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1 Overview: Challenges and Opportunities for Environmental Cooperation in the Context of Greater North American Economic Integration

The North American Commission for Environmental Cooperation is at a unique and important juncture in its evolution, particularly given the strong focus Canada, Mexico and the United States have placed on enhancing North American relations. The newly elected leaders of Canada, Mexico, and the United States recently set out as a common goal the strengthening of the North American partnership with a view towards deepening a sense of community. This builds on the foundation of the pursuit of prosperity through open markets and sustainable development laid out by the three countries through the North American Free Trade Agreement (NAFTA) and the North American Agreement on Environmental Cooperation (NAAEC).

The prospect of greater North American integration presents unique opportunities and challenges. It calls upon all North American institutions to examine their work to determine how they can contribute to realizing the goal set by the North American leaders.

The Council of the North American Commission for Environmental Cooperation has the opportunity at this significant juncture to define work of the Commission in supporting and addressing the environmental dimensions of further North American integration. It can identify priorities building on the legacy of the Commission's work to help build a closer North American community. Council will also need to examine how the Commission can be strengthened so that it can be an even more effective institution in assisting North American governments and society to build an environmentally sustainable North American community.

1.1 The North American Economy

NAFTA has defined North America as an integrated economic region producing US\$8 trillion worth of goods and services.

There can be no doubt that NAFTA has brought about a remarkable expansion of trade and investment among the three countries. Total trade for 2000 was US\$700 billion and investment has increased significantly.

Trade and economic integration challenges our environmental institutions to keep pace with the accelerating rate of change. Efforts continue to understand these challenges, and devise public policies that realize the full benefits that open markets can bring. These benefits, which build upon partnerships with the private sector and civil society, range from diffusion of environmentally-beneficial products and technologies, to new communications networking capacities linking people to create an informed and active community to protect the environment.

1.2 Environmental Challenges

While North America has made important progress in environmental protection and conserving natural resources, increased economic activity, transportation, and population growth can place additional stress on ecosystems and natural resources. The three countries share concerns about the long-range transport of atmospheric pollutants, hazardous waste generation and disposal, the quality of air and water, declining natural resources, and the introduction of invasive alien species and loss of native species. Environmental degradation brings with it real economic costs, costs which lower GDP rates of growth for all three NAFTA countries. Investments in environmental protection can enhance and strengthen the economy by reducing these costs, helping to achieve efficiencies, and creating predictability and stability for investors.

There are several key sectors where the economic and environmental links among the three countries of North America are increasingly evident. Here are a few examples:

- Hazardous wastes, as a byproduct of industrial activity, are transported across borders in North America. Opportunities exist for adopting common, environmentally sound management provisions for the transport, disposal and destruction of these wastes, as well as improved mechanisms for tracking their cross-border movements.

- Transportation of goods in North America has grown phenomenally since NAFTA came into effect. Depending on the location, truck traffic in 2000 had increased 30 to 40 percent since 1994, and 80 percent of all truck border crossings occur in Texas—Interstate highway 35 carrying the vast majority of all resulting traffic. Another similarly busy crossing is the Detroit-Windsor link. Without appropriate action, trade-related emissions could increase substantially in such transportation corridors.
- Continental energy links have proliferated over the past two decades, spawning a complex array of cross-border transactions and relationships. Recently, the leaders of the three countries announced the development of a “North American approach” to energy markets. This enhanced level of North American cooperation on energy presents important opportunities for the private sector and environmental policy-makers to address environmental concerns at a North American level.

1.3 *The work of the Commission in North American environmental cooperation*

The Commission is part of a “new generation” of international environmental organizations. It exists not only to promote environmental cooperation, but also to address environmentally related trade and economic issues, and to promote public participation and accountability in environmental decision-making. It is also unique in that it is a *North American* institution.

Since its inception, the Commission has built a record of success. For example, it has facilitated the development of comparable information related to pollutant releases and transfers, ecoregions and marine protected areas. It has worked with the three countries to establish limits for specific pollutants, resulting in the complete phase out of DDT and chlordane. It has looked at innovative ways in which the market can be harnessed to conserve biodiversity through North American trade in shade-grown coffee, “green” electricity and ecotourism.

While the Commission has made important strides, it still has enormous potential for advancing environmental cooperation in the context of an integrated North American economy. The successes of the Commission provide a solid basis upon which further progress in establishing environmental systems in support of an increasingly integrated North American economy can be built. As well, the experience of the Commission in harnessing the North American market to promote the conservation of biodiversity can be very useful for such efforts in the future.

In the following pages, the advances of the Commission are presented in more detail. We at the Secretariat invite you to learn more about what has been accomplished and what needs to be done, and how you can get involved in the development of a strengthened North American partnership for environmental sustainability.

2 *Environment, Economy and Trade*

Cooperation among the North American countries is essential to addressing regional environmental issues. It is also a cornerstone of a vibrant North American economy. A more integrated North American economy calls for a greater degree of coordination and cooperation to facilitate trade and establish complementary systems for environmental protection on a North American scale.

A more integrated economy also provides opportunities for employing economic incentives and financial instruments in support of sustainable development. It underscores the need to engage the principle economic actors in environmental protection and conservation in new ways. Farmers, businesses, consumers, landowners, investors and others hold the key to actualizing environmentally sustainable economic development. As they operate in an increasingly North America-wide economy, market-based mechanisms that are crafted for an integrated economy need to be put in place.

Council’s 1998 statement directing the work for the Commission, *A Shared Agenda for Action*, identified the following as priorities in helping the three countries pursue environmental sustainability in open markets:

- promoting trade in environmentally-friendly goods and services;
- exploring linkages between environment, economy and trade; and
- acting regionally in developing North American opportunities under the Clean Development Mechanism, and examining the potential for carbon “sinks” such as forests.

Council also called on the Commission to examine the effects of NAFTA on the environment, complementing this analysis with a look at environmental emerging trends resulting from expanding economic activity. It indicated that the Commission should undertake regular “issue scans,” taking into account economic as well as environmental trends, and identified the environmental dimensions of the deregulation of the electricity sector as a case of interest. It also directed the Commission to work with other NAFTA bodies and appropriate international institutions to ensure that trade and environment policies are mutually reinforcing.

The Commission’s work program on environment, economy and trade addresses each of these priorities.

2.1 *Green Goods and Services*

In the past few years, the CEC has gained considerable experience in the area of Green Goods and Services—exploring ways to harness the power of markets to support the conservation of biodiversity. Shade agriculture for coffee, vanilla, palm production and other commercial products represents one of the more promising areas under exploration because of its potential to advance sustainable development by supporting economically-viable and environmentally-preferred practices.

2.1.1 *Shade-grown Agricultural Products*

The CEC has contributed important analytical work to help identify the challenges and opportunities for marketing shade-grown products, with a special focus on coffee. It has played the role of an information broker between producers, retailers and financial markets to help ensure that the concerns and needs of each group are understood and hopefully addressed.

Following the publication of the first-ever North American market study on shade-grown coffee and a collaboration with the Smithsonian Migratory Bird Center to classify growing criteria for shade-grown coffee, the CEC has worked with others to develop baseline environmental data on forest cover and land-use patterns associated with coffee production in Mexico. In parallel with these efforts, the CEC has been working closely with coffee producers, certification bodies, retailers and financial institutions to assess and communicate opportunities for this commodity. Currently, the CEC is providing information on shade-grown coffee and related produce to financial institutions considering micro-loan packages for such products.

Actions this year have included:

- working with UNAM in calibrating results of the 2000 survey by Mexico’s National Institute of Geography on rates of change in forest cover in Mexico;
- providing new analysis of comparative yields and revenues between shade- and non-shade-grown coffee, including analysis of net present value;
- providing a compendium of linkages between biodiversity and coffee production;
- working with Resources for the Future to strengthen baseline data on changes in coffee production activities, and the underlying socioeconomic drivers of change;
- providing information to industry groups on prospects for shade-grown coffee;
- initiating work with the financial services sector to examine financing opportunities for coffee; and
- maintaining the online searchable database that describes different coffee labeling and certification schemes in North America.

2.1.2 *Chamaedorea Palm*

Initial work related to sustainable trade in the chamaedorea palm involves the CEC releasing a socioeconomic and ecological analysis of the palm. The document will appear during the summer. The working group on trade in wildlife species will assess ongoing work and consider next steps.

