



annual ²⁰¹³ report

Commission for Environmental Cooperation



Mission

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

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CEC Ministerial Statement

Twentieth Regular Session of the CEC Council

Los Cabos, Mexico, 11 July 2013—North America’s major environmental challenges—including air pollution from transportation, climate change, and the movement of hazardous waste—require joint, coordinated action in the context of the region’s shared borders and closely linked economies.

During our meeting today as the Council of the Commission for Environmental Cooperation (CEC), we agreed to a new Operational Plan for 2013–2014 that focuses on collaborative actions in three strategic areas to maximize our impact: greening transportation, tackling climate change while improving air quality, and addressing waste in trade.

Participants at our town hall meeting on transportation and the environment, as well as our Joint Public Advisory Committee members during their round table on sustainable transportation yesterday, called for action to reduce the environmental impact from our transportation networks that serve as vital links between our countries. To this end, we are announcing new initiatives to reduce emissions from trucks and buses, as well as from maritime transportation, especially at our borders and along our coasts.

We have also decided to bolster our joint efforts to combat climate change as well as harmful air pollutants that threaten the health of our communities and our economies. These efforts are intended to focus on reducing carbon in the atmosphere through protecting coastal and forest ecosystems, avoiding black carbon emissions, collecting and disseminating reliable and comparable data on greenhouse gas emissions and other pollutants, and promoting green building construction.

The management of hazardous wastes in trade, including electronic wastes and spent lead-acid batteries (SLABs), requires particular attention from our governments. The CEC Secretariat’s recent *Hazardous Trade?* report on SLABs made specific recommendations that we have considered in developing a North American response, through our enforcement and regulatory officials, to ensure that these wastes are properly managed to avoid harming the environment and the health of our communities.

Finally, as part of the new Operational Plan, we intend to continue our collaboration on key North American initiatives tracking pollutants, protecting shared ecosystems, reducing risks from chemicals, and coordinating environmental enforcement.

Taking action through community partnerships

Communities across North America are tackling environmental challenges head on with exciting and successful community-led projects that are restoring ecosystems altered by invasive species, improving the quality of life for the communities through sustainable building techniques in coastal communities devastated by hurricanes, and restoring natural diversity while beautifying neighborhoods by removing concrete and asphalt. These are just a few of the projects with direct and positive impacts on their communities and the environment that we are proud to support through our North American Partnership for Environmental Community Action (NAPECA).

Today we are again calling on community leaders to propose hands-on projects that demonstrate innovative approaches to addressing community, indigenous, local and regional environmental issues by promoting partnerships and delivering clear and tangible results that can be shared with communities across North America. Building on the many success stories generated through this grant program we have dedicated \$1.2 million to support these new projects over the coming two years. Proposals can be submitted until 10 September 2013, and we look forward to announcing grant recipients early next year.

New online tools for the Submissions on Enforcement Matters process

We are committed to ensuring that the Submissions on Enforcement Matters (SEM) process continues to be an efficient and valuable public participation mechanism, promoting the effective enforcement of

environmental law in our three countries. Last year we adopted significant revisions to the *Guidelines on Submissions on Enforcement Matters under Articles 14 and 15 of the North American Agreement on Environmental Cooperation (NAAEC)*, in order to ensure that the process is more timely, accessible, and transparent.

Today we are pleased to announce two new tools designed to make the SEM process more accessible to the North American public. First, a new online portal, designed to provide members of the public with a user-friendly resource for filing submissions. Second, in support of Council's overall objectives to promote transparency and accountability, an online SEM "tracker" that will allow interested parties to easily monitor compliance with the mandatory and target SEM process deadlines set forth in the Agreement and the SEM Guidelines.

In the year ahead, our officials plan to work with the Secretariat and the Joint Public Advisory Committee to ensure effective SEM process monitoring and assessment and to begin implementation of a SEM outreach strategy.

Twenty years of successful environmental cooperation

We look forward to meeting in Canada in 2014, where we plan to celebrate the 20th anniversary of the North American Agreement on Environmental Cooperation, an agreement of historic significance borne out of trade agreement negotiations, which has enabled our three countries to work together on issues affecting our shared environment. From tracking pollutants and protecting migratory species that cross our borders to greening our economies by reducing risks from chemicals and making our industrial supply chains more sustainable, we have achieved significant results together. We intend to continue and strengthen these joint efforts over the years to come, particularly as we begin work on the CEC's 2015-2020 Strategic Plan.

The Council, the CEC's governing body, is composed of the federal environment ministers (or equivalent) of the three countries, and meets at least once a year. The Council members are Canadian Environment Minister Peter Kent, Mexican Secretary for Environment and Natural Resources Juan José Guerra, and Acting US Environmental Protection Agency Administrator Bob Perciasepe. The Joint Public Advisory Committee (JPAC) is a 15-member, volunteer body that provides independent advice and public input to Council on any matter within the scope of NAAEC.

Cooperative Achievements

1. Introduction

The Commission for Environmental Cooperation (CEC) was created in 1994 under the North American Agreement on Environmental Cooperation (NAAEC) concluded by Canada, Mexico and the United States (the “Parties”) as a side-agreement to the North American Free Trade Agreement (NAFTA). The CEC’s mission is to facilitate collaboration and public participation to foster conservation, protection and enhancement of the North American environment.

A Council composed of cabinet-level environmental officials from each of the NAAEC Parties governs the CEC; oversees the implementation of the Agreement, and oversees the CEC Secretariat. A fifteen-member Joint Public Advisory Committee (JPAC) acts as an independent advisory body to the Council on any matter within the scope of the Agreement. The CEC Secretariat is headquartered in Montreal and has a liaison office in Mexico City. It is headed by an Executive Director who oversees programs fostering cooperation on various North American environmental matters; the development of independent Secretariat reports on North American environmental issues, and a unit that processes citizen submissions on enforcement matters (SEM). More information at: www.cec.org

In July, the Council held its twentieth regular session in Los Cabos, Mexico where the Council convened a town hall meeting on transportation and the environment, and agreed on key areas of focus for 2013-2014: Greening transportation, tackling climate change while improving air quality, and addressing waste in trade. During the public session, the Council issued a call for proposals regarding “hands-on” projects to be funded under the North American Partnership for Environmental Community Action (NAPECA). The Council approved a 1.2 million budget to support this initiative for the next two years. The Council also launched new SEM online tools that will allow the public to file electronic submissions under a new portal and an online tracker facilitating public monitoring of SEM process target deadlines.

2. Cooperative Work Program

CEC’s cooperative work program has followed the Council agenda set forth in 2009 by implementing concrete initiatives under three broad priorities, namely: Healthy Communities and Ecosystems; Climate Change – Low-Carbon Economy; and, Greening the Economy in North America. These strategic priorities and their associated objectives are detailed in the Strategic Plan 2010-2015. In support of the three CEC strategic priorities, the CEC has continued to develop map layers and datasets under the North American Environmental Atlas. Activities in 2013 included a workshop in April aimed at training the public on how to best use geospatial data to better understand location-based environmental issues.

Another cross-cutting initiative was the inauguration of the CEC virtual library, providing the public with easy access to the CEC’s collection of published work on environmental policy and planning from the last 20 years in English, French and Spanish. Developed using Islandora, an open source digital asset management system, the wide array of reports covers climate change, pollutants, ecosystems, green economy and enforcement.

(A) Healthy communities and Ecosystems

Canada, Mexico and the United States recognize that North America’s wellbeing—both environmental and economic—is grounded in healthy communities and ecosystems. Therefore, the Parties committed to building upon and renewing collaborative efforts within the CEC to protect, sustain and restore the health of people, communities and ecosystems using integrated and comprehensive approaches and partnerships.

(i) Improved Environmental Health of Vulnerable Communities in North America

Pollution in the environment can have significant effects on human health. However, some individuals and groups are more vulnerable to health risks from exposure to environmental contamination. This project involves the development of a framework document to assist individuals and communities in the identification of potential health risks associated with environmental pollution. It also supports the implementation of AirNow-International in Mexico, with the purpose of providing the capability to inform the public about air quality conditions that can impact human health.

In April, the CEC conducted training sessions on AirNow Information Management Systems for the Ministry of Sustainable Development (Secretaría de Desarrollo Sustentable) in Nuevo León, Mexico and the National System of Air Quality Information in Mexico (Sistema Nacional de Información de la Calidad del Aire, SINAICA). AirNow identifies opportunities to improve comparability, enabling NAAEC Parties to share results and strengthen capacities, while working towards advancing domestic mitigation objectives, standards, regulations, and policies over the next five years. In June, the final installation AirNow-I at the Integrated System of Environmental Monitoring (Sistema Integral de Monitoreo Ambiental, SIMA) in Monterrey, Nuevo León, was completed. The system have resulted in 80% reduction in data processing time, improved data quality, effective integration of data processing and analyses, and efficient use of the information for air quality management. Finally, the CEC drafted a document on vulnerability to environmental contamination across North America, which is intended to serve as resource for the development of environmental health assessment tools.

As part of the project Improving Indoor Air Quality to Reduce Exposure to Airborne Contaminants in Alaskan Native Populations and Other Indigenous Communities in North America, the CEC held a CECTalk broadcasting “The Alaskan Experience,” an interactive webcast featuring two Alaskan fieldworkers faced with challenging North American public health issue: indoor air quality. Through the CEC, fieldworkers shared how they have been working to improve chronic health problems in Alaska’s indigenous communities that are linked to substandard housing, overcrowding, poor indoor air quality and the lack of indoor plumbing. More information at <http://www.cec.org/CECTalks>

(ii) Increased Resilience of Shared Ecosystems at Risk

Building upon CEC’s past efforts, the North American Grasslands project published an online collection of beneficial management practices to promote sustainable ranching and biodiversity conservation. This online tool has over 100 practices and featured stories from ranchers, conservation organizations, government and academic bodies in Canada, the United States and Mexico. As part of these efforts, the North American Grasslands Alliance met in April with partners and experts to discuss the implementation of ranch-level beneficial management practices that improve environmental sustainability of livestock production on ranches and bring concurrent economic and biodiversity benefits. The document, “The North American Grasslands Alliance: A Framework for Change” contains foundational principles, objectives and priorities to sustain working landscapes, conserve biodiversity, and support vibrant rural communities across North America.

The Big Bend-Río Bravo Steering Committee (BBRB-SC) sustained efforts by bringing together conservation experts to identify key conservation areas and resources that will culminate through a report on “Conservation Assessment for the Big Bend-Río Bravo Region: A Binational Collaborative Approach to Conservation,” thereby creating a binational priority assessment that both countries can use to inform future conservation and restoration work and research in the region. Other activities included the creation of a ecotourism cooperative in Boquillas, Coahuila to welcome back visitors through the pedestrian border crossing, invasive terrestrial plant and animal species eradication, control and monitoring over 10 km of river bank, and scientific research on sediment transport in Big Bend reach of the Rio Grande.

The CEC supported the North American Invasive Species Network (NAISN) in extending its partners network by conducting capacity building workshops on invasive species introduction and spread, and by developing a NAISN website and data-sharing platform. NAISN is a North American consortium of experts and institutions working on the eradication of invasive species through science-based understanding of, and effective response to exotic invasive species.

The North American Marine Protected Areas Network (NAMPAN) has been focusing on community-based education and awareness of Marine Protected Areas (MPAs). In January, the CEC broadcasted a discussion with Maria Brown the superintendent from the Gulf of Farallones National Marine Sanctuary and Juliet Eilperin from The Washington Post. This webcast event featured a panel discussion on how North America's marine protected areas are being impacted by climate change, as well as how marine protected area managers, government marine conservation officials and others can use scientific information products developed by the CEC and its partners to address these impacts. In October, the CEC's marine work was featured in a conference in Marseilles, France by prominent members of NAMPAN.