2.1.3 Sustainable Tourism

The Secretariat has completed a summary report of “best practices” in sustainable tourism in North America’s natural areas. The report is being peer-reviewed and will be released this summer. The online database, describing definitions and initiatives related to tourism, was also completed in early 2001. In March 2001, the CEC hosted a meeting on sustainable tourism as it relates to coastal and marine areas. The purpose of the La Paz meeting was to assess the potential of ecotourism for protecting biodiversity, to develop a plan for sustainable whale watching in the Baja to Bering coastal area as a case study, and to present preliminary results of the state and extent of nature-based tourism in North America.

Among the highlights and follow-up work of this pilot workshop were:

- undertaking, via a transparent, competitive process, a pilot demonstration project regarding whale watching (the CEC has already identified some seed money for this and will pursue other private moneys as well);
- furthering transparency and the flow of information among these projects (to this end, the CEC has established a web site for posting progress reports and recommendations and linking ecotourism sites); and
- elevating the visibility of tourism in CEC’s priorities and highlighting results of this project for the United Nations “2002: Year of Ecotourism,” in Quebec City.

2.2 Assessing Environment and Trade Relationships

In October 2000, the CEC hosted the first North American Symposium on Understanding the Linkages between Trade and Environment. The meeting, held at the World Bank, attracted 300 people from across North America, representing industry, government, research groups, development groups and environmental NGOs. During the two-day meeting, 14 original research papers were presented and discussed. The symposium represents a step forward in applying empirical and rigorous analysis to the trade-environment debate. The 14 papers are now on the web in their original languages. They will be translated and published in mid-2001, together with highlights of the discussion. An executive summary will be published by the CEC Secretariat for the June Council session, highlighting key findings of the 14 papers.

The Ford Foundation has decided to contribute funds in support of the publication of summary of the symposium, including a closer look at the wider impacts of globalization at the community level.

The next phase of the NAFTA Effects work is to focus on specific issues and/or economic sectors to help deepen the understanding of the relationship between economic and environmental policies. This will include examining such issues as land-use change, forestry and freshwater resources, and the role of market-based incentives to help secure sustainable economic policies.

2.3 Financing and the Environment

The Commission has completed its overview report on possible climate-related investment opportunities among small and medium-size enterprises among three industrial sectors in Mexico. The report is expected to be released during the summer. The CEC has also prepared a financial analysis of potential investment opportunities in the Mexican coffee sector. This has formed the basis for a series of meetings with representatives of the financial services industry held this year to identify financing opportunities for sustainable coffee production. An analysis comparing the relationship between disclosure of financial information to financial/capital markets of the three countries is also being prepared for the fall of 2001, with results to be submitted to the parties in October 2001.

NAAEC Article 10(6) Trade-Environment Officials Meeting

Following the October 2000 meeting, three studies (requested by the parties) are being prepared on the use of precaution in environmental regulations and policies:

- a cost-benefit analysis of applying precaution in environmental policies;
- an overview of the use of precaution in statutes in all three countries, using environmental as well as other public policy areas as examples; and
- examples of case law in which precaution has played a role.

Challenges:

Most people familiar with the CEC expect the organization to provide timely information on key linkages between trade flows and related environmental quality indicators. Essentially, compiling and publishing such information enables the public to gauge “how we are doing in North America” and to test the various working hypotheses about the environmental impacts, both positive and negative, of expanded trade.

In its early years, the CEC focused exclusively on the methodological tools for conducting such assessments. Now that a variety of tools and methodologies are available, the CEC can shift its emphasis to providing the public with high quality data, bringing together the best available information from reliable trade and environment sources. Making such information available in a user-friendly format represents a significant challenge for the organization.

Just as trade has been identified as one of the driving forces behind change in North America, the influence of private financial markets on the environment represents a growing area of study. Among the key lessons learned to date from the Commission’s work on green goods and services includes: (a) undertaking rigorous, ongoing assessment work, capable of providing reliable information on the comparability of different goods and services, based on their environmental characteristics; (b) understanding consumer interest in green goods; (c) understanding specific challenges for producers in supplying green goods and services to the market; (d) addressing transparency issues related to market information tools; and (e) identifying financing opportunities in the green goods and services sector.

More work is needed in linking different marketing schemes both with producer needs and also with consumer expectations. Additionally, the Commission is examining financial mechanisms and public policy measures to take advantage of the opportunity presented by shade-grown agricultural products.

The CEC is currently engaging key private financial institutions in its work on Green Goods and Services. Expanding these efforts will require the active support of governments to assist in creating a supportive policy framework to complement private sector initiatives.

CEC trends work has been hampered by lack of agreement on the topics selected for study by the advisory group, lack of continuity in the advisory group membership, and the lack of an audience for research products. The work program outline for 2001 proposes to fold trends work into ongoing trade work, to examine forward-looking projects in the areas currently under study.

By most any measure, efforts to date have not produced the kind of institutional cooperation between trade and environment officials called for in the NAAEC and noted by the JPAC and the public on numerous occasions. Despite several CEC-funded meetings between trade and environment officials, there is little cooperation between the CEC and the various other committees established under NAFTA, and little more than background discussion papers have resulted from their several encounters.

3 Conservation of Biodiversity

North America supports some of the most diverse marine and land ecosystems on earth. For example, Mexico is among the top ten “megadiversity” countries in the world for the range of species, ecosystems and the endemisms present in its territory. The problems confronting the North American region are, however, as vast as its wealth of life forms: threats to biodiversity and to the health of North American ecosystems put both at risk for current and future generations. Although most problems affecting the North American environment are on the national level, certain others are shared by two of the three countries, and the effects and consequences of some of them have the potential to affect the entire continent.

The CEC acts as consensus builder and catalyst, in cooperation with the three governments and various stakeholder groups, to develop strategies that bring a holistic approach to face the biodiversity challenges of North America.

3.1 Strategic Directions for the Conservation of Biodiversity

The Commission has involved the public and private sector stakeholders from across North America in the development of a long-term strategy in the area of biodiversity. The strategy—a CEC biodiversity agenda for North America—strives to ensure that the Commission’s work results in effective, efficient and inclusive conservation initiatives to deal with common threats and opportunities at both the regional and continental scales.

As part of the process for developing the strategy, an *Integrated Baseline Report* was prepared, providing a first attempt to identify concrete opportunities the CEC could undertake in dealing with these issues. The document was then enriched by comments and input from the various stakeholders—the second stage of the strategy development. North American stakeholders from governmental and nongovernmental organizations, indigenous groups, academia, the private sector and the general public assisted in reviewing the *Integrated Baseline Report*, and in providing the CEC with crucial information in the development of the strategy.

The third stage in developing the strategy involved geographic priority setting. This involved a workshop with twenty-one leading ecologists from the three North American countries who identified important regions for biodiversity conservation. The workshop identified fourteen regions as prime candidates for focusing CEC’s attention, based on biological continental significance and a high level of threat.

The final stage in the strategy development process was to compile a list of proposed priorities for action that deserve prime attention for North American cooperation via efforts of the CEC. These priorities were derived primarily from stakeholder feedback and reflect continental significance, binational and trilateral relevance, a high level of urgency, a high degree of stakeholder consensus and are appropriate to the CEC’s mandate.

In April 2001, the Commission held a round table on biodiversity conservation with major conservation organizations to develop a set of recommendations for the draft strategy. The strategy is intended to operate within a 15-year period, setting a broad and consistent framework for achieving the strategic aims, objectives and subsequent priorities for action.

3.2 North American Bird Conservation Initiative

The North American Bird Conservation Initiative (NABCI) is a partnership of organizations and agencies in the private and public sectors with the goal of coordinating domestic efforts to protect birds at a continental scale.

The second trilateral NABCI meeting took place in Querétaro, Mexico, 14–16 February 2001. The goal of this meeting was to focus on strategy implementation, as a follow up to the first meeting (held in Puebla in 1998), which established the NABCI vision and guiding principles. In order to implement NABCI, a priority for the CEC is the development of trilateral action plans that address common priorities and bird conservation approaches. Therefore, priority areas that were agreed upon at the Querétaro meeting, included providing measurable objectives for a five-year NABCI plan that reflects the national plans; strengthening and consolidating NABCI; increasing the commitment to international bird conservation; and expanding partnerships within the conservation community.

The main recommendations stemming from the NABCI meeting include:

- Developing a trilateral bird conservation agreement signed at the highest level of accountability in each country.
- Establishing a revitalized trilateral committee with clear accountability to the three national committees.
- Developing and implementing international demonstration projects. A first set of criteria was developed and it was recommended that project priorities should originate in Mexico, with subsequent identification of key sites around these species’ suites to take place in the United States and Canada. It is expected that the careful selection of these projects can show local people and national and international program leaders how integrated bird conservation can work on the ground.
- Develop strategic communication plans and products.
- Develop enhanced funding to deliver on the above priorities.

The five-year NABCI plan is expected to be ready in the last quarter of 2001.

3.3 *Species of Common Conservation Concern*

The Species of Common Concern initiative focuses on those species identified by the Parties as priorities for North American cooperation. They include: ferruginous hawk, peregrine falcon, loggerhead shrike, piping plover, mountain plover, burrowing owl, northern spotted owl, Mexican spotted owl, golden-cheeked warbler, whooping crane, California condor, black-tailed prairie dog, Sonoran pronghorn, lesser long-nosed bat, (greater) Mexican long-nosed bat, black bear, and gray wolf.

Because most of the listed species inhabit the prairie ecoregion—itsself a special North American ecosystem—efforts have begun to foster cooperation among those interested in prairie conservation. Specific actions will also be identified to benefit individual species in the region.

In February 2000, the CEC released the report, *Species of Common Conservation Concern*, in North America, citing evidence of the decline of many grassland migratory and transboundary species. Also in February, the Shared Species Working Table of the Trilateral Committee for Wildlife and Ecosystem Conservation and Management met in Texas and came to the same conclusion. Both groups agreed that it was necessary to take a serious look at what conservation measures the three countries can take in the grasslands.

Given the continental importance and of the grasslands ecosystem and the need to establish a cooperation framework, in mid March 2001, the CEC organized a first trilateral workshop to develop a framework of bi- and trilateral cooperation to conserve migratory and transboundary grassland Species of Common Conservation Concern.

The objectives of the workshop were: 1) to bring together key players engaged in the conservation of grasslands species to determine what is needed to conserve these species, especially (but not exclusively) those on the SCCC list; 2) to identify binational cooperation opportunities among players interested in the conservation of grassland species; and 3) to provide elements to develop action plan(s) to conserve migratory and transboundary grassland species of common conservation concern.

During the workshop, a shared vision was developed and the main recommendations include: 1) developing a grassland strategy; and 2) ensuring a multi-stakeholder cooperation framework to address species of common interest, including the species of common conservation concern.

The focus for the remainder of the year will be on establishing a grassland strategy as a basis for elaborating species' recovery action plans.

3.4 *Marine Protected Areas*

The Marine Protected Areas (MPA) initiative is establishing a network of MPAs across the region to share approaches, monitoring data and other valuable information to better protect these critical marine habitats and the many migratory species they sustain. The MPA has accelerated a regionally-based pilot of activities with numerous other groups in the Baja to Bering region.

3.4.1 *Mapping Marine and Estuarine Ecosystems of North America*

Lead participants from the three countries have begun to work together to review the existing initiatives and assess the gaps found in current North American marine mapping. On 12–13 February 2001, the country leads met to review progress and plan the next steps of the project, which include: 1) gathering and reviewing information for each ecological region and ecoprovince (levels I & II); 2) developing a straw-man approach for a level III subdivision of ecoprovinces; and 3) organizing an expert workshop to review proposed mapping scheme to level III (scheduled for August 2001). The present steering committee, composed of these lead participants from each country, is expanding by one to two members for each country and will include governmental and nongovernmental organizations.

3.4.2 North American Marine Protected Areas Network

The Action Plan framework has seven areas of recommended action: 1) valuing economic benefits of MPAs; 2) mapping marine and estuarine ecosystems of North America (formerly defining marine bioregions of North America); 3) developing guidelines for measuring MPA effectiveness; 4) incorporating integrated management planning; 5) expanding applied research for MPAs; 6) developing an ocean ethic; and 7) developing protection standards. Activities are now being initiated to implement the majority of them. Presently, over 250 people from various governmental, nongovernmental, academic, indigenous and private sector organizations are participating in the various North American MPA Network activities (described below).

As suggested by the Steering Committee of the North American MPA Network and accepted by the MPA community, to move this project forward, certain elements of the action plan would be better implemented at a regional level, while others will be implemented at the North American scale. The region selected was the Pacific Coast of North America, also known as the Baja California-Gulf of California to Bering Sea (B2B) region.

The CEC is focusing its stewardship in two ways. First, it will support the identification of trinational conservation priorities (species and habitats) and complementary mechanisms to measure the effectiveness of MPAs. This was begun at a workshop held in Monterey, CA, in early May 2001. Second, it will ensure that communication among stakeholders, the network of MPAs, and the institutional framework, which provides leadership and coordination in the region, is strengthened and effective.

In order to advance the initiative in this manner, the following activities are being implemented:

MPA networking and capacity building

Inventory

In coordination with DFO, the *Comisión Nacional de Areas Naturales Protegidas*, NOAA, and other governmental and NGO partners, the CEC is working to develop a web-based inventory of MPAs for managers, NGOs, decision makers, academics and other users to support the North America network. This visual, geographical information system (GIS)- and web-based tool will provide a common North American Graphic User Interface that will use the content and data from existing Canadian, Mexican and US Internet-based inventories. Its inventory will not only be accessible through different query capabilities (i.e., by clicking on a MPA site on a map or through name or theme searches), but also it will include searchable thematic topics and feature special projects or initiatives that individual sites can share with others.

Web tool

A joint collaborative web tool—Marinet <<http://www.crossdraw.com/marinet>>—was created to facilitate communications and provide a vehicle for members of the NA MPA Network to inform each other about important MPA related documents, events, and issues.

Institutional Strengthening

The CEC is partnering with the Baja California to Bering Sea (B2B) Marine Conservation Initiative to bring together nongovernmental organizations, agencies, scientists, stakeholders, and interested individuals to help restore and conserve the unique biodiversity and productivity of the Pacific Coast of North America through a linked network of marine protected areas. Among other goals, the B2B Initiative strives to build the long-term institutional support for the network and is working closely with the CEC on areas of common interest.

Over the past year, the B2B participants have developed a common vision and mission, and identified the key components of a strategic plan, which were finalized on 19–20 April 2001 in Tofino, British Columbia. Five program goals have been identified:

- develop a common conservation vision for the region, including a linked network of MPAs and connecting corridors;

- develop a common understanding of past and present ecological processes and cultural attributes of the B2B region and foster the advance of new research in these areas;
- foster an ocean ethic among the public and develop support for the B2B conservation vision;
- build and support regional and local grassroots capacity to implement the conservation vision; and
- promote dialogue, partnerships and information exchange.

Trinational conservation priorities and measuring effectiveness

The three priority areas—protection standards, expanding applied research for MPAs, and MPA management effectiveness tools—address three fundamental MPA network questions:

- What species at risk are of common conservation concern to all three countries and what collaborative actions can be taken to help improve their status? (Marine Species of Common Conservation Concern Track)
- Where are the high priority marine and coastal habitats most in need of conservation? (Priority Habitats Track)
- What are realistic conservation objectives and targets for such sites and how will we measure their effectiveness over time? (Targets and Indicators Track)

The first activity of the Protection Standards priority area is the definition of Marine Species of Common Conservation Concern. Through this project, a list of species of trinational importance shall be developed and agreed upon by the three countries of North America. In a subsequent report, the status of the species will be described, and the gaps/opportunities for collaboration will be identified. This project will be one of the many sources of information used in developing targets and indicators as well as priority areas for the B2B region.

The first activity of the Applied Research priority area will focus on means of identifying priority areas within the B2B region. This will be done by incorporating existing biological and physical data as well as socially derived data into a geographical information system (GIS). This data collection process will provide the basis for a follow-on workshop to identify important habitats for conservation. Using the level III map as a starting point (developed via the work of the Ecosystem Mapping team), conservation sites can then be prioritized through a process of risk assessment.

The first activity of the Management Effectiveness priority area will provide an appraisal by scientists of the ability of MPAs to achieve specific goals and information on how these goals will be measured.

Challenges:

The CEC has concentrated on identifying North American priorities, resulting in a framework for catalyzing action more effectively at the continental and regional levels. As the CEC moves from planning to on-the-ground delivery of conservation action, the challenge ahead is to ensure synergies among the various stakeholders and to integrate current CEC activities. An agreement of the Parties is urgently needed on which North American biodiversity conservation priorities the CEC will be stewarding, particularly in light of human and financial resource constraints.