(iii) Pollutant Release and Transfer Registers (PRTR)

The North American PRTR (NAPRTR) Project involves the compilation and dissemination of information on the sources, amounts and handling of toxic substances released or transferred by industrial facilities in North America, based on data reported to the pollutant release and transfer register (PRTR) of each country. The main products of this project are Taking Stock Online: a website featuring information and a searchable database of integrated, North American PRTR and the annual Taking Stock report. The online platform brings together information allowing stakeholders to understand the context and limitations of PRTR data and areas for further improvement. The Taking Stock report also features special analyses of the data, which can provide additional insights for decision-making.

The CEC continued preparation of the Taking Stock report which is now expected to be published in 2014 presenting analyses from 2005-2010, with a focus on the pulp and paper sector. The Taking Stock Online for 2011 will be published in 2014. The website currently features customized, searchable access to the integrated North American PRTR database, allowing users to explore various aspects of reported data, and access summary charts and tools to download the data and display them in the Google Earth mapping application.

In March, the CEC held the meeting of the North American PRTR Officials to discuss recommendations from the NAPRTR project public meeting, on the Action Plan to Enhance the Comparability of PRTR data in North America. The Action Plan document contains specific actions for consideration by the CEC Council. A final draft Action Plan will be presented to the CEC Council for their consideration in 2014.

As part of an outreach effort, the CEC organized a series of training webinars in English, French and Spanish on the use of Taking Stock Online. The use of Taking Stock Online was also presented at Canada's National Pollutant Release Inventory Data Users Workshop, and at the Society of Environmental Toxicology and Chemistry conference. The webinars were recorded and made available for viewing on the CEC YouTube channel.

Also in 2013, the CEC worked on the analysis of the Taking Stock report, updated Taking Stock online and drafted the action plan, based on the 2012 recommendations from its public meeting in Toronto. Conducted in an annual basis, the public meeting serves as a forum for citizens and representatives of communities, industry, academia, governments and non-governmental organizations concerned with North American environmental pollution, to share knowledge and ideas relating to PRTRs and access to public information. Input from participants also serves to guide the development of the Taking Stock report and website.

(iv) Enhanced Regional Approach to Sound Management of Chemicals

The Sound Management of Chemicals (SMOC) program gathers senior government officials charged with setting a framework for addressing the sound management of persistent, bio-accumulative, and toxic chemicals in North America.

In June, the SMOC Working Group met in Montreal, Canada to discuss results from the 2011-2012 Operational Plan, share progress on domestic chemical management practices, and discuss future projects. As part of SMOC efforts with Mexican officials to develop capacities in this country, the CEC held a workshop in February on dioxin exposure, aimed at identifying potential exposure pathways for dioxin, dioxin-like compounds, and hexachlorobenzene that could result in significantly elevated exposures in Mexico. Based upon data collection, the CEC completed a report and a tri-national comparison for air monitoring data for dioxins, furans and coplanar polychlorinated biphenyls for the North American Air Monitoring Network. The CEC also developed a report outlining a risk-based approach for the derivation of guidelines for dioxins, furans and hexachlorobenzene in fertilizers and soil amendments.

The CEC compiled information on mercury waste management options in North America and released four reports detailing progress on the sound management of mercury, notably in Mexico. These reports addressed undocumented primary mercury production; mercury thermometers substitution in hospitals; findings of mercury studies in fish samples; and, outlined a North American Regional Action Plan for Mercury close-out. The CEC also published outreach material related to dioxins exposure through wood burning and agricultural waste. As part of the CEC's sustained work on Polybrominated Diphenyl Ethers (PBDEs), alternatives to PBDEs were identified in Mexico; and, PBDEs and flame retardants were characterized in leachate and biosolids. A comparison study between national chemical inventories was completed and the close-out report on lindane and other hexachlorocyclohexane isomers was released.

The Environmental Monitoring and Assessment Action Plan (EM&A Plan) continues to be an integral part of the overall SMOC program. The objective of this plan is to identify adverse effects to human health and the environment using a regional monitoring approach to support risk reduction strategies, including identification of priorities, assurance of comparable data and monitoring for results.

In 2013, the National Program for Environmental Monitoring and Assessment in Mexico (*Programa Nacional de Monitoreo y Evaluación Ambiental* —Proname) continued to grow through the addition of two new sites (Mapimí and Salamanca). Also, the Proname web microsite was updated which will continue to allow access to environmental monitoring results as they become available.

As part of the EM&A Plan, efforts continued in 2013 on adoption of quality assurance/quality control protocols for analytical chemistry and data reporting and producing results validated on a continental scale. In April, the CEC held a workshop to share and assess the results from Proname with representatives and experts from the three countries. This workshop allowed the NAAEC Parties to address the similarities between programs, and how future collaboration can be established in North America. Also the CEC published a report articulating efforts with the Strategic Approach to International Chemicals Management (SAICM). Specifically, the report measures how the CEC's work on chemicals management has helped achieve progress on SAICM indicators.

(v) Strengthening Regional Environmental and Wildlife Law Enforcement

The North American Working Group on Environmental Enforcement and Compliance Cooperation (EWG) is tasked with enhancing compliance with and strengthening enforcement of environmental and

wildlife laws in North America. The EWG is composed of senior-level environmental and wildlife law enforcement officials from North America.

Following its commitment to implement an intelligence-led approach to regional environmental and wildlife enforcement, during 2013 the CEC focused on sharing information on hazardous waste, including spent lead acid batteries, e-waste, ozone layer depleting substances, non-compliant engines in motorcycles and wildlife.

The EWG held a workshop in March in Minneapolis on the use of electronic media for conducting investigations in environmental and wildlife enforcement. The purpose of this workshop was to share expertise in cutting-edge techniques for conducting investigations utilizing electronic media in the implementation of intelligence-led enforcement. In May, the Wildlife Enforcement Group met in Shepherdstown, West Virginia to discuss ways to enhance the implementation of the wildlife intelligence-led enforcement and strengthen NAAEC Parties capacities in targeting illegal trade in wildlife, particularly on marine species. To address this need, key agencies and players responsible for protecting marine species in North America met in Vancouver, British Columbia in June.

The EWG later met in November in Washington DC to discuss, analyze cases success stories and key challenges in enforcing compliance of regulated materials to outlines approaches and avenues in the implementation of enforcement and compliance activities. The EWG also completed a technical sheet including the most salient elements of US and Canadian motorcycles standards for engines.

As part of the CEC's continued efforts in outreach to enforce environmental legislation, the EWG launched in September the Hazardous Waste Online Trainer in English, French, Spanish and Mandarin, which purpose is to help identify hazardous waste and its relevance in international law, outlining import and export requirements for NAAEC Parties. The CEC held in June workshops on environmentally sound management practices for e-refurbishers and e-recyclers in Mexico City and Toronto. These workshops aimed at reviewing and discussing key issues and approaches to implementing environmental sound management.

(B) Climate Change – Low-carbon Economy

Concerning the Climate Change – Low-carbon Economy priority, the CEC intends to collaborate on improving the comparability of GHG emissions data gathering, methodologies, and inventories, and build stronger networks of experts and systems to share climate change information.

(i) Engagement of Experts and Strengthened Information Sharing in Climate Change and Low-Carbon Economy

Since 2011, the CEC has supported the development of methodologies to estimate carbon stored in ecosystems across North America. Key goals of the project include the development of trilaterally-agreed modelling methods and products; support for carbon dynamics modelling efforts in Mexican forest ecosystems for long-term carbon dynamics assessment; support for the development of a national-scale carbon accounting system for Mexico; and, provide recommendations for a North American modeling and analysis approach to support REDD+ in Mexico. In 2013 the CEC began the project “Integrated Modeling and Assessment of North American Forest Carbon Dynamics and Climate Change Mitigation Options.” As part of project activities, the CEC held technical meetings in January and November to discuss the application of empirical carbon budget models and disturbance models at several pilot sites in Mexico; select pilot study areas and discuss and agree on the completion of the 2005 to 2010 annual land cover time series and the assessment of the potential for a spatially detailed and new land cover products. The CEC also began a new project on coastal vegetated carbon (blue carbon) which is looking at the amount of carbon stored in mangroves, salt marshes and seagrasses in North America.

(C) Greening the Economy in North America

The CEC has been working with partners in the private sector to improve the environmental performance of the private sector in areas such as state-of-the-art green building design, and the movement of used electronics and other e-wastes.

(i) Improved Private Sector Environmental Performance in North America

The CEC launched an online library on Green Building featuring nearly 400 publications. In continuation of the CEC initiatives on improving green building construction in North America, the CEC published three reports that examine best practices in financing, policy making and education in the green building sector.

In April, the CEC held a workshop on harmonizing indicators of energy efficiency for North American buildings, focusing on Mexico's adoption of Energy Star requirements for commercial buildings. Also, a focus group meeting held in Toronto on green building financing models provided feedback to the United States and Canada. A similar focus group meeting was held in Mexico City provided feedback to Mexican officials on financing models. Finally, the CEC held a meeting in Ottawa to draft business cases for green building financing models capable of increasing green building construction in Canada and the United States. In May, CEC hosted a web panel on the cultural shift to green building broadcasted through the CECTalk series. In November, the CEC gathered stakeholders and officials at the margins of Greenbuild meeting in Philadelphia to discuss the implementation of financing solutions, following the report "Improving Conditions for Green Building Construction in North America."

The CEC completed work on Improving the Economic and Environmental Performance of the North American Automotive Industry Supply Chain, which engaged key automotive companies for the development of green supply-chain programs. Two major accomplishments were the establishment of a Mexican section of the *Alianza Verde Automotriz*, and the hosting of the first North American forum of suppliers partnership. As part of this effort, in June the CEC broadcasted a conference on innovation in the North American automotive supply chain. Finally, NAAEC Parties commitment led to the adoption of the project to improve the economic and environmental performance in the truck and bus manufacturing supply chain.

Commission for Environmental Cooperation		
Financial report - Cooperative Work program		
2013 Projects		
(thousands of Canadian dollars)		
DESCRIPTION	2013 Annual Budget	Total Expenses
Tackling Climate Change and Improving Air Quality	1,190.0	932.7
1 North America's Blue Carbon: Assessing the Role of Coastal Habitats in the Continent's Carbon Budget	200.0	221.1
2 North American Black Carbon Emissions Estimation Guidelines	185.0	94.1
3 Integrated Modeling and Assessment of North American Forest Carbon Dynamics and Climate Change Mitigation Options	210.0	193.7
4 Improving Conditions for Green Building Construction in North America	220.0	153.3
5 North American On-line, Interactive Informational Platform on Climate Change	100.0	64.7
6 Improving Indoor Air Quality to Reduce Exposure to Airborne Contaminants in Alaska Native Population and Other Indigenous Communities in North America	150.0	108.4
7 North American AirNow-International Project	125.0	97.4
Greening Transportation in North America	425.0	291.2
8 Greening Transportation at North American Land Ports of Entry (POEs)	145.0	129.2
9 Reducing Emissions from Goods Movement via Maritime Transportation in North America	150.0	98.5
10 Improving the Economic and Environmental Performance of the North American Truck and Bus Manufacturing Supply Chain	130.0	63.4
Addressing Waste in Trade in North America	410.0	178.1
11 Enhancing Environmental Law Enforcement in North America	210.0	78.1
12 Environmentally Sound Management of Selected End-of-Life Vehicle Batteries, Including Spent Lead-Acid Batteries (SLABs), in North America	200.0	99.9
Cross-cutting Initiatives	640.0	559.0
13 Catalyzing North American Grasslands Conservation and Sustainable Use Through Partnerships	200.0	203.0
14 North American Collaboration for Conservation of Transboundary Protected Areas	200.0	153.3
15 Enhancing Trilateral Understanding of Chemicals in Products in North America	150.0	108.1
16 Close-out of Past Environmental Monitoring/Assessment, Chemicals Inventory and Mercury Activities in Mexico	90.0	94.6
GRAND TOTAL	2,665.0	1,961.0

Secretariat Report on Recycling and Environmentally Sound Management of Spent Lead-Acid Batteries (SLABs Report)

Under the authority of NAAEC Article 13, the Secretariat prepared an independent examination of US-generated SLAB exports and secondary lead recycling in North America, published in April. The SLAB report found that between 2004 and 2011, SLAB exports from US to Mexico increased in the range of 449–525 percent and to Canada by 221 per cent; the regulatory frameworks covering secondary lead smelters in North America do not provide equivalent levels of environmental and health protection; and, national cross-border accounts in all three countries do not accord with shipping or receiving volumes of SLABs from either sending or receiving countries. The SLAB report also found that despite Mexico’s permitting process, there are important gaps in its overall regulatory framework, and considerable delay with respect to the prevailing environmental and public health standards in the United States and Canada. The report included recommendations to environmental authorities in North America that will enhance the protection of our shared environment, and the health of workers and communities.