4 Protecting the Environment for Better Human Health

Air pollution, water contamination, exposure to hazardous wastes, and levels of contaminants found in food, as well as in the home and work environment are increasingly being recognized as key determinants of health. From conception through adulthood, exposure to environmental hazards can impair human health and quality of life. Children, because of their development and rapid growth, and their unique behaviors, are more vulnerable than adults. Other population groups that may be vulnerable to environmental contaminants include aboriginal people living in the North, the aged, and the poor. Threats to human health posed by contaminants can also affect economic development through associated health care and environmental remediation costs, and other indirect economic costs.

North America is linked by air and watersheds. Pollutants can travel through the atmosphere for thousands of miles. As well, toxic substances cross boundaries as products or wastes to be treated. Cooperation on environmental health threats can ensure that hazards from common sources are

adequately addressed and that successful strategies and tools to provide people with clean air, clean water, and environmental health are shared.

Council, in its *A Shared Agenda*, recognized the importance of protecting human and ecosystem health. It called on the Commission to continue promoting cooperation on air quality issues, targeting substances for phase-out or reduction under the Sound Management of Chemicals program (SMOC), and to promote pollutant release and transfer registers, and to continue the production of *Taking Stock*. In 1999, Council identified children's health and the environment as an important concern, and directed the Commission to work in that area.

4.1 Cooperation on North American Air Quality Issues

Pollutants are often carried across political boundaries through atmospheric transport. By cooperating on the tools and methodologies addressing air pollution and transport, as well as supporting cooperative work among the North Americans, the CEC is helping to maintain the integrity of our common airsheds.

As regional commerce accelerates, so too does the volume of goods and services flowing through North America trade arteries—on land, by air and over water. In September 1999, the CEC performed initial scoping work resulting in the preparation of *North American Trade and Trade Transportation Corridors*. The report identified the most significant projects, participating agencies, and current level of coordination associated with North American transportation corridors. In 2000, the CEC sponsored a study by ICF Consulting to look at potential environmental impacts from increased trade along five corridor segments in North America—two crossing the Mexico-US border and three crossing the Canada-US border. This effort also formed a stakeholders advisory group, (governmental and nongovernmental representatives from each country) to help identify likely environmental impacts (with special emphasis on air quality) of North American trade and transportation corridor development, and describe opportunities for the prevention or mitigation of these impacts.

The work by ICF led to a public presentation of the study at a CEC-sponsored workshop in Winnipeg, Manitoba, on 15 March 2001. Some of the key points on air pollution impacts from increased trade identified in the report include:

- Assuming low-sulfur fuel and heavy-duty diesel emission standards are implemented in the US and Canada, total trade-related emissions of NO_x and PM₁₀ will decline or remain constant by 2020, compared to current levels. This occurs despite trade volumes projected to grow by two to four times.
- In corridors with high trade growth and absent technological improvements in current locomotive engines, NO_x and PM₁₀ emissions from rail transportation will increase 50 to 100 percent by 2020. In all corridors, because of the projected decline in truck emissions, rail will contribute a much larger proportionate share of trade-related NO_x and PM₁₀ emissions.
- Trade-related emissions of greenhouse gases and CO will not be reduced under the new emission standards, and are expected to rise substantially by 2020. For example, under the baseline 2020 growth scenario, trade-related CO₂ emissions will increase by 2.4 to 4 times over current levels in the five corridors studied.

Air pollution episodes are regional and transboundary in nature. Thus there is a need to better understand source-receptor relationships in order to put in place cost-effective control programs. Toward this end, an initiative has been launched to develop a trilateral inventory for criteria air pollutants. Such information is critical to the use of atmospheric models employed to inform national programs and strategies. As with the PRTR reports, a criteria air pollutant inventory report will also provide the public with information on pollution sources, both locally and regionally. The CEC air quality program has been in discussions with federal, provincial, state, and local air inventory specialists as part of a process to outline the pertinent issues on inventory data sharing and comparability among the three countries. The CEC plans to have a scoping document on these issues prepared by August for discussion among the governments. After government review, the discussion paper will be presented for public discussion at a joint meeting with the PRTR Consultative Group in late 2001 or early 2002.

In May 2001, the CEC air quality program initiated a cooperative effort with the United States-Mexico Foundation for Science in Mexico City (established by the Mexico Nobel laureate Mario Molina) to launch an association of air quality professionals in Mexico. The association will be national in scope, and include participants from government, the private sector, academia, and environmental nongovernmental organizations. This is the first national organization of its kind in Mexico and will help disseminate throughout the country the lessons learned on air quality research in Mexico City, the border cities, and elsewhere. The association will also provide an organizational focus for exchange opportunities with comparable organizations in Canada and the United States.

4.2 *Sound Management of Chemicals*

There are currently over 70,000 chemicals in commerce in North America. Relatively few of these have been fully tested for their toxic effects although many have been on the market for many years. In addition, in excess of 1,000 new chemicals are introduced into commerce every year.

The Sound Management of Chemicals (SMOC) program was launched in 1995 to give governments a trilateral forum to deal with chemicals of mutual concern in a cooperative and coordinated fashion. To date, priority attention has been given to persistent and bioaccumulative toxic chemicals. North American Regional Action Plans (NARAPs) have been prepared and action taken to address DDT, chlordane, PCBs, and mercury. Of particular note is the fact that based on the commitments in the DDT NARAP, Mexico moved in a deliberate fashion to phase out the use of DDT and have now instituted other means to control the threat of malaria. Because of these actions, North America is now a “DDT-free Zone.” The chlordane NARAP is now also coming to a successful completion of its goal to phase-out use of chlordane.

A NARAP is in preparation to deal with dioxins/furans and hexachlorobenzene as a cluster of chemicals. Lindane and lead are currently being examined by the Parties in the three countries to ascertain whether further trinational action is needed on these substances.

SMOC working group meetings and a public meeting were held in Mexico City, 21–23 March 2001, to review progress in the implementation of the work program. Most notable elements included the completion of a final report on chlordane and the start up of the taskforce on dioxins and furans.

A monitoring and assessment workshop was held in Toronto, 27–28 March 2001, to review monitoring and assessment needs for the North American region. It was attended by experts from government, academia, and nongovernmental organizations. The objective was to assist the Monitoring and Assessment Task Force to prepare an action plan to address monitoring needs for the continent from an ecosystem and human health perspective. It is anticipated that the action plan will address both some pressing short-term needs as well as to put in place a framework for a long-term, more comprehensive plan.

Under the auspices of UNEP, a persistent organic pollutants (POPs) treaty was successfully concluded in 2000. The actions detailed above deal with many of the POPs that will be covered by the treaty, thus putting North America in a leadership position in tackling this major global threat. UNEP has recognized these efforts and has invited the CEC to enter into an memorandum of understanding to share our work with other regions of the globe.

4.3 *Promoting Public Right-to-Know: Pollutant Release and Transfer Registers*

Providing information to the public about releases and transfers of specific pollutants is recognized as an important public policy tool by the three countries. Tracking data on releases and transfers of pollutants can help identify opportunities to reduce waste, cut costs and create a safer environment for workers and local communities. *Taking Stock* is a North American inventory and overview of continental pollutant releases and transfers, and a “right to know” tool to improve transparency and promote the reduction of such pollution in North America. The compilation makes North America a leader among the OECD members in pollutant inventory development and the regional integration and use of such information. As an ever-increasing number of countries around the world look to PRTRs as practical tools for promoting

pollution reduction and public access to information, North America is well placed to play a leadership role.

The fifth *Taking Stock* report, presenting 1998 data and 1995–1998 data trends, will be released this summer. In conjunction with the report's release, the CEC will launch its new interactive PRTR web site that will enable users to generate comparisons and track trends for chemicals, sectors or geographic regions of particular interest across North America. Based on input from stakeholders and following developments in the national registers, such as addition of new chemicals and lowering of reporting thresholds, the *Taking Stock* report continues to be improved and expanded. To date, the report includes data from the US and Canada: as data from the Mexican PRTR become available they will be included in future reports.

Supporting the further development of the PRTR program in Mexico is a priority focus of the CEC's PRTR project. In November 2000, approximately 100 participants took part in a two-day workshop on "Forging Alliances to Prevent Industrial Pollution: New Approaches and Tools for Environmental Management" in Tijuana, Baja California, Mexico. The event was organized jointly by the CEC's PRTR project, the Law and Policy program area, and NAFEC, in collaboration with the *Dirección General de Ecología* of the State of Baja California, Mexico, and the federal *Instituto Nacional de Ecología* (INE). It provided a forum for representatives of government, industry, public interest groups, academia and others from the border region and throughout North America to discuss the complementary roles of PRTRs, EMSs and public access to information as tools for sound environmental management and effective industry-community dialogue. Participants emphasized the importance of PRTRs and public access to information as a basis for trust and accountability, and noted ways in which a company's EMSs and PRTR reporting can be made mutually supportive.

Members of the multi-stakeholder Consultative Group for the PRTR Project and other interested parties convened in Mexico City on 5–6 March 2001, for the annual public meeting. In addition to providing input into the development of the *Taking Stock 1999* report, the meeting also featured a round table discussion on opportunities for advancing the PRTR in Mexico and a special session on tools that use PRTR data. During the round table on the Mexican RETC, the representatives from the *Secretaría de Medio Ambiente y Recursos Naturales* (Semarnat), affirmed their government's commitment to evolving the currently voluntary RETC with a view to making it mandatory within two to four years. As a parallel effort, the national chemical industry (*Asociación Nacional de la Industria Química*, ANIQ) and the industry association in Monterrey, Nuevo León (*Cámara de la Industria de la Transformación de Nuevo León*), pledged to make information available under the current voluntary scheme. Participants also generated a number of additional ideas on ways to promote PRTR reporting and public access to information in Mexico, which was seen as a top priority for the CEC's PRTR project.

As a result of their involvement in the CEC PRTR project, the three national PRTR programs interact on a regular basis to exchange ideas and share technical information. The countries are also engaged in an ongoing process of looking at the similarities and differences among their three systems, with a view to improving the comparability of PRTR data across North America over the medium to long term.

4.4 Pollution Prevention

The pollution prevention program commenced its activities in 1995 with the object of promoting the introduction of this type of initiative into productive activities, particularly in Mexico. The CEC undertook 10 pilot projects to demonstrate the economic and environmental benefits of pollution prevention techniques and technologies in Mexico.

In 1996, with the participation of Mexico's National Confederation of Industrial Chambers (*Confederación de Cámaras Industriales*—Concamin), a pilot fund was set up to support the implementation of pollution prevention projects in small and medium-size Mexican businesses. It is estimated that the environmental benefits generated by these four projects to date have avoided emissions of over 1,465 tonnes of chemicals and saved more than 68,200 cubic meters of water.

In January 2000, at the initiative of the CEC, the activities of the Mexican Pollution Prevention Round Table got underway with the first meeting of its organizing committee, currently composed of 13 different

organizations and institutions representing government, industry, academia, technical and financial assistance agencies and nongovernmental organizations. The first event of the round table was held in the city of Querétaro in August 2000. Currently, there are five standing working groups on political aspects, barriers, technical support, financing and training, respectively.

At the trinational level, work is being done to integrate the region's three pollution prevention round tables. The presidents and directors of these round tables held an initial meeting in October 2000 to explore various forms of linkage and cooperation among the three organizations. Since then, they have been cooperating in two main areas: 1) electronic linkage of their web sites and active participation in one another's events; and 2) analysis of North American pollution prevention policies, for which purpose analysis and proposal documents are currently being developed for each of the three countries. These documents will be presented in preliminary form at the next event of the Mexican Pollution Prevention Round Table, to be held in Monterrey, Mexico, in September. Based on the results of this work and with the help of a trinational group, a regional vision will be produced, encompassing specific projects for the next several years.

4.5 *Children's Health and the Environment*

Children throughout North America are exposed via food and mother's milk to persistent toxic substances transported across borders by wind and water. To date, environmental health research and standards-setting processes have been geared towards adult exposures and susceptibilities, with the result that often not enough is known about the potential impacts on children. A concerted effort is needed to gain a better understanding of environmental threats to children's health and development, and to develop appropriate policy tools.

Recognizing the need for greater cooperation to protect children from environmental threats in North America, in June 1999 the CEC Council announced a special initiative on children's health and the environment. A symposium on the subject was convened in Toronto in May 2000, during which participants noted numerous challenges to children's health in North America and underscored the potential benefits of regional cooperation. In June 2000, the CEC Council issued Council Resolution 00-10 on Children's Health and the Environment. The Resolution calls for the development of a cooperative North American agenda to protect children from environmental threats and other actions to promote information exchange and incorporate a children's health perspective into existing CEC projects. The Council also called for the formation of an Expert Advisory Board to advise it on matters of children's health and the environment. The board will be officially convened in summer 2001.

Discussions are ongoing on possible trilateral cooperation to develop better data on children's exposures to toxic chemicals, the development of indicators, and comparative analyses of existing and emerging policy tools. By providing a continent-wide forum for children's environmental health issues, the CEC is working to foster partnerships and create synergies among the numerous institutions and actors that are actively involved in efforts to protect children's health and the environment throughout the continent.

Challenges:

While SMOC remains the flagship initiative in this area and has produced significant results in its early years, challenges will emerge as the Parties address more extensively used (mercury) or widely emitted (dioxins) substances. Implementation of action plans in these areas will require governments to take actions that are rooted in their domestic programs. At present there is no mechanism to evaluate progress in the implementation of existing NARAPs. A mechanism that reports back to the Parties and the public would not only help maintain support for the SMOC initiative, but would also help identify areas where additional attention is useful and where collaboration with other agencies and organizations may be helpful.

In addition, since action has been taken on only a relatively few chemicals to date, the Commission's efforts in the SMOC program will need to turn to strategies that can tackle more chemicals more quickly. Toward this end, the "cluster" and "sector" approaches that are being examined to tackle the dioxin family of chemicals may provide a model for accelerating the rate of dealing with other problem chemicals. In addition, the Commission can work with chemical manufacturers, supporting their efforts to study environmental and human health effects for chemicals that are currently in commerce and providing

data on this to governments. How the three countries can work together to screen new chemicals and products of biotechnology for their environmental and human health effects before they are introduced into commerce should also be explored. And finally, consistent with new directives being adopted by the OECD and falling under the Basel Convention, more attention is needed at the end of products' lifecycles to ensure that hazardous wastes are properly transported and treated, destroyed or recycled. Since bilateral agreements between Canada and the United States and Mexico and the United States are already in place governing the transboundary movement of hazardous wastes, there is the opportunity to link enforcement actions to ensure that cross border movement of these wastes does not escape nationally established safety nets.

Mexico recently committed itself to seek a mandatory PRTR reporting regime, though it will still be some time before CEC reporting in this area (*Taking Stock*) includes Mexican data. There is also a need to remove other barriers to a continent-wide data set as important differences persist respecting key issues such as reporting thresholds, covered substances and definitions.

Conversely, although efforts in the air projects got off to a slow start in looking at convergence opportunities in other areas of air pollution, progress on the inventory of criteria pollutants has accelerated appreciably in the past year.

5 Environmental Law and Policy

Law and policy are the cornerstones of efforts to protect the environment and promote sustainable development in the three countries. The transboundary nature of many of the problems facing all three North American nations have increasingly led to efforts to seek common solutions and approaches. The Law and Policy program at the CEC helps the countries carry out their NAAEC obligations in encouraging regional cooperation among the government agencies, not only in enforcement and compliance promotion activities but also in development and improvement of environmental laws and regulations.

5.1 Comparative Report on Environmental Standards

The program is continuing its work on a scoping project to analyze standards in a critical area of North American environmental concern. As the trend toward increased intensive agricultural practices continues, regulatory agencies throughout North America are seeking ways to balance commercial and environmental interests. This study will provide a comparative overview of the regimes in place (of a regulatory and guidance nature) and highlight current trends. It will provide a baseline report on how environmental and human health concerns are addressed by various authorities in this area.

5.2 Enforcement Cooperation

The Council, in its *A Shared Agenda*, identified as a major task of the Commission the monitoring of trends in domestic legislation and implementation to ensure that domestic laws are being effectively enforced. Council also emphasized the importance of the Commission assisting the three countries by facilitating cooperative efforts in ensuring compliance. Specifically Council identified the following as important areas of concentration for the Commission:

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

5.2.1 North American Regional Enforcement Forum

The North American Working Group on Environmental Enforcement and Compliance Cooperation (EWG), a group of enforcement officials from each of the three countries, has met regularly since 1995 and given guidance to the CEC in projects such as voluntary compliance initiatives and a needs assessment for tracking and enforcement of transboundary movement of hazardous wastes. Planning for

this year's annual meeting has been delayed by changes in administration in Mexico and the United States and the retirement of key Canadian members of the EWG. However, the new membership also provides an opportunity to expand the attendance at this meeting to include high ranking enforcement officials from other government departments in the three countries to discuss new avenues for regional enforcement cooperation.