Building on this report, a new project will address secondary lead processing industry, with a view to strengthening the competitiveness of this sector; promoting safer working environments; and, fostering the creation of new jobs.

North American Partnership for Environmental Community Action

Improving environmental conditions across North America is a challenging task. Individual investments made by each country can achieve greater success if a shared sense of responsibility and stewardship is developed at the community level. This can be accomplished when government efforts are supported and complemented through strong partnerships with stakeholders and the public in all three North American countries. With this in mind, the CEC Council established NAPECA in 2010 to support communities in their efforts to address environmental problems locally. This year the CEC Council announced its intention to allocate a total of \$1.2 million to the NAPECA grant program. NAPECA’s call for proposals was closed in September, after receiving over 500 proposals. In December, the NAPECA Selection Committee met in Montreal, Quebec to select project candidates to be awarded a NAPECA grant, which final grant list will be announced in 2014.

Submissions on Enforcement Matters

Articles 14 and 15 of the NAAEC provide for a mechanism whereby any person or non-governmental organization can file a submission asserting that a Party to the Agreement is failing to effectively enforce its environmental law. The process may lead to the development and publication of a factual record containing information relevant to a consideration of the alleged failure(s) by a Party to effectively enforce its environmental law. The process is informed by the Guidelines for Submissions on Enforcement Matters under Articles 14 and 15 of the NAAEC (the “SEM Guidelines”).

In order to ensure that the public submission process remains a vital mechanism for facilitating public participation and government transparency, the CEC implemented new online tools to help with the preparation of a submission, and assess compliance with target deadlines in the SEM Guidelines.

SEM outreach activities in 2013 included a joint workshop of the CEC Secretariat, the North American Consortium on Legal Education (NACLE), McGill University Faculty of Law and Vermont Law School, on “Sustainable Development, the NAAEC Submissions Process and Cross-Boundary Energy Issues”; and,

participation in meetings and presentations on the Lake Chapala II factual record, in Guadalajara, Jalisco and Mexico City, including at the International Book Fair in Guadalajara. The Secretariat's SEM Unit also participated in numerous JPAC sessions and meetings with Council representatives in order to provide its advice during the SEM modernization process which led to the SEM Guidelines being revised, and the SEM online portal and tracking tool being launched.

With respect to the status of submissions between the 1994 entry into force of the NAAEC and 2013, eighty-three submissions have been filed with the Secretariat: thirty concerning Canada, forty-one concerning Mexico, eleven concerning the US, and one concerning both Canada and the US. During that time, the Secretariat dismissed or terminated seventy-three submissions: Twenty-nine submissions did not warrant further consideration based on Article 14(1) or (2); nineteen were dismissed following the concerned Party's response; and five others have been withdrawn. Twenty-nine factual records have been recommended to the Council. In two cases, the Council voted against the Secretariat's recommendation to develop a factual record. The Secretariat has published seventeen factual records.

During 2013, the Secretariat submitted three draft factual records to the Council for a 45-day comment period on the accuracy of the drafts (Environmental Pollution in Hermosillo II, consolidated submissions Ex Hacienda El Hospital II and Ex Hacienda El Hospital III, and Coal-fired Power Plants); presented the Environmental Pollution in Hermosillo II final factual record to the Council for its vote on whether to make the final factual record publicly available; and, publicly released the Lake Chapala II final factual record in accordance with Council Resolution 13-01. The Secretariat continued its review to determine whether the BC Salmon Farms submission warranted the development of a factual record. The Secretariat determined that three submissions did not meet all the criteria for admissibility contained in Article 14 and terminated the process with respect to St. Lawrence River Wind Farms, Louisiana Refinery Releases, and Refinery Releases in Shreveport, Louisiana. The Secretariat requested responses from Canada regarding the Alberta Tailings Pond submission, and from Mexico regarding the revised submission on Tourism Development in the Gulf of California. The Secretariat also recommended to the Council that a factual record be developed for three submissions (Wetlands in Manzanillo, Protection of Polar Bears, Sumidero Canyon II) and, terminated one submission (Iona Wastewater Treatment) in accordance with Article 15(1).

The Secretariat also reviewed three new submissions to determine whether they meet Article 14(1) criteria: the Tourism Development in the Gulf of California submission, asserting that Mexico is allegedly authorizing various construction projects and tourist real estate operations in ecologically sensitive areas; the Louisiana Refinery Releases submission, asserting that US Environmental Protection Agency has failed to use the Clean Air Act to address "environmental hazards discovered in the agency's July 2012 Risk Management Plan inspection of the ExxonMobil Refinery in Baton Rouge, Louisiana"; and, the Refinery Releases in Shreveport, Louisiana submission, asserting that the US Environmental Protection Agency has failed to enforce the 1990 Clean Air Act and its amendments.

Joint Public Advisory Committee

The JPAC is composed of fifteen citizens (five from each country) and its main role is to advise the Council on any matter within the scope of the North American Agreement on Environmental Cooperation, and to serve as a source of information for the Secretariat. To date, JPAC has issued a total of 106 advices to Council, four of them issued in 2013. Four JPAC advices were issued in 2013 on North America environmental issues including resilience of communities; sustainable energy economy; CEC's operational plan and the 20th anniversary of NAFTA.

In March, JPAC issued Advice 13-01 on resilient communities in North America, which included recommendations underlining the importance of making use of the information in the North American

Environmental Atlas and noting that the CEC can play a key role in the identification of areas that provide disturbance control and in the identification of communities that have higher vulnerability to the impacts of global climate change.

In April, JPAC held a meeting on Greening North America's Energy Economy. Guided by experts on the field—which included a Nobel Prize—JPAC recognized that North America is rich in fossil fuel resources, but also acknowledged the long-term danger of continuing current patterns of energy development and consumption in the region. Also, JPAC launched a public consultation on the 20th anniversary of NAFTA and NAAEC. Seeking feedback on what was perceived as the environmental successes and letdowns of both regional agreements, the CEC asked the whether the organization was achieving its goals and these are adequate in face of ongoing environmental challenges.

In May, JPAC launched a call for public comments on the draft 2013-2014 CEC Operational Plan. Comments received during the JPAC-led Public Consultation were incorporated in JPAC Advice to Council 13-03, which underscored that several projects under the Climate Change-Low Carbon Economy and Greening the Economy in North America did not contain a green energy component. It also noted that there is less emphasis on ecosystem health themes.

In July, JPAC met on the margins of the CEC Council Session to discuss sustainable transportation in North America. The session explored how to more sustainably transport goods across borders, how to reduce the impact of transportation—from delivery trucks to public transit—in urban centers, and concluded with a look at technological innovations being developed across North America to address these issues.

In October, JPAC held its last regular session of the year to follow up on comments to the 20th anniversary of NAAEC. A former CEC Executive Director, representatives from the Institute for Sustainable Development, the Center for International Environmental Law, the Peterson Institute for International Economics, the Inter-American Development Banks and regional NGOs participated in the session. JPAC Advice 13-04 based its recommendations on this meeting, addressing the need to reinvent CEC's niche, reengaging and broadening its constituency and reaching a strong and stable financial position. Overall, JPAC recognized that fears related to a "race to the bottom" did not materialize and that the foundation for North America's environmental cooperation has been to some extent accomplished. JPAC called for a new mission for the CEC, targeting new priorities for the next twenty years.

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Country Reports

2013 Country Progress Report

Country Report on Implementation of the Commitments Derived from the NAAEC

PART I: Government of Canada

Significant Successes

Strategic Initiatives

- In 2013, Canada released its [2013-2016 Federal Sustainable Development Strategy \(FSDS\)](#), which provides a detailed description of how the federal government is taking action to address four key themes:
 - Addressing Climate Change and Air Quality;
 - Maintaining Water Quality and Availability;
 - Protecting Nature and Canadians; and
 - Shrinking the Environmental Footprint – Beginning with Government.

Although many of the objectives remain unchanged from the 2010-2013 FSDS, the 2013-2016 Strategy has two new targets:

- Facilitate reduced vulnerability of individuals, communities, regions, and economic sectors to the impacts of climate change through the development and provision of information and tools; and
- Provide a stable or improved level of biodiversity and habitat capacity on agricultural working landscapes by 2020.

Funding & Land Conservation Initiatives

- Canada announced \$4.5 million in funding under the [EcoAction Community Funding Program](#) for new and existing projects in 2013-14. In the previous five years, through the EcoAction program, the Government of Canada has approved more than 650 projects, and spent over \$20 million on community-level environmental projects across the country, demonstrating that partnerships can achieve even greater environmental protection for our communities. The program supports projects that relate to four themes: clean air, clean water, climate change, and nature.
- Canada announced a \$10 million contribution to the Climate and Clean Air Coalition (CCAC) to Reduce Short-Lived Climate Pollutants in addition to its existing contributions to the Coalition, as well as a \$2.5 million contribution to the Climate Technology Centre and Network (CTCN). These investments are part of Canada's Fast-Start Financing commitment under the Copenhagen Accord to provide \$1.2 billion in new and additional financing to support climate change action in developing countries.
- Canada launched the Recreational Fisheries Conservation Partnerships Program, which will make \$10 million available over two years to support conservation activities through partnerships with local groups to restore and protect recreational fisheries habitat.

- Canada announced a five-year fund worth \$29 million to restore the ecological health of Lake Simcoe and South-eastern Georgian Bay to improve water quality for the residents and wildlife of the region. The fund will support community-based projects that are focused on priorities such as reducing phosphorous inputs from urban and rural sources, restoring fish and aquatic wildlife habitat and populations, and addressing nearshore toxic and nuisance algae growth.
- Canada announced \$45,000 to fund a suite of monitoring projects in the Annapolis River watershed to assess water quality and ecosystem health. This investment is part of Atlantic Ecosystem Initiatives funding, which helps organizations take action for the long-term sustainability of local watersheds and adjacent coastal areas.
- Canada announced \$116,000 in funding over two years from the Aboriginal Fund for Species at Risk Program for a project to initiate community discussions on local species at risk and engage residents in activities for habitat conservation and species protection on reserve lands. The key objective of the fund is to encourage meaningful involvement of Aboriginal people and communities in the implementation of the *Species at Risk Act*.
- Canada renewed its commitment to the National Historic Sites Cost-Sharing Program in 2013. Through this program, up to 50% of eligible costs incurred in the conservation and presentation of a national historic site are reimbursed, up to a maximum of \$100,000. For the year 2013-2014, 17 projects were funded throughout the country.
- Canada celebrated the opening and preservation of a number of trails and recreational areas in 2013. Canada works to ensure that its historic and natural heritage is protected and, through a network of 44 national parks, 167 national historic sites, and four national marine conservation areas, and invites Canadians and people around the world to these natural and historic places. Canada also supports twinning arrangements, such as the one between Banff National Park and Huangshan National Forest Park in China, announced in 2013. These arrangements support international co-operation and sharing of conservation expertise between countries for the benefit of iconic national parks.
- Sable Island, off the coast of Nova Scotia, was designated as a National Park Reserve. Located in the middle of the Atlantic where many ships came to their last port, Sable Island is an important part of Nova Scotia's maritime heritage. It is a long, narrow, crescent-shaped island located at the edge of the Continental Shelf approximately 290 kilometres southeast of Halifax. It is characterized by sand dunes and grasses and is home to over 190 plant species and 350 species of birds, including the endangered roseate tern. The island's most famous inhabitants are its iconic wild horses, of which there are approximately 500.