To bring to a close its work on compliance indicators, the EWG decided to prepare a "lessons learned" report on its pilot project to develop compliance indicators in the area of hazardous wastes.. This report was to be prepared by the members of the EWG as their last effort in this area since the group agreed that it was unable to make further progress on compliance indicators at this time.

5.2.2 Enforcement and Compliance Capacity Building

Capacity building efforts address both wildlife enforcement and pollution tracking and control..

Capacity building with respect to wildlife enforcement is carried out in conjunction with the North American Wildlife Enforcement Group (NAWEG). In August 2000, NAWEG and the CEC sponsored their fifth annual CITES-related training seminar. Held in Monterrey, Mexico, it focused on enforcement issues related to trophy hunting and game farming. Over 70 wildlife enforcement officers from Canada, Mexico and the United States attended to review not only the regulatory systems in effect in each country but also inspection techniques and species identification. The significant cost sharing contributions from all agencies involved highlight the importance that they attach to this type of regional capacity-building and networking.

The work of the North American Wildlife Enforcement Group (NAWEG) has shifted focus from CITES training to public participation issues. The NAWEG is organizing a two-day forum on public participation in wildlife enforcement activities to take place in the fall of 2001 in Washington, DC. This departure from its usual training focus is due to the success of the short seminar on public participation in enforcement, which the EWG put on in conjunction with the JPAC meeting during the CEC annual Council Session in Dallas last June. NAWEG met in Ottawa in April 2001 in conjunction with the meeting of the Trilateral Committee on Wildlife and Ecosystem Management and Conservation. The NAWEG used this meeting as a working session to provide input into the organization of the fall 2001 workshop, agree on its plan of activities for the next three years, and undertake the preparation of a 10-year strategic plan for the group. The Law and Policy program and NAWEG collaborated with the Conservation of Biodiversity program in organizing the invasive species workshop held in Montreal in March 2001. Enforcement issues relating to invasive species will be the topic for the next annual NAWEG training seminars in 2002.

Capacity building for pollution tracking and control involves two areas: (a) participation in SMOC meetings to add enforcement and compliance expertise in the formulation of NARAPs, and (b) work on designing and presenting joint training on the illegal trade in CFCs. This year the Enforcement Cooperation program has for the first time initiated a more direct contribution to enforcement and compliance dimensions of the Phase II Mercury Action Plan. It will participate in a joint study to focus initially in gathering information on the transboundary movement of mercury destined for processing or final disposal.

Capacity building in the second area centers on training on enforcement issues related to ozone-depleting substances (ODSs). This area was selected because all three NAFTA Parties are signatories to the Montreal Protocol on Substances that Deplete the Ozone Layer. Both the United States and Canada have already imposed severe limitations on the production and importation of many ODSs and Mexico is currently working on new regulatory controls on ODSs. However, there is a thriving trade in some restricted ODSs (such as CFC-12, or "Freon," which is used as a refrigerant in automobile air conditioners). This joint training on enforcement issues related to ODSs is intended not only to enhance enforcement capacity but also to serve as a foundation on which to build an enforcement network for continuing cooperation. The CFC training will take place in the fall of 2001 in Mexico city. The UNEP office responsible for this type of training in Central and South America has agreed to participate in this CEC initiative as an initial step in helping to encourage a broader enforcement network throughout the Americas to control illegal trade in CFCs.

5.2.3 *Enforcement and Compliance Reporting*

Since June 2000, the members of the Enforcement Working Group (EWG) have been preparing their draft reports for contribution to the Special Enforcement Report. The topics being covered are inspections, compliance promotion activities and results measurement.. The complete version in all three official languages will be published in summer 2001. The EWG supported the preparation by the CEC Secretariat of an enforcement report, in the alternating years in which there is no Special Enforcement Report produced by the Parties. Topics for this report are currently under consideration.

5.2.4 *Environmental Management Systems to Promote Compliance and Environmental Performance*

In June 2000, Council endorsed the Guidance Document on environmental management systems produced by the Enforcement Working Group. Entitled *Improving Environmental Performance and Compliance: 10 Elements of Effective Environmental Management Systems*, the document has been available since June on the CEC web site, has been produced in pamphlet form in the three languages, and has been distributed to various interested international organizations.

The CEC has also sought to pilot use of the document by private sector organizations. DuPont Mexico has agreed to be the first participant in a pilot project using the Guidance Document and the CEC is pursuing discussions to encourage the participation of US and Canadian DuPont plants. The CEC is also exploring ways to expand the pilot to other industries or sectors.

Challenges:

The first few years succeeded in building trust and laying the foundation for cooperative enforcement-related efforts in this area. However, given the often confidential nature of domestic enforcement operations and strategy and the limited avenues for meaningful public participation, it remains difficult to identify initiatives in the enforcement and compliance area that garner the ongoing interest and support of all Parties.

The key to success with the NAWEG projects has been the commitment to action by all country representatives on capacity building projects of practical relevance to all three parties. The future success of the EWG for other cooperative enforcement work will require the same level of interest from its members and expansion to build relationships with state and provincial enforcement colleagues.

Although the EWG has sought to maximize its limited funding by producing work through its members,, heavy work loads on domestic issues have meant that working group tasks on EWG projects are seldom completed in a timely fashion. Given the human resource constraints all Parties face, the EWG needs to assume a supervisory rather than a participatory role in carrying out the work of the Enforcement Cooperation program and to make strategic choices to focus its efforts on fewer projects. While the reports issued to date have been of interest to the enforcement community, more effort will be required to fulfill public expectations to provide useful information respecting the effective enforcement of environmental law. Overall, the Parties may wish to consider additional measures to address public expectations regarding CEC reporting on enforcement practices in the region.

Overall, the Parties may wish to consider additional measures to address public expectations regarding CEC reporting on enforcement practices in the region.

6 Secretariat Report on the Environmental Challenges and Opportunities of the Evolving North American Electricity Market

The combination of restructuring and increased international trade in electric power in North America presents challenges to, and opportunities for, environmental policy. The sector has long been a major source of several key air pollutants and associated environmental impacts, including mercury and acid rain, as well as non-air environmental problems, such as potential impacts of transmission on children's health, and land-use changes. The sector has also made important progress in the decoupling of total electric power generation from total emission levels. More analysis is required to determine probable effects of changes in the structure of the electricity sector in terms of both environmental quality, and environmental policy.

In November of 1999, under NAAEC Article 13, the CEC began to examine the environmental opportunities and challenges associated with electricity restructuring in North America. In January 2001, the first meeting of the Advisory Group on Electricity and the Environment took place, bringing together senior representatives of the utilities sector together with environmental and regulatory experts. The Advisory Group, chaired by the Hon. Phil Sharp, is advising the Secretariat on the development of the initiative on Electricity and the Environment. A report will address the environmental opportunities and challenges facing the evolving continental electricity market including demand-side efficiency and incentives—two main issues identified by the advisory board during the meeting.

Actions to date include:

- the first phase of an online database, describing key developments in restructuring and environmental and renewable portfolio standards, as well as demand-side issues related to product energy efficiency standards;
- the preparation of a background report, highlighting key issues related to market integration;
- an overview of quantitative economic modeling used thus far to assess the environmental effects of restructuring, as well as development of a CEC-sponsored (partial equilibrium) model to examine possible trade-environment links;
- a summary market analysis of demand-side issues; and
- the identification of potential market access issues.

Next steps will include:

- developing scenarios of possible changes in international trade of electricity involving Canada, US and Mexico;
- with Mexico's National Commission for Energy Conservation (*Comisión Nacional para el Ahorro de Energía*—CONAE), and informal data support/input from Mexico's Federal Electricity Commission (*Comisión Federal de Electricidad*—CFE), undertaking the first market analysis in Mexico of demand-side issues related to energy efficiency and renewability, with a survey of the top 100 Mexican companies measured by energy use;
- examining market incentives in support of environmental goals during restructuring and continental market integration;
- conducting additional modeling work;
- holding a meeting of advisory group in late May 2001;
- staging a Symposium on Electricity and the Environment in November 2001; and
- producing a final report for Council in late 2001, with recommendations from the Advisory Group.