State of Environment

- The governments of Canada and Alberta launched an online data portal (www.JointOilSandsMonitoring.ca) containing federal and provincial environmental monitoring data on air, water, land, and biodiversity in Canada's oil sands. The new portal represents the next stage of progress for the *Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring* announced in February 2012. It will monitor the impacts of oil sands activity over an area covering 140,000 square kilometres.
- The governments of Canada and British Columbia (B.C.) have renewed the Memorandum of Agreement for Water Quantity Surveys, which ensures the ongoing collection, processing, publication

and distribution of water quantity data in B.C. The B.C. network of approximately 450 water quantity monitoring stations has been co-managed by Environment Canada and B.C.'s Ministry of Environment since 1975. The agreement provides for shared operating costs of approximately \$7 million each year. Similar partnerships exist between the Government of Canada and all of the provinces and territories. Collectively, these bilateral agreements establish the framework for the national network of more than 2,500 water quantity monitoring stations which provides valuable information that helps to protect and conserve Canada's water supplies.

- Canada announced the official opening of a partner weather station in Eskasoni First Nation, Nova Scotia, with more than \$70,000 of in-kind support from Environment Canada. The department has worked with Eskasoni, the largest Mi'kmaq community on Cape Breton Island, Nova Scotia, to install a state-of-the-art weather station. The data will be transmitted to Environment Canada's meteorological services to predict daily weather and monitor climate trends.
- After being alerted of an upwelling of heavy oil at the Zalinski wreck site, where a ship sank in 1946 in Grenville Channel while in transit to Alaska, the Canadian Coast Guard, the B.C. Ministry of Environment, the Gitga'at First Nation, and the Gitxaala First Nation collaborated to safely extract approximately 44,000L of heavy Bunker C oil and 319,000L of oily water from the wreck.

Legal and Policy Developments

Air Quality

- The Government of Canada announced the new Canadian Ambient Air Quality Standards (CAAQS). The new standards lower short-term limits and introduce new limits for long-term exposure for particulate matter and ground-level ozone, which are two major components of smog. The CAAQS set objectives, based on health considerations, for outdoor air concentrations for these pollutants. These new air quality standards are the first concrete step towards implementing Canada's new Air Quality Management System (AQMS).
- Canada continued to take action on greenhouse gas (GHG) emissions by announcing final regulations to improve fuel efficiency and reduce GHG emissions from new on-road heavy-duty vehicles and engines. The regulations will establish progressively more stringent standards for 2014 to 2018 vehicles. These new measures will reduce GHG emissions from 2018 model-year heavy-duty vehicles by up to 23 per cent. The regulations will result in GHG reductions of 19.1 megatonnes over the lifetime of the 2014-2018 model-year vehicles.
- New health-based Canadian Ambient Air Quality Standards (CAAQS) for fine particulate matter and ozone were established.

Biodiversity

- The Government of Canada published an Emergency Order to protect the Greater Sage-Grouse under the *Species at Risk Act* in September 2013. The Order addresses imminent threats to the survival and recovery of the Sage-Grouse by protecting important habitat for this species on provincial and federal crown lands. The Order, along with important voluntary stewardship measures, is anticipated to help stabilize the Greater Sage-Grouse population and begin its recovery. In 2012, there were estimated to be between 93-138 adult birds in Canada.

- Canada announced a one-year funding agreement of \$20,000 with the Calgary Zoo for its Whooping Crane captive-breeding program. Canada is home to the world's largest migratory population of Whooping Cranes, which are classified as endangered under the *Species at Risk Act* and are also protected under the *Migratory Birds Convention Act*.
- Canada announced an additional \$330,000 in funding over the next four years for the Canadian Cooperative Wildlife Health Centre at the University of Saskatchewan. The funding agreement will facilitate national coordination, surveillance, and response to the danger posed by White Nose Syndrome to bat species in Canada.
- The Minister of the Environment met with counterparts in Moscow, Russia, to celebrate the 40th Anniversary of the 1973 Agreement on the Conservation of Polar Bears. The Polar Bear Range States (Canada, the United States, Norway, Russia, and the Kingdom of Denmark), who are signatories to the 1973 Agreement on the Conservation of Polar Bears, renewed their commitment to polar bear conservation and management through the signing of a Declaration that recognizes the need for engagement with local communities in the North and highlights important emerging issues impacting the species, such as climate change and illegal trade.

Toxic Substances

- The Government of Canada signed the Minamata Convention on Mercury, a global agreement under the auspices of the United Nations Environment Programme (UNEP) that aims to reduce mercury emissions and releases to the environment. Its primary objective is to protect human health and the environment from human sources of emissions and releases of mercury and mercury compounds.
- The Government of Canada released the final version of the Update to Canada's National Implementation Plan under the Stockholm Convention on Persistent Organic Pollutants (POPs) which discusses Canada's plans, policies and programs in place to meet our commitments regarding the nine POPs that were recently added to the Stockholm Convention;
- A series of Significant New Activity Notices (SNAC) were also applied. A SNAC is applied by Environment Canada and Health Canada when the departments suspect that a significant new activity, in relation to a substance that has undergone an assessment, may pose new or increased risks to the environment and/or human health. For example, in May 2013, a SNAC was applied to germanium dioxide.
- In January 2013, Canada published the *Prohibition of Certain Toxic Substances Regulations, 2012* which is a multi-substance risk management instrument used to prohibit the manufacture, use, sale, offer for sale or import of certain toxic substances and products containing these substances with a number of exemptions.
- Canada published a risk management strategy for lead, which provides a comprehensive description of the government's progress to date in managing lead, and outlines current and anticipated management activities.
- Environment Canada issued a series of Federal Environmental Quality Guidelines (FEQGs) on a range of chemical substances. FEQGs provide benchmarks for the quality of the ambient environment. Where the FEQG is met there is low likelihood of adverse effects on the protected use (e.g., aquatic life or the wildlife that may consume them).

- Health Canada and Environment Canada created a Science Committee to contribute expertise pertaining to scientific considerations moving forward in the implementation of Canada's Chemicals Management Plan.
- Health Canada released the Second Report on Human Biomonitoring of Environmental Chemicals in Canada. This technical report provides the results of the biomonitoring component from the second cycle (2009-2011) of the Canadian Health Measures Survey. It presents a comprehensive set of data on the exposure of the Canadian population to 91 environmental chemicals, such as bisphenol A and lead, and is the first cycle to include data for children aged 3 to 5 years.

Government Enforcement

- Every year, Canada reports on successful prosecutions of environmental offences. The Environmental Damages Fund, which is administered by Environment Canada, was created in 1995 to provide a mechanism for directing funds received as a result of fines, court orders and voluntary payments to priority projects that will benefit our environment. In 2013, Canada made 16 successful prosecutions, resulting in more than \$2 million in fines for the Environmental Damages Fund. Additional details can be found on Environment Canada's Enforcement website: <https://www.ec.gc.ca/alef-ewe/default.asp?lang=En&n=8F711F37-1>
- Canadian officials were appointed to key positions within INTERPOL's Environmental Compliance and Enforcement Committee (ECEC) and the Fisheries Crime Working Group (FCWG). The ECEC brings together executive leaders and decision makers from all 190 INTERPOL member countries to provide strategic advice on relevant issues and to harness global support in the fight against environmental crime. It is composed of three working groups specializing in fighting crime in wildlife, pollution, and fisheries. The FCWG initiates and leads a number of projects to detect and combat fisheries crime.
- Fisheries and Oceans Canada (DFO) fishery officers conducted at-sea patrols in coastal and inshore areas, monitored catches, conducted forensic investigations and audits, conducted inland patrols and provided information to fishers regarding government policies and regulations. The enforcement and compliance monitoring activities of fishery officers are key to protecting Canada's fish and fish habitat. Enforcement actions include inspections to monitor or verify compliance; investigations of alleged violations; and the issuance of warnings, inspector's directions and ministerial orders. Court actions such as prosecutions, court orders upon conviction and suits for recovery of costs can also be pursued where appropriate.
- During calendar year 2013, DFO:
 - Issued 20 warnings under the habitat protection provisions of the *Fisheries Act*;
 - Laid 4 charges under the habitat protection provisions of the *Fisheries Act*;
 - Proceeded with 1 alternative measures to prosecution;
 - Issued 7 Inspector's Directions; and
 - Successfully completed 13 convictions under the fisheries habitat protection provisions of the *Fisheries Act*.
- In 2012, a recreational boater in British Columbia was convicted of harassing killer whales under SARA and of disturbing killer whales under the Fisheries Act. The individual was fined \$7,500 and was ordered to write a court-approved mea culpa for submission to a Campbell River newsletter. The fine

was directed to the Environmental Damages Fund to support local marine mammal conservation and education activities. This was the first time that an individual has been found guilty of harassing killer whales under SARA.

PART II: PROVINCIAL GOVERNMENTS

ALBERTA

Significant Successes

- The draft South Saskatchewan Regional Plan was released for final public input in 2013.
- The government accepted all 21 recommendations contained in the Flat Top Complex Wildlife Review Committee report and is committed to full implementation. New funding was provided to commence implementation of the recommendations that require additional resources. These actions will better protect Albertans, communities, natural resources, and other values from the risk of wildfire.

State of Environment

- In 2013, Alberta suffered the largest and most expensive natural disaster in Alberta's history. Almost 100,000 people, 10,000 homes and a substantial amount of infrastructure were affected by flooding that spanned 50,000 square kilometres in southern Alberta. New funding was announced for the provincial Flood Hazard Identification Program to update existing maps and/or to map new areas. Alberta Environment and Parks led the way by providing warning of the advancing flood waters, assisting people who were forced to evacuate their homes, and working tirelessly in the subsequent clean up, ongoing restoration and mitigation work.
Alberta allocated \$40 million of in-year funding for surveying and control activities of mountain pine beetle infestations, as well as rehabilitation for beetle-killed areas. Mountain Pine Beetle poses a serious threat to Alberta's forest resources. Left unmanaged, they could devastate Alberta's pine forests and spread eastward across Canada's boreal region.

Legal and Policy Developments

- Proclamation of the *Protecting Alberta's Environment Act*, which established the Alberta Environmental Monitoring, Evaluation and Reporting Agency
- Proclamation of the *Responsible Energy Development Act* dissolved the former Energy Resources Conservation Board and enabled the creation of the Alberta Energy Regulator to regulate all upstream oil, gas, oil sands, and coal projects from application to reclamation.
- Under The Government of Alberta's Policy on Consultation with First Nations on Land and Resource Management, Alberta created the Aboriginal Consultation Office by merging relevant services previously provided by Alberta Environment and Parks and the ministry of Aboriginal Relations. A new Wetland Policy for the province was announced. It provides the strategic direction and tools required to make informed management decisions that minimize the loss and degradation of wetlands,

while allowing for continued growth and economic development in the province.

Government Enforcement

- Ten companies and individuals were charged for offences under legislation administered by Environment and Sustainable Resource Development (*Environmental Protection and Enhancement Act, Public Lands Act, Water Act, Waste Control Regulation, Forests and Prairies Protection Act and the Water (Offences and Penalties) Regulation*).
- Prosecutions concluded during this period resulted in convictions of 11 individuals and companies on 13 counts resulting in total fines of \$692,500.
- There were 42 orders, 75 written warnings and 80 corrective letters issued during this period to compel parties to meet regulatory standards.
- In 2013, eight new creative sentencing orders worth \$156,120 were issued by Alberta provincial court judges.
- During 2013, the department managed 13 projects resulting from previous creative sentencing orders and monitored the completion of another nine projects.
- The department also assessed \$701,711 for 102 administrative penalties for less serious regulatory offences.
- A pesticide sweep was conducted throughout the province in 64 locations. Seven inspectors visited pesticide vendors, primarily to ensure the sale of federally labelled commercial and restricted class pesticides are sold only to appropriate and qualified purchasers.
- As well, department staff participated in a task force dedicated to enforcing regulations on Crown land during the 2013 May long weekend. This partnership involves municipal, provincial, and federal enforcement agencies. The task force benefits all agencies and, ultimately, Alberta's natural resources by educating users regarding garbage, responsible camping, off-highway vehicle use, and much more.
- Alberta Environment and Parks compliance statistics can be found in quarterly and annual reports at this link: <http://esrd.alberta.ca/focus/compliance-assurance-program/environmental-protection-commission-reports/annual-and-quarterly-reports-compliance-assessment-enforcement-reports.aspx>.

MANITOBA

Significant Successes

- In 2013, Manitoba Conservation and Water Stewardship provided \$600,000 in funding for nine initiatives to help restore the health of Lake Winnipeg, including new wetlands research and support for international co-operation on nutrient management. Included in this funding was continued support for the ongoing work of the Lake Friendly initiative, a partnership of nine municipalities along the South Basin of Lake Winnipeg, for the "Do What Matters" project, the first program in the country that works to educate people on the impact everyday choices have on waterways. Funding was also provided to the Lake Winnipeg Research Consortium, to assist in operation of the MV Namao, a former Canadian Coast Guard ship now dedicated to conducting research and monitoring on Lake

Winnipeg. The province has now invested a total of \$1.225 million toward the operation of the Namao over the past 10 years, which has led to many important findings critical to developing effective solutions to water quality issues on Lake Winnipeg.

- In 2013, Manitoba Education produced “Lake Winnipeg: a resource for Grade 12 interdisciplinary topics in science.” This document provides information to teachers of a Grade 12 special topics course that will expose Manitoba students to the complexity of issues associated with Lake Winnipeg, and, through science investigations and problem-based approaches to learning, will encourage students to develop decision-making skills associated with the ecological and social dynamics of the Lake Winnipeg environment.
- Manitoba partnered with the City of Winnipeg in 2013 to complete a new landfill gas collection system at the city’s Brady Road Resource Management Facility, significantly reducing the emission of greenhouse gases produced when organic waste decomposes. The new system captures and flares off landfill gases, mostly made up of methane, a greenhouse gas that contributes to climate change. In terms of its global warming potential, methane gas is 21 times more potent than carbon dioxide, the end product of the flaring operation.

State of the Environment

- In May 2013, Manitoba Conservation and Water Stewardship acquired two new high-heat, high-pressure mobile decontamination units - the first in Canada - to protect the biodiversity of the province’s lakes, rivers, and other waterways from invasive species. The units are able to purge invasive aquatic species from boats entering Manitoba at border crossings, fishing tournaments, and high-traffic boat launches around the province. In spite of this effort, Manitoba’s first reported specimens of zebra mussels were found in Lake Winnipeg in fall 2013. A rapid-response protocol was implemented to address the situation in fall 2013 and spring 2014, in an attempt to eliminate the zebra mussels from the observed locations while they are still found in small numbers.
- The Manitoba government committed to providing the International Institute for Sustainable Development (IISD) with ongoing, secure funding for the Experimental Lakes Area (ELA) in Northwestern Ontario. A new six-year agreement includes \$900,000 to be dedicated to funding freshwater research and technology at the ELA. IISD is a Winnipeg-based international public policy research institute for sustainable development that successfully negotiated with the governments of Ontario and Canada to take over operation of the world-renowned freshwater research facility.

Legal and Policy Developments

- *The Endangered Species Act* was amended in 2013, and renamed *The Endangered Species and Ecosystems Act*. The Act is now the first in North America to allow the listing of ecosystems as endangered or threatened and protect them on provincial Crown land. Amendments also created a new designation called ‘special concern’ for species at risk of becoming threatened in Manitoba; laid out requirements for recovery strategies and/or management plans to prevent these species from further loss; added prevention orders that empower conservation officials to pre-emptively stop activities that would endanger habitat and ecosystems; and increased fines and penalties for violations under the legislation.

- In 2013, two new regulations came into force under *The Climate Change and Emissions Reduction Act*. The Green Building Regulation sets standards for energy efficiency for new, renovated or expanded buildings owned or leased by the provincial government. The Greening of Government Vehicles Regulation sets a provincial fuel efficiency standard for new passenger vehicles and light-duty trucks in the government fleet, and ensures that government agencies are considering fuel efficiency as a key factor in purchase. Both regulations also establish protocols for calculating and reporting progress.
- In 2013, Manitoba became the first jurisdiction in Canada to enact a regulation banning coal and petroleum coke for use as space heating fuels. Revenue from Manitoba's Emissions Tax on Coal and Petroleum Coke are being re-directed to help coal users convert to carbon-neutral biomass heating energy, and support continued research and development. These activities support the province's climate change and green economy objectives, promote local economic development, and encourage green energy innovation.
- In 2013, Manitoba announced two new initiatives under the province's three-year, four-point Active Transportation Action Plan: the establishment of a provincial AT policy framework and the creation of a standing Active Transportation Public Stakeholder Advisory Committee. Both initiatives are intended to promote and increase the use of active transportation by Manitobans, by improving co-ordination, developing supportive policies and resources, increasing investments, and improving education and awareness.

Government Enforcement

- Manitoba reported 51 prosecutions under *The Environment Act* and related Regulations, as well as 51 prosecutions under *The Dangerous Goods Transportation and Handling Act* and related Regulations, for the 2013-14 fiscal year. Fines levied as a result totalled \$84,494.

QUÉBEC

Significant Successes

- In 2013, the Québec carbon market, put in place as part of the Western Climate Initiative (WCI), passed two significant milestones: (1) the signing of the agreement to link Québec's carbon market with California's and (2) the first auction of emission allowances. The revenue generated by the carbon market is reinvested in full to fund measures implemented under the [2013–2020 Climate Change Action Plan](#).
- In September 2013, the [Quebec Water Conservation and Efficiency System](#) was made public. The program aims to bolster research efforts, encourage partnerships, and promote the development of new technologies for the conservation and efficient use of water.
- Québec also developed an Emergency Measures Plan for public dams in order to plan and coordinate between different units of the organization during emergencies at public dams.
- In the area of waste management, in 2013, Recyc-Québec developed the [2013-2015 Action Plan of the Coordinating Group on Recycling Organic Waste](#) (French only), aimed at achieving the Québec Policy

on Residual Materials objectives of diverting 60 percent of organic waste from landfills by 2015 and banning organic waste in landfills by 2020.

- Regarding protected areas, the Société des établissements de plein air du Québec (SÉPAQ) published its [2013–2016 Land Occupation and Vitality Action Plan](#) (French only). This document sets out tangible actions to achieve the goals of the 2011–2016 accompanying strategy and the results expected by SÉPAQ in this area. In addition, the area of protected sites in Québec rose to 150,970 square kilometers as of 31 December 2013, which represents 9.11 percent of the province’s territory. 2013 also saw the creation of two new provincial parks: Opémican National Park (Southern Quebec) and Tursujuq National Park in Nunavik. The latter alone has an area of over 26,000 square kilometres, making it the largest provincial park in eastern North America.

State of the Environment

- In 2013, the MDDELCC released 30 new [publications](#) documenting the state of the environment (list available) on its own website or those of its agencies and partners.
- Québec government publications also dealt with the issue of water management in 2013 by publishing an initial version of the [Hydroclimatic Atlas of Southern Québec](#). This atlas presents a clear and accessible overview of the potential “impact of climate change on high, low and mean flow regimes for the 2050 horizon” over a large portion of southern Québec.
- Québec also published an [Interactive Atlas of Surface Water Quality and Aquatic Ecosystems](#) (French only), a [report on 1999–2008 Water Quality Trends in 10 Agricultural Watersheds in Quebec](#) (French only), a [Guide to biological monitoring based on freshwater benthic macroinvertebrates](#) (French only), and in the area of climate change, a [summary Characterization of the Spatial and Temporal Variability of Air Temperature in an Urban Area](#), which includes Quebec City as a case study (French only).
- In addition, subsequent to the implementation of amendments to the Regulation respecting the quality of drinking water related to lead, the ministry published [general information about this subject](#) on its website (French only) in March 2013. It also published an [Evaluation and Intervention Guide for Monitoring Lead and Copper in Drinking Water](#) (French only) for drinking water system managers. It also published [Guidelines for Fish Processing Plants \(Wastewater Section\)](#) (French only) in February 2013. In particular, this document presents possible treatment technologies, methods for implementing best operating practices for this sector, and guidelines for establishing effluent standards and a self-monitoring program.
- Among the documents dealing with the issues of hazardous waste and pesticides, Québec also published a [Report on Pesticide Reduction Plans for Golf Courses](#) and a [Report on Sales of Pesticides in Québec 2010](#) (French only).
- Regarding air quality, in February 2013 Québec published the [Inventory of 2010 Greenhouse Gas Emissions and Trends Since 1990](#) along with a [2010–2012 Report of Québec Halocarbon Sales and Recovery of Used Halocarbons](#) in October 2013 (French only).
- In May 2013, the MDDELCC published its [Position on the enforcement of Canada-wide standards regarding municipal sewer system overflows](#), which sets out that no sewer system extension project likely to increase the frequency of combined, sanitary, or pseudo-sanitary sewer overflows will be authorized.

- Finally, in the area of fighting climate change, Québec published the [Results of the auction of greenhouse gas emission units on December 3](#), as well as the 2013 [Sixth 2006–2012 CCAP Progress Report](#) (French only).

Legal and Policy Developments

Laws passed:

- No law relevant to the MDDELCC was passed in 2013.
- While not under the purview of the MDDELCC, it is relevant to note that the Sustainable Forest Development Act (RLRQ, c. A-18.1) came into effect on April 1, 2013.

Draft laws submitted:

- An Act to prohibit certain shale natural gas exploration and production activities, Bill no. 37 (sent to the Committee on Transportation and the Environment for study – 3 December 2013), 1st session., 40th legislature.

Regulations passed:

- Introduction of administrative monetary penalties (AMPs) and the increase of criminal penalties led to the amendment of many regulations (O.C. 652-2013 to 687-2013, O.C. 647-2013 and O.C.1229-2013).
- Regulations and other acts related to the quality of the atmosphere and the Cap and Trade System for Greenhouse Gas Emissions Allowances:
 - Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere, M.O. (2013) 145 G.O.II, 5827.
 - Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances, O.C. 1137-2013, (2013), 145 G.O.II, 4947.
 - Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances, O.C. 1138-2013, (2013), 145 G.O.II, 4947.
 - Regulation to amend the Clean Air Regulation, O.C. 1228-2013, (2013) 145 G.O.II, 5525.
 - Order in Council concerning the ratification of the Agreement between the Gouvernement du Québec and the California Air Resources Board concerning the harmonization and integration of cap-and-trade programs for reducing greenhouse gas emissions M.O., (2013) 145 G.O.II, 5275.