7 Submissions on Enforcement Matters

Under Article 14, any citizen in North America may make a submission to the Commission calling attention to situations where governments may not be enforcing environmental laws effectively. This tool is for members of the public to request that the CEC develop a factual record on alleged non-enforcement of environmental law. Since June of last year, three new submissions have been received by the CEC Secretariat.

7.1 Status of submissions

The status of the twelve submissions currently under review is as follows:

Pending Council Decision on Development of Factual Records:

- 1) **Aquanova.** On 4 August 2000, the Secretariat informed Council that SEM-98-006/*Grupo Ecológico Manglar A.C.* (concerning Mexico's enforcement in regard to wetlands impacts of shrimp farm) warrants developing a factual record.
- 2) **Migratory Birds.** On 15 December 2000, the Secretariat notified Council that submission SEM-99-002/*Alliance for the Wild Rockies, et al.* (concerning enforcement by the US of the Migratory Bird Treaty Act against logging operations) warrants developing a factual record.
- 3) **BC Mining.** On 11 May 2001, the Secretariat notified Council that submission SEM-98-004/*Sierra Club of British Columbia, et al.* (concerning Canada's enforcement of the Fisheries Act against mining operations in British Columbia) warrants developing a factual record.

4) **Oldman River II.** The Council has deferred consideration of the Secretariat's notification that a factual record is warranted with respect to SEM-97-006/*The Friends of the Oldman River* (concerning Canada's enforcement of the Canadian Environmental Assessment Act and the Fisheries Act).

Regarding these four cases, Council may, upon a two-thirds vote, instruct the Secretariat to prepare a factual record.

Factual Record in Development:

Metales y Derivados. The Secretariat is currently developing a factual record on SEM-98-007/*Environmental Health Coalition, et al* (concerning Mexico's enforcement related to abandoned lead smelter site).

Pending Determination Whether Factual Record is Warranted Under Article 15(1):

- 1) **Río Magdalena.** SEM-97-002/*Comité Pro Limpieza del Río Magdalena* (concerning Mexico's enforcement in relation to wastewater discharges)
- 2) **Great Lakes.** SEM-98-003/*Department of the Planet Earth et al.* (concerning enforcement by the US in relation to dioxin and mercury emissions from solid and medical waste incinerators)
- 3) **BC Logging.** SEM-00-004/*David Suzuki Foundation et al.* (concerning Canada's enforcement of the Fisheries Act in relation to logging operations in British Columbia)
- 4) **Molymex II.** SEM-00-005/*Academia Sonorense de Derechos Humanos et al.* (concerning Mexico's enforcement in relation to air quality and environmental impacts of molybdenum processing plant)

These submissions are being reviewed by the Secretariat in light of the Party's response to determine whether development of a factual record is warranted. On 13 September 1999, the Secretariat requested additional information from Mexico under Article 21(1)(b) concerning SEM-97-002/*Comité Pro Limpieza del Río Magdalena* (concerning Mexico). No response to this request has been received.

Pending Response from a Party Under Article 14(3):

Cytrar II. On 13 June 2001, the Secretariat determined that the Party's response in SEM-01-001 / *Academia Sonorense de Derechos Humanos, A.C. et al.* (concerning Mexico's enforcement in relation to hazardous waste landfill) was insufficient to determine that the Secretariat shall proceed no further with the submission under Article 14(3)(a). Under Article 14(3), the Party has 30 remaining days to provide more information relevant to Article 14(3)(a) and/or to respond to the allegations in the submission.

Pending Secretariat Determination Under Articles 14(1) and (2):

- 1) **Tarahumara.** SEM-00-006/ *Comisión de Solidaridad y Defensa de los Derechos Humanos, A.C* (concerning Mexico's enforcement in relation to access to environmental justice to indigenous communities).
- 2) **Dermet.** SEM-01-003/ *Mercerizados y Teñidos de Guadalajara, S.A.* (concerning Mexico's enforcement in relation to the probative value in a civil trial of a *Profepa* technical opinion in relation to on groundwater contamination caused by the Dermet, S.A. de C.V., in the city of Guadalajara in Jalisco).

These submissions are being reviewed by the Secretariat to determine whether they meet the Article 14(1) criteria and whether, based on the factors in Article 14(2), they warrant a response from the Party.

7.2 **Historical Background of Submissions**

The **nineteen** submissions that are no longer pending were addressed as follows:

Ten submissions have been dismissed on the grounds that they did not warrant further consideration, based on Article 14(1) or (2):

Spotted Owl- SEM-95-001/*Biodiversity Legal Foundation et al.*

Logging Rider- SEM-95-002/*Sierra Club et al.*

Tottrup- SEM-96-002/*Aage Tottrup*

CEDF- SEM-97-004/*Canadian Environmental Defence Fund*

Biodiversity- SEM-97-005/*Animal Alliance of Canada et al.*

Guadalajara- SEM-98-001/*Instituto de Derecho Ambiental, A.C., et al.*

Ortiz Martínez- SEM-98-002/*Ortiz Martínez*

Molymex I- SEM-00-001/*Rosa María Escalante de Fernández*

Jamaica Bay- SEM-00-003/*Hudson River Audubon Society of Westchester, Inc., et al.*

AAA Packaging - SEM-01-002/*Submitter's name confidential.*

Two submissions have been terminated under Article 14(3)(a):

Methanex- SEM-99-001/*Methanex Corporation*

Neste- SEM- 00-002/*Neste Canada Inc.*

Three submissions have been terminated under Article 15(1):

Oldman River I- SEM-96-003/*The Friends of the Oldman River*

Lake Chapala- SEM-97-007/*Instituto de Derecho Ambiental*

Cytrar- SEM-98-005/*Academia Sonorense de Derechos Humanos*

One submission has been withdrawn by the Submitters:

Fort Huachuca- SEM-96-004/*The Southwest Center for Biological Diversity et al.*

Two factual records have been prepared and made public:

Cozumel- SEM-96-001/*Comité para la Protección de los Recursos Naturales, A.C. et al.*

BC Hydro- SEM-97-001/*B.C. Aboriginal Fisheries Commission et al.*

The Council has dismissed one submission under Article 15(2) following notification from the Secretariat that preparation of a factual record was warranted:

Quebec Hog Farms- SEM-97-003/*Centre québécois du droit de l'environnement. et al.*

At the 13 June 2000, Council Session, Resolution 00-09 was adopted, establishing two mechanisms related to NAAEC Articles 14 and 15. First, Council established an ongoing process for referring to JPAC issues raised by Council, the public, the Secretariat or JPAC itself concerning the implementation and further elaboration of Articles 14 and 15, so that JPAC may conduct a public review and provide advice to Council on the issues. This process was established for an indefinite period. Second, Council asked the JPAC to conduct a review the history of citizen submissions and report on the lessons learned regarding the Article 14 and 15 process, taking into account issues raised by the Parties' on specific submissions and referred to JPAC through Council. The JPAC finalized this report on 4 June 2001. Council stated its intention to review the operation of Resolution 00-09 after two years (i.e., in 2002).

8 Public Participation and Transparency

Public participation and transparency are core values that are reflected in both the design and operation of the CEC. An active and engaged JPAC as well as the National Advisory Committees (NACs) and Government Advisory Committees (GACs) are successful in facilitating public discussion and input on various issues and have played important roles in providing valuable advice to Council and ministers respectively. The citizen submission process under Article 14 helps contribute to a better understanding of

effective enforcement, and promotes North American values of openness, transparency, and accountability at all levels of government. As well, the CEC facilitates the development of environmental information and public access to that information.

Efforts are being made to strengthen the participation of civil society in the work of the Commission. While the CEC Secretariat has tried to incorporate public participation mechanisms into many of its programs and projects, there is room for improvement. A clear public participation strategy is required. As a first step in meeting this need, CEC staff have developed a draft strategy and outlined pilot activities to be carried out in 2001. These will include efforts to enhance public participation in (a) the Annual Council Session and (b) the Pollutants and Health program (particularly in the SMOC process, but with links to other program elements). The JPAC Liaison Officer and NAFEC Coordinator will take primary responsibility for these activities, in close cooperation with other CEC staff. Following evaluation of this initial stage, the strategy will be refined and a proposal will be developed to integrate effective public participation mechanisms into the work of the CEC Secretariat on a more permanent and extensive basis.