Regulations to amend land use planning and development:

- Regulation to amend the land use planning and development in effect on the territory of the Regional County Municipality of Thérèse-De Blainville, O.C. 753-2013, (2013), 145 G.O.II, 3119.
- Regulation to amend the land use planning and development in effect on the territory of the Regional County Municipality of Deux-Montagnes, O.C. 754-2013, (2013), 145 G.O.II, 3126.
- Regulation to amend the land use planning and development in effect on the territory of the Ville de Laval, O.C. 755-2013, (2013), 145 G.O.II, 3134.

Regulations related to hunting and fishing

- Ministerial order concerning the Regulation to amend the Regulation Respecting Hunting M.O., (2013) 145 G.O.II, 3339.

- Ministerial order concerning the Regulation to amend the Regulation Respecting Hunting, M.O., (2013) 145 G.O.II, 3853.
- Regulation to amend the Regulation Respecting Fishing and Hunting Areas, M.O., (2013) 145 G.O.II, 4759.

Regulations and other acts related to the establishment of protected areas

- Regulation respecting the establishment of parc national Tursujuq, O.C. 648-2013, (2013) 145 G.O.II, 2654.
- Regulation to amend the Regulation respecting the establishment of Parc national des Îles-de-Boucherville, O.C. 1023-2013, (2013), 145 G.O.II, 4727.
- Regulation respecting the establishment of Parc national d'Opémican, O.C. 1200-2013, (2013), 145 G.O.II, 5276.
- Regulation to amend the Parks Regulation, O.C. 1024-2013, (2013), 145 G.O.II, 4731.
- Order in council concerning the establishment of the Réserve écologique du Mont-Gosford and approval of its conservation plan, O.C. 180-2013, (2013) 145 G.O.II, 1083.
- Ministerial order concerning the assignment of proposed biodiversity reserve status to land located on Île aux Lièvres, in the St. Lawrence estuary, and establishment of the plan of that area and its conservation plan, M.O., (2013) 145 G.O.II, 3042.
- Ministerial order concerning the assignment of proposed aquatic reserve status to an area of the St. Lawrence estuary surrounding the Manicouagan Peninsula and establishment of the plan of that area and its conservation plan, M.O., (2013) 145 G.O.II, 3094.
- Ministerial order concerning the assignment of proposed biodiversity reserve status to land of the former Dunn property, M.O., (2013) 145 G.O.II, 3165.

Other texts:

- Regulation to amend the Regulation respecting the fees to be paid under section 106.6 of the Act respecting the conservation and development of wildlife, O.C. 5-2013, (2013) 145 G.O.II, 233.
- Regulation to amend the Regulation respecting the protection of waters from pleasure craft discharges, O.C. 131-2013, (2013) 145 G.O.II, 487.
- Regulation to amend the Regulation respecting the charges payable for the disposal of residual materials, O.C. 547-2013, (2013) 145 G.O.II, 1467.
- Regulation to amend the Regulation respecting animals in captivity, O.C. 1173-2013, (2013), 145 G.O.II, 3288.
- Ministerial order concerning the Regulation to amend the Regulation respecting the classes of licences to keep animals in captivity and their term, M.O., (2013) 145 G.O.II, 3297.
- Regulation to amend the Regulation respecting compensation for municipal services provided to recover and reclaim residual materials, O.C. 1302-2013, (2013) 145 G.O.II, 3597A.
- Regulation to amend the Regulation respecting pulp and paper mills, O.C. 1230-2013, (2013) 145 G.O.II, 3603.
- Regulation to amend the Regulation respecting the application of the Environment Quality Act, O.C. 1303-2013, (2013) 145 G.O.II, 3749.
- Regulation respecting municipal wastewater treatment works, O.C. 1305-2013, (2013) 145 G.O.II, 3749.

Notable draft regulations:

- The draft Water Withdrawal and Protection Regulation (WWPR) was published in the Gazette officielle du Québec and went through a 60-day period of public consultations from 28 December 2011 to 29 February 2012. However, it was re-published in May 2013 and underwent further public consultations due to the addition of provisions.
- In May 2013, the draft Regulation respecting municipal wastewater treatment works was published in the Gazette officielle du Québec to announce the 60-day public consultation period, which ended on 13 July 2013.
- The draft Regulation respecting financial guarantees payable for the operation of a residual organic materials was published in the Gazette officielle du Québec on 20 November 2013 for its consultation period.

Government Enforcement

In 2013:

- The MDDELCC had 281 inspectors.
- The MDDELCC filed 110 reports of infractions with the Director of criminal prosecution of Québec.
- MDDELCC inspectors and investigators carried out 15,826 inspections and conducted 204 investigations.
- The MDDEFP published, on its website, 80 [press releases related to criminal judgments](#) of over \$2000 for infractions committed under environmental laws and regulations.
- 4,869 authorizations were issued under the [Environment Quality Act](#).
- 68 establishments held depollution attestations, 48 for the first order and 20 for the second order.
- Eight attestations were issued for the operation of two cemeteries, two ore processing plants, one mine, one silicon metal production plant, and one metal processing plant (two attestations for the same plant).
- 5,093 notifications of default (non-compliance notifications and warning letters) were sent.
- MDDELCC investigators carried out 23 entry authorizations and four search warrants.
- 10 advance notice of orders and 16 orders were issued.
- 11 notices of claim were sent by the MDDELCC for non-payment or late payment of fees.
- 111 people were found guilty of infractions following criminal judgments, for a total of \$870,440 in fines.

In the process of enforcing Québec's environmental assessment procedures under the *Environment Quality Act*, the MDDELCC and, when applicable, relevant committees formed under the James Bay and Northern Quebec Agreement (JBNQA), completed environmental assessments of 62 projects whose impact studies had been presented. For 39 of them, the government issued approval orders (28) or modifications (11). The other 23 projects planned on the JBNQA territory were decided on by the provincial JBNQA administrator, who authorized them (4) or requested modifications (19).

Mexico Progress Report, 2012

Country Report on Implementation of the Commitments Derived from the NAAEC

Introduction

The information contained in this section of the *2013 Annual Report*, referring to the period from 1 September 2012 to 31 August 2013, is taken from the annual report of the Secretariat of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat). Without seeking to be exhaustive, this report intends to highlight some of the activities and progress with respect to environmental conservation and the sustainable use of ecosystems in Mexico, including activities undertaken by Semarnat's autonomous and decentralized agencies: the National Water Commission (*Comisión Nacional del Agua*—Conagua), the National Commission for Protected Nature Areas (*Comisión Nacional de Áreas Naturales Protegidas*—Conanp), the National Commission for the Knowledge and Use of Biodiversity (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*—Conabio), the National Forestry Commission (*Comisión Nacional Forestal*—Conafor), the Mexican Institute for Water Technology (*Instituto Mexicano de Tecnología del Agua*—IMTA), the National Institute of Ecology and Climate Change (*Instituto Nacional de Ecología y Cambio Climático*—INECC) and the Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*—Profepa)

Significant Successes

- As of June 2013, the country has a total of 176 protected natural areas (*áreas naturales protegidas*—ANP), two more than in 2012. Decisive for the conservation of high-biodiversity national ecosystems, ANPs account for a total area of 25,387,972 hectares (20,617,450 ha in land area and 4,770,522 ha in marine area), representing 12.9% of national territory.
- In the framework of the 37th session of the World Heritage Committee held in Cambodia, and in recognition of its “exceptional beauty and aesthetics due to the grandeur, scale, intactness, diversity and the sharp visual contrasts of the desert landscape features,” the El Pinacate and Gran Desierto de Altar Biosphere Reserve in the northwestern state of Sonora was listed as a World Heritage Site in June 2013. With this designation, Mexico has five natural properties with world heritage status.
- The increase in the budget allotted to the At-Risk Species Conservation Program (*Programa de Conservación de Especies en Riesgo*—Procer) enabled an increase in the number of support concepts or items listed in the program invitation, going from 26 in 2012 to 96 in 2013. Conservation and recovery actions undertaken in the January-June 2013 period include the authorization of 76 projects of national scope; the increased budget for the Species Conservation Action Program (*Programa de Acción para la Conservación de la Especies*—PACE), which like Procer is managed by Conanp); the formation of a Presidential Advisory Commission on vaquita recovery; the phase-out of shrimping nets in the Upper Gulf of California; and the formation of a working group to study the causes of yellow turtle mortality in the Gulf of Ulloa, Baja California Sur.

- From 1 December 2012 to 30 June 2013, 294 Wildlife Conservation Management Units (*Unidades de Manejo para la Conservación de la Vida Silvestre*—UMAs) were added to the UMA System (including 48 intensive management units and 246 open units), with a total area of 376,574 hectares, representing 47% progress towards the annual goal. Thus, the country reported a total of 11,949 UMAs, with an area of more than 38 million hectares or 19.3% of national territory.
- As regards the verification of the level of compliance with wildlife laws, from December 2012 to June 2013 there were 915 inspections and 938 enforcement actions. This included 170 operations to combat the illegal trafficking of wild fauna and flora in 30 Mexican states.
- Based on the National Hydrofluorocarbon Phase-Out Plan (*Plan Nacional de Eliminación de Hidroclorofluorocarbonos*), the following activities were carried out from 1 December 2012 to 31 August 2013: nine formulators underwent the reconversion of their processes to eliminate HCFC-141b consumption in their systems, using non-ODS agents and agents with a low or zero risk of global warming potential (with 40% progress); a national manual was prepared to train technicians on best practices to use HCFC alternatives, such as cleaning agents and refrigerants in refrigeration and air conditioning systems; 30 people from Customs, the Federal Commission for the Protection Against Health Risks (*Comisión Federal para la Protección Contra Riesgos Sanitarios*—Cofepris), Profepa and Semarnat were trained in the detection of illegal trafficking of ozone-depleting substances.
- In December 2012, the project for the evaluation of nine air quality management programs (Proaire) was completed in Puebla, Toluca (Mexico State), Ciudad Juarez (Chihuahua), Salamanca and León (Guanajuato), Monterrey (Nuevo Leon), Cuernavaca (Morelos), Durango and the Comarca Lagunera region (Durango and Coahuila). Proaire programs establish strategies, measures and actions aimed at reducing pollutant emissions into the air, in order to protect the environment and health.
- As regards the transboundary movement of hazardous waste, from September 2012 to August 2013 the tariff compliance of 5,448 shipments of such waste was verified. This enabled the sound environmental management of 622,500 and 56,371 tons of hazardous waste in import and export operations, respectively.
- In the first half of 2013, 283 environmental emergencies were handled, 169 of which were caused by hydrocarbon spills and other chemicals, 39 were from explosions, 44 were due to leaks, 26 were facility fires and five were for other causes.
- At the end of 2012, 194 water research and development projects were carried out, with another 121 projects from January to June 2013. Key results include the following: the hydrological safety of 10 critical dams in the country was assessed; three technologies were authorized, with intellectual property or copyright protection and IMTA recognition; an information system for the collection-payment of water fees for water operators and a project to improve sanitary conditions in three peri-urban schools in Mexico State were developed, with the support of the United Nations Human Settlements Programme (UN-Habitat).
- From 1 December 2012 to 30 June 2013, 5,526 comprehensive actions were carried out for the conservation, restoration and sustainable use of natural resources, benefiting 16,506 persons, 10,227 of whom belong to indigenous communities.
- The National Sustainable Production and Consumption Strategy (*Estrategia Nacional de Producción y Consumo Sustentable*) was published in May 2013, seeking to implement the adoption of better environmental practices in the production and service sectors by fostering competitiveness and innovation and influencing society to adopt better consumer decisions.