9 Partnerships and capacity building

Partnerships

The CEC draws significantly on the expertise found in universities, NGOs, business groups and government agencies. It depends on its ability to reach out to other organizations and collaborate with them to achieve concrete results. There are good examples of effective partnerships with other organizations that are contributing to valuable progress:

- The CEC has collaborated with many organizations to establish the North American Biodiversity Network (NABIN), including the US Geological Survey, Agriculture Canada, *Red Mexicana de Información sobre Biodiversidad*, *Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*, the Centers for Disease Control and others. In total, the CEC has leveraged over a million dollars, primarily through the National Science Foundation, but also through EPA, NOAA and others.
- UNITAR has been an informal partner of the CEC with the mutual aim of supporting the further development of the national PRTR program, RETC, in Mexico.
- The CEC has collaborated with the Conference of New England Governors and Eastern Canadian Premiers in identifying the movement of smog precursors.
- The Western Governors Association has helped the CEC in its work on promoting transboundary environmental impact assessment.

Capacity Building

One of the important conclusions that can be drawn from the work of the CEC is that investment in high levels of environmental protection and the effective enforcement of environmental laws will enable countries to come to terms with any environmental challenges raised by liberalized trade. While Canada and the United States have technical and financial resources to address environmental concerns, the resources available to Mexico are more limited. The CEC has undertaken efforts to strengthen the capacity of government, business and NGOs in specific areas:

- **Sound Management of Chemicals:** A joint \$400,000 project with the United Nations Environment Program and the Pan American Health Organization under the Global Environment Fund to share the successful experience of Mexico through SMOC to phase out DDT with the countries of Central America.
- **Pollutant Release and Transfer Inventory:** The CEC has provided support to Mexico in the development of RETC. Discussions are underway to work with the Mexican chemical manufacturing association, ANIC, in strengthening capacity in the private sector with regards to develop a pollutant release and transfer report.

- **Pollution Prevention:** The CEC worked with the Confederation of Industrial Associations of the United Mexican States (*Confederación de Cámaras Industriales*—Concamin) to establish a pollution prevention fund for small and medium-size Mexican enterprises (SMEs). The CEC has provided \$350,000 and Concamin \$650,000 to fund the *Fondo para proyectos de prevención de la contaminación*—Fiprev, a revolving fund for SMEs. Fiprev has provided 40 loans to SMEs, enabling SMEs to incorporate pollution prevention technologies into their practices and resulting in measurable reductions in wastes, and energy and water use.

The CEC has also worked with the Mexican Center for Clean Technology to establish a pollution prevention roundtable, bringing business, research and technology institutes and governments together to strengthen institutions and programs for pollution prevention.

- **Network of Air Experts:** The CEC is working with the Government of Mexico to develop a core team of experts on air pollution and research staff with a view to having a ‘single point of communication’ within Mexico that can work with similar networks at the international level
- **Wildlife Enforcement:** The CEC has worked with the North American Wildlife Enforcement Group to sponsor annual training sessions on various aspects of CITES enforcement, targeting trade in fur-bearing species, birds, reptiles, corals and marine invertebrates as well as trophy species. In addition, the CEC has contributed to organizing two international wildlife forensic seminars, which enable forensic experts and enforcement program managers to share valuable information, and has published two information brochures on forensic techniques, which have been widely distributed among the North American wildlife enforcement agencies.

The CEC is currently organizing a training seminar on enforcement issues regarding illegal traffic in ozone-depleting substances. This will involve officers from enforcement and customs agencies in all three countries.

Challenges:

A major challenge in achieving North American environmental progress is the lack of financial, technical and institutional resources available, particularly in Mexico. There can be no doubt that Mexico requires financial support and technical assistance to carry-out its environmental objectives and participate fully in North American cooperation.

While the Commission has taken into account capacity building needs of Mexico in its work, the resources available from its annual budget are not sufficient to make a significant contribution on its own. The Commission, therefore, has adopted a policy of allocating specific substantial resources for leveraging of other resources. For example, it has leveraged US\$100,000 to leverage US\$330,000 from the Global Environment Fund, \$100,000 (in kind) from the Pan American Health Organization (PAHO) for a joint project on DDT phase-out with PAHO and the governments of Mexico and Central America. It is hoped that the next phase of this initiative will allow the Commission to use US\$200,000 to leverage approximately US\$15 million. Limited but valuable opportunities for leveraging such as this exist for other areas.

The experience of the Commission in capacity building suggests that Mexico’s status as an OECD member limits the amount of grant money available to it from international agencies. While the Global Environment Fund remains an important source, it cannot be the only one. This leads the Commission to pursue the following strategies:

- Access resources from multilateral agencies through projects that transfer Mexico’s environmental successes to other parts of the hemisphere.
- Identify and approach financial mechanisms under international conventions, such as the POPs fund established by Canada.
- Identify ways in which changes to NADBank’s mandate can help make NADBank financing available for Mexican initiatives undertaken under NAAEC.
- Explore market-based instruments.
- Explore cross-border private sector partnerships.
- Explore possibilities of greater collaboration with USAID and CIDA programs.
- Strive for synergy in work by collaborating with other international agencies.

The Commission can play an important role as a catalyst for capacity building, involving building technical and official consensus on priorities, brokering partnerships, and project definition and preparation.

10 NAFEC

The North American Fund for Environmental Cooperation (NAFEC) has awarded 142 grants to community-based projects since 1996. A new round of grants will be announced in early summer 2001. The grants for 2001 will focus on two areas of CEC's work: (1) Marine Protected Areas and (2) Children's Health and the Environment.

NAFEC has increased its efforts to promote networking and exchange among its grantees and other nongovernmental organizations involved in projects related to the CEC's work. In 2000, it brought nongovernmental organizations involved in pollutant release and transfer registers (PRTRs) and environmental management systems (EMS) together with government and industry in order to develop approaches that would satisfy all the stakeholders. NAFEC has also continued to build on its considerable work in supporting community-based approaches to trade in green goods and services, promoting exchange among communities involved in sustainable tourism and sustainable agriculture, and bringing their experiences to bear on other CEC projects.

NAFEC has also increased its collaboration with other grantmakers in efforts to expand and combine resources in support of cross-border initiatives, projects related to trade and environment (including promoting green goods and services) and channeling additional resources to work in Mexico. Collaboration with CEC's Financing and the Environment project is permitting exploration of the potential for green investment to leverage NAFEC's resources.

As the NAFEC evaluation carried out in 2000 indicated, NAFEC plays an important role in enhancing public participation in the work of the CEC. It provides funding as well as other types of support (e.g., technical assistance, facilitating networking and information sharing) that strengthen the capacity of organizations that contribute to meeting CEC's objectives. It also serves as an entry point to other CEC processes. NAFEC is putting increasing emphasis on using its information base and networking capacity to enhance public participation in all of CEC's activities.

11 2002–2004 Program Outline and Approval Process for the Three-year Program Plan

The Secretariat has developed the Outline for 2002–2004 to stimulate discussion and feedback from the Parties, JPAC and the public in the development of the 2002–2004 proposed Program Plan and Budget. The guidance received by the Secretariat will be incorporated, and the document will be submitted to the Parties for review and approval in early September.

12 Monitoring and Evaluation of Projects

The methodology for evaluation has been finalized and is currently being applied to a results-oriented logical framework, as well as to the preparation of a reporting document for all programs. Once this step is completed, the terms of reference for the evaluations will be prepared, and independent evaluators will be contracted. It is expected that initial evaluation reports will be available for a number of units prior to the end of 2001.

A continuous monitoring system is also operational. The Online Manager (OLM) will allow us to track all project-related progress in 2001 and beyond and will facilitate preparation of a number of reports.

13 **Communications and Outreach**

In October 2000, the Commission launched *Trio*, a new quarterly newsletter designed to update readers on the progress of the NAFTA partners in the protection of their shared environment. CEC-related news is revealed through stories told by a variety of voices from across the CEC community. *Trio* was published in the fall and winter 2000, spring 2001 and summer (June) 2001. The newsletter is made available in both a hard-copy (print) edition and a special Internet edition.

The CEC is exploring ways to make better use of information and communications technologies to enable greater access to its work. In October, the CEC produced its first live audio web-cast for its symposium on “Understanding the Linkages between Trade and Environment.” People unable to attend the event in Washington were able to monitor the presentations and discussions in all three languages, in real time through their own computers, as well as download documents, see photos of speakers, and read journalistic summaries of the two-day event provided by the International Institute for Sustainable Development (IISD).

As well, the July launch of *Taking Stock 1998* will be handled for the first time by the release of a summary volume intended for widespread distribution, a more detailed sourcebook, and a web site where users can customize their own data searches.