- From 1 December 2012 to 31 August 2013, research projects on issues such as climate change, comprehensive basin management and the creation and building of local capacities to foster the conservation of biodiversity were carried out. Voluntary standards aimed at establishing requirements to certify animal welfare, conservation, research and safety at zoos, and also for environmental protection in oil well drilling, maintenance and abandonment in Mexican marine zones, were also developed. These standards also seek to support the assessment and implementation of public policies to foster environmental protection, ecological preservation and restoration, and climate change mitigation and adaptation in the country.
- From December 2012 to June 2013, the annual mean availability of 193 basins was updated in the Federal Official Gazette (*Diario Oficial de la Federación—DOF*), for a total of 471 basins with updated availabilities published. The other 260 basins are in different stages of the process to be published in the *DOF*. In the same period, the annual mean availability of surface waters for 112 hydrological basins was published, for 41% of the goal stated for 2013.
- As regards water, an investment of 40,2014 billion pesos was slated for 2013: 55.8% of the total was allocated to developing the potable water supply, sewer and sanitation infrastructure; 30.4% was applied to develop and operate the farm water infrastructure; and the remaining 13.8% was invested in works for flood prevention and protection and other actions to manage and control the hydrological system.
- In the framework of the Sustainable Development Conservation Program (*Programa de Conservación para el Desarrollo Sostenible—Procodes*), a budget of 217 million pesos was authorized in 2013, 3.5% higher than the 210 million pesos authorized in 2012. Through Procodes, from January to June 2013, 1,737 persons in 47 municipalities in 15 Mexican states benefited from the establishment of 72 community forest fire prevention brigades, in 46 ANPs; 136 community projects were undertaken on 4,368 hectares with forest plantations, including reforestation, ecosystem cleanup, planting of cover and species monitoring; nurseries, community orchards and ecotourism infrastructure was established on 5,040 m²; and 15 project operation training courses were held.
- With respect to citizen engagement, from September 2012 to August 2013, the system to generate and process information from the Index of Citizen Participation in the Environmental Sector (*Índice de Participación Ciudadana del Sector Ambiental*) was restructured and improved, which was included as an indicator in the 2013-2018 Environment and Natural Resources Sector Program (*Programa Sectorial de Medio Ambiente y Recursos Naturales—Promarnat*). This index is a measuring tool that shows what is being done in the environmental sector in conjunction with and for the benefit of citizens, how many people are involved (broken down by gender) and the resources available for their participation. The index also benchmarks the strengthening and improvement of engagement mechanisms and instruments implemented in the environmental sector.
- From December 2012 to August 2013, 3,421 citizen submissions were handled, along with 2,551 information requests under the Federal Transparency and Access to Governmental Public Information Act (*Ley Federal de Transparencia y Acceso a la Información Pública Gubernamental—LFTAIPG*) handled from 1 September 2012 to 31 August 2013.
- Also during that period, responses were prepared to 85 recommendations issued by the regional Sustainable Development Advisory Boards (*Consejos Consultivos para el Desarrollo Sustentable—CCDSs*) and the National Board. CCDSs were also active participants at public consultations on the National Development Plan (*Plan Nacional de Desarrollo*) and the National Climate Change Strategy

(*Estrategia Nacional de Cambio Climático*), held throughout the country during the first half of 2013, as well as at various national and international forums and consultations, including the Whale Dialogue and the consultation to define the national position at forums of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),¹ in addition to two public meetings to provide information on mining projects subject to environmental impact assessment.

- As regards the strengthening of mechanisms and programs in the environmental sector involving civil society, Mexico's National Advisory Committee (NAC) was installed in 2013 in the framework of the North American Agreement on Environmental Cooperation (NAAEC) and the ruling creating the CCDs. The NAC held its first meeting on 19 June 2013, where its operating rules were approved. The purpose of the Committee is to provide advisement on any matter relating to the NAAEC, to the Secretary of the Environment and Natural Resources, who acts as Mexico's representative on the Council of the Commission for Environmental Cooperation.

State of the Environment

- In March 2013, the website of the National Environmental and Natural Resources System (Sistema Nacional de Información Ambiental y de Recursos Naturales—SNIARN) published the 2012 edition of the Report on the Environmental Situation in Mexico (*Informe de la situación del medio ambiente en México*), consisting of seven chapters: 1) population and the environment, 2) terrestrial ecosystems, 3) soils, 4) biodiversity, 5) air (air quality, climate change and thinning of the ozone layer), 6) water (availability and quality), and 7) waste (solid, urban and hazardous).
- The National Emissions Inventory (Inventario Nacional de Emisiones—INEM), 2008 base year, was completed in the reporting period, indicating the criteria pollutant releases and secondary pollutant precursors, as well as greenhouse compounds (which in the end will be of use to revise the greenhouse gas inventory).
- To get information on forestry resources by state, to improve planning and decision-making in the forestry sector, actions were carried out in coordination with 16 state governments (Campeche, Chihuahua, Chiapas, Coahuila, Colima, Durango, Guerrero, Jalisco, Michoacán, Morelos, Oaxaca, Puebla, Quintana Roo, Tabasco, Veracruz and Yucatán), culminating with the preparation of 16 inventories in 2013, with an investment of 119.7 million pesos in federal funds.
- Under the National Environmental Audit Program (Programa Nacional de Auditoría Ambiental), as of July 2013 the professional involvement and interaction between enterprises with the best results in terms of acceptance of environmental certification; new certification requests were received from 313 facilities, and 463 certificates were given to organizations that satisfactorily completed their action plans. As of that date, 2,472 certificates were in effect in the country.

¹ There was excellent North American regional coordination during the 63rd and 65th meetings of the Permanent Committee, especially during the 16th meeting of the Party Conference (Bangkok, 2013), where proposals were adopted for Appendix II to include the hammerhead shark (*Sphyrna lewini*, *S. mokarran* and *S. zygaena*). Co-sponsored by the United States, Mexico and other countries, these proposals were a milestone in CITES history.

- Semarnat has been actively involved in international cooperation for the sustainable development of marine and coastal zones. In this context, the Integrated Assessment and Management of the Gulf of Mexico Large Marine Ecosystem Project, in cooperation with the United States, completed the formalization of the strategic action program and began to prepare the national action program.
- To complement the National Forest and Soil Inventory (Inventario Nacional Forestal y de Suelos—INFS), hemispherical photos were taken at 1,806 conglomerates in 2013, in a joint Conafor-Conabio initiative to obtain biophysical information on Mexico's jungles and forests.

Changes in Level of Protection

- As regards ANP management and the protection of representative ecosystems, from December 2012 to June 2013 eight management program summaries were published in the *DOF*, corresponding to an area of 2,833,836 hectares. With the formulation of five additional programs, the area of ANPs with an activity planning and regulation instrument in place increased considerably. With these new programs, there are 116 management programs developed (75 published in the *DOF*), covering 20,428,681 hectares (80.46% of the protected area).
- On 29 January 2013, a notice was published in the *DOF* to provide the general public with studies for the reclassification and delimitation of the Nevado de Toluca National Park as a flora and fauna protection area, increasing its area to 53,590 hectares and incorporating the forms and limitations for the usage of natural resources, for the long-term maintenance of its environments and habitats as necessary for the conservation of biodiversity, especially woodlands. Another objective is to recover environmental services of high economic importance (such as water captation and soil conservation) and to foster sustainable development through the adequate use of natural resources in this protected natural area.
- In the framework of the Convention on Wetlands of International Importance (Ramsar Convention), the La Cruz wetlands, with an area of 6.6 ha in the northern region of the Gulf of California in the state of Sonora were added to the list of wetlands of international importance on 2 February 2013. The expansion of the La Mancha and El Llano Ramsar site in Veracruz was also approved (designated in 2004), adding a mangrove area of 6,000 ha, for a total of 7,456 ha, thereby bringing continuity to the region's coastal processes.
- In accordance with the General Climate Change Act (*Ley General de Cambio Climático*), the Intersecretarial Commission on Climate Change (*Comisión Intersecretarial de Cambio Climático*) was established on 29 January 2013, to coordinate the federal government's efforts aimed at developing and implementing the national climate change policy, including processes for consultation and negotiation with the social and private sectors.
- The National Climate Change Strategy (*Estrategia Nacional de Cambio Climático*) was published in the *DOF* on 3 June 2013, as the instrument to guide national climate change policy for the next 40 years.
- Mexican Official Standard NOM-161-Semarnat-2011, *Establishing criteria to classify special-handling waste and determine what waste is subject to a management plan, as well as the list of waste, the procedure for inclusion or exclusion from the list, and the elements and procedures for preparing management plans*, was published in the *DOF* in February 2013.

- NOM-162-Semarnat-2012, *Establishing specifications for the protection, recovery and management of sea turtle populations in their nesting habitat*, was published in the *DOF* that same month. This standard includes key criteria for protecting nesting turtles and the sound management of turtles nested onsite or in nurseries, in addition to establishing the immediate release of bred turtles as a species survival measure.
- Mexican Official Standard NOM-016-Semarnat-2013, *Phytosanitary regulation of the importation of fresh cut lumber*, was published in the *DOF* on 4 March 2013 to protect the country's vast forestry resources. This standard ensures that no pest or disease warranting quarantine will enter Mexican territory from another country.
- On 6 March 2013, the Intermunicipal Center for Solid Waste Management (*Centro Intermunicipal para el Manejo de Residuos Sólidos*) was completed and delivered at Atotonilco el Alto, Jalisco, a clear example of the federal government's strategy to foster comprehensive waste management across the country. Located on seven hectares, this center features a transfer station, a materials recovery plant and a composting plant, to service three municipalities abutting Lake Chapala.
- The detailed version of the *Basic Diagnosis for Comprehensive Waste Management 2012* was published on 8 April 2013.
- In addition, Mexican Official Standard NOM-163-Semarnat-ENER-SCFI-2013, *Carbon dioxide (CO₂) emissions from exhaust and their equivalence in terms of fuel performance, applicable to new automobiles with a gross vehicle weight of up to 3,857 kilograms*, was published in the *DOF* in June 2013, to gradually reduce average CO₂ emissions from the fleet of new light vehicles and increase their fuel performance.
- During the 2012-2013 period, 12 community ecotourism enterprises were certified under NMX-AA-SCFI-2006. The enterprises have a diagnosis and action plans to implement better environmental practices, culminating in ecological and social benefits.
- In 2013, the Mexican Accreditation Entity (*Entidad Mexicana de Acreditación*) certified two verification (inspection) units under Mexican Official Standard NOM-083- Semarnat-2003, establishing the conditions to be met by waste disposal sites.

Government Enforcement

- In the period from December 2012 to June 2013, 286 inspections were carried out at 204 fixed sources under federal jurisdiction that generate or may generate air pollution emissions. The intent was to verify compliance with the obligations under the General Ecological Balance and Environmental Protection Act (*Ley General del Equilibrio Ecológico y la Protección al Ambiente—LGEEPA*), the air pollution prevention and control regulations thereunder, and the Pollutant Release and Transfer Register (*Registro de Emisiones y Transferencia de Contaminantes—RETC*).
- From December 2012 to June 2013, Profepa received 4,377 environmental complaints, 9% more than those reported for the same period the year before. Of these complaints, 2,655 were concluded, representing more than 26% than in 2012.
- To ensure the legality of international trade of regulated or protected species and merchandise subject to tariff restrictions, and to prevent and combat illegal trafficking, from December 2012 to June 2013 there were 2,972 inspections of transboundary movements for the importation of wildlife specimens, products and byproducts, 36,960 similar inspections for the importation of forestry products and byproducts, and 140 technical reports.

- Achievements in wildlife law enforcement include the seizure of a shipment of 898,000 specimens of dry sea cucumber, 78,000 dead seahorse specimens and 1,000 boxes of frozen totoaba bladder, all endangered species under NOM-059-Semarnat-2010. At the port of Manzanillo, Colima, 44 containers were seized with 830 m³ of protected tropical wood species, such as manjack, granadillo, cocobolo and monkeypod. In addition, in coordination with the customs, military, public safety and phytosanitary authorities (the General Customs Administration, Secretariat of National Defense, Federal Police and National Animal Health Service, respectively), a special border sealing operation was carried out in June 2013 at 22 northern border crossings, resulting in 2,006 vehicle inspections to review the origin and legal status of 20,000 kilograms of charcoal, 29 wildlife specimens, 116 fisheries products in general, five hunting trophies and 1,408 skins from various reptile species, leading to the preventive seizure of 600 kilograms of charcoal and nine wildlife products.
- During the period from 1 September 2012 to 31 August 2013, the 32 Profepa delegations simultaneously carried out five national inspection operations at highway checkpoints, land-based and maritime customs offices to verify the environmentally sound management of hazardous materials, substances and waste. Specifically, 266 inspection points were set up on the country's highways, with 187 inspection points at 19 customs houses; the highway operation involved 1,650 Profepa inspectors, supported by 1,526 armed police officers, while the customs inspections had 184 Profepa inspectors and 582 customs officers. As a result of these actions, 70 irregularities were found in the movement of 710 tons of hazardous waste at highway checkpoints, leading to 55 administrative proceedings and 13 indictments for crimes against the environment. In addition, 32 irregular movements of 189 tons of hazardous waste were detected at entry points, leading to 22 administrative proceedings and the indictment of five people for irregular trade.
- Among the national inspection and surveillance actions carried out from January to June 2013, in the framework of the program to fight clandestine tree felling, the Intensive Program to Fight Clandestine Tree Felling (*Programa Intensivo de Combate a la Tala Clandestina*) in the Monarch Butterfly Biosphere Reserve stands out: 325 surveillance rounds, 15 inspections at storage and processing centers (*centros de almacenamiento y transformación*—CATs) and lumber yards, three property inspections, 36 vehicle checkpoints, 13 special investigations and 43 surveillance committees. These actions led to the seizing of 30 sets of equipment and tools, 11 vehicles, four chainsaws and 1,267.5 m² of wood, in addition to the closing of eight CATs and lumber yards and the confiscation of 49.87 m² of timber.
- From December 2012 to June 2013, 2,989 inspections were conducted at establishments with a high risk of pollution (including inspections performed by reason of environmental complaints and to attend to environmental emergencies involving chemical substances). As a result of these actions, fines were levied for a total of 62.21 million pesos.
- In terms of environmental education, the offering of courses, programs and workshops was fostered in conjunction with the Secretariat of Public Education (*Secretaría de Educación Pública*—SEP), to bring primary and secondary school teachers up to date on environmental education. The states were also encouraged to adopt “Environmental Education for Sustainability” coursework as part of the 2011 Basic Study Plan, enabling the inclusion of specific issues of interest with regard to society, culture and nature. In the 2012-2013 school year, 16 states offered environmental education courses.
- To build capacities among public officials and rural actors, courses, certificate programs and in-person and distance training workshops were held in all Mexican states, on issues such as climate change, hydrographic basin management, wetlands and municipal environmental education programs.

- The “Fans of the Planet” (*Fans del Planeta*) environmental education communication strategy was also continued, aimed at children aged eight to 12, seeking to foster and contribute to the development of responsible, informed and participative citizens committed to protecting the environment and the sustainable use of natural resources. From December 2012 to June 2013, the website www.fansdelplaneta.gob.mx had 73,733 visitors.
- During August, Regulatory Improvement and Service Sessions (*Jornadas de Mejora Regulatoria de Trámites y Servicios*) were held to answer questions and address specific needs of operators in the Federal Procedures and Services online system, to ensure an updated procedure platform and respond to the environmental sector’s and citizens’ needs.

Future Plans in Implementing the Agreement

Key goals and objectives proposed for late 2013 include:

- Presenting three Proaire programs for the second half of 2013, to improve air quality in Queretaro, Leon (Guanajuato) and San Luis Potosí.
- Providing 23,200 hectares with coral reef restoration, reforestation and soil and water management and conservation works. As of June 2013, 14,873 hectares were restored in 27 protected natural areas.
- Concluding 173 research and development projects carried out by the Mexican Institute for Water Technology (*Instituto Mexicano de Tecnología del Agua—IMTA*), with an authorized budget of 492.7 million pesos by the end of 2013.
- Concluding the General Water Act (*Ley General de Aguas*) bill, whose drafting as of June 2013 was 25% completed.
- Providing irrigation to 3,100 hectares, with an investment of 1.8887 billion pesos in federal funds, as part of the Conagua process to further irrigation. As of June 2013, with the addition of 620 hectares, the process was 28% completed.
- Attaining 68% of the national coverage of wastewater treatment by the end of 2014. In the reported period, there was an inventory of 2,356 treatment plants with a total treated volume of 101,399 liters per second.
- Achieving the stated goal of planting 180 million trees for the 2013 reforestation season, including 229 million plants. As of June 2013, there was 91.9% progress, equal to more than 210 million plants.
- Increasing the national potable water coverage to 92.3% in 2013, with levels of 95.7% and 80.8% in urban and rural locales, respectively, as well as increasing the national sewer coverage to 90.9%, with 96.4% in urban locales and 72.5% in rural locations. When these goals are met, just over 106 million residents will have potable water service in private homes and 104.5 million residents will have sewer service.

Further information is available at the following web links:²

www.semarnat.gob.mx/programs/informes/primer-informe2013

<http://pnd.gob.mx/wp-content/uploads/2013/05/PND.pdf>

² Any possible discrepancy between the figures presented herein and the information contained on the referenced websites is due to updates made in the preparation of this report.

United States Progress Report, 2013

Country Report on Implementation of the Commitments Derived from the NAAEC

Country Report on the Implementation of the Commitments Derived from the North American Agreement on Environmental Cooperation

The following report was submitted to the CEC Secretariat by the Government of the United States in accordance with the North American Agreement on Environmental Cooperation (NAAEC).

Introduction

The information included in this section of the 2013 Annual Report is intended to highlight certain activities and developments related to environmental protection for the calendar year 2013. It does not represent the full range of activities undertaken by the United States (US) government with the NAAEC, nor is it intended to reflect environmental efforts at the state, tribal, territory, or local level.

Significant successes

- The US Fish and Wildlife Service approved more than \$25 million in federal grants and Federal Duck Stamp revenues to protect, restore or enhance thousands of acres of wildlife habitat in the United States and Mexico for the benefit of shared migratory bird populations. The Migratory Bird Conservation Commission voted to approve the use of Migratory Bird Conservation Fund monies and North American Wetlands Conservation Act grants to acquire and enhance this habitat for waterfowl, shorebirds, landbirds, marsh birds and other wetland-dependent species. An additional \$19.5 million awarded through the North American Wetlands Conservation Act will protect, restore or enhance more than 170,000 acres of habitat for migratory birds in the United States and Mexico, leveraging \$57 million in matching funds. Eighteen projects in 15 United States and seven projects in Mexico will receive North American Wetlands Conservation Act funding.

The 2013–2014 Migratory Bird Hunting and Conservation Stamp, also known as the Federal Duck Stamp, will go on sale June 28. Since 1934, sales of Federal Duck Stamps have raised more than \$800 million to acquire 6 million acres of habitat for the National Wildlife Refuge System.

The North American Wetlands Conservation Act is the only federal grant program dedicated to the conservation of wetland habitats for migratory birds. Through the Act's US Standard grants program, 3,300 partners have been involved in 910 projects affecting more than 7 million acres of habitat.³

- The Migratory Bird Conservation Commission today approved \$28 million in funding to conserve, restore and enhance vital wetlands, including acquisition of more than 9,000 acres of waterfowl habitat in the National Wildlife Refuge System. The commission approved close to \$4 million in projects for land purchases and leases on three refuges with funds raised largely through the sale of Federal Duck Stamps. In addition, the panel approved \$23.7 million in grants through the North American Wetlands

³ <www.fws.gov/birdhabitat/Grants/NAWCA/Standard/US/2013_Sept.shtm>

Conservation Act to protect, restore or enhance nearly 89,000 acres of habitat for migratory birds in the United States and Canada, leveraging \$28.5 million in matching funds.

The three commission-approved refuge projects are:

- Trinity River National Wildlife Refuge in Texas. Approval to acquire 81 fee acres of quality waterfowl habitat in the river floodplain for \$44,700. These bottomland hardwoods and associated wetlands benefit a wide variety of waterfowl, including mallard, wood and mottled ducks.
- Red Rock Lakes National Wildlife Refuge in Montana. Price approval and approval for a boundary addition on 489 lease acres for \$1,750. The commission also supported a price re-approval of \$22,350 on leased land that it previously approved in September 2012. Since then, the state of Montana reassessed the lease value, which increased by 102 percent. The new price is now locked in for five years. The refuge and the wider land area support high breeding densities of lesser scaup and trumpeter swans.
- Upper Ouachita National Wildlife Refuge in Louisiana. Approval to acquire more than 3,200 acres in fee title for \$3.76 million will almost complete the current footprint of this refuge. The refuge provides high quality habitat for migrating and wintering waterfowl.

As part of the North American Wetlands Conservation Act funding, the commission approved \$20.7 million in grants through the Standard Grants Program to support nine Canadian projects that will benefit ducks, geese and other migratory birds on 36,744 acres in 12 provinces and territories, leveraging \$21 million in matching funds.⁴

Strategic Initiatives

- As part of President Obama's Climate Action Plan to cut carbon pollution and lead in clean energy, EPA released its 2013 Strategic Sustainability Performance Plan that outlines actions planned over the next year to cut energy use and waste in agency operations. President Obama signed [Executive Order 13514](#) on Federal Leadership in Environmental, Energy, and Economic Performance in October 2009, setting aggressive targets for reducing waste and pollution in Federal operations by 2020. EPA's 2013 Sustainability Plan builds on four years of progress under the Executive Order and provides an overview of how the agency is saving taxpayer dollars, reducing carbon emissions, and saving energy. The 2013 Sustainability Plan will also help guide EPA's actions to meet the new goal President Obama set today with a Presidential Memorandum directing the Federal Government to consume 20 percent of its electricity from renewable sources by 2020—more than double the current level. Meeting this renewable energy goal will reduce pollution in our communities, promote American energy independence, and support homegrown energy produced by American workers.⁵
- The US Environmental Protection Agency (EPA) issued a final rule that helps create a consistent national framework to ensure the safe and effective deployment of carbon capture and sequestration (CCS) technologies. CCS technologies allow carbon dioxide to be captured at stationary sources—like coal-fired power plants and large industrial operations—and injected underground for long-term

⁴ <www.fws.gov/home/newsroom/MBCCapproves9000acresNR06052013.html>

⁵ <www.epa.gov/sites/production/files/2015-09/documents/sspp2013full_508.pdf>

storage in a process called geologic sequestration. The new rule clarifies that carbon dioxide streams captured from emission sources, injected underground via UIC Class VI wells approved for the purpose of geologic sequestration under the Safe Drinking Water Act, and meeting certain other conditions (e.g., compliance with applicable transportation regulations), will be excluded from EPA's hazardous waste regulations. EPA concluded that the careful management of carbon dioxide streams under the specified conditions does not present a substantial risk to human health or the environment. EPA's determination will help provide a clear pathway for the deployment of CCS technologies in a safe and environmentally protective manner while also ensuring protection of underground sources of drinking water. This rule is complementary to previous EPA rulemakings, including Safe Drinking Water Act regulations that ensure the Class VI injection wells are appropriately sited, constructed, tested, monitored, and closed.⁶

- EPA issued its annual report that tracks the average fuel economy of vehicles sold in the United States which showed a 1.2 mpg increase over the previous year, making it the second largest annual increase in the last 30 years. Fuel economy has now increased in seven of the last eight years. Fuel economy will continue to improve under the Obama administration's historic National Clean Car Program standards. The program doubles fuel economy standards by 2025 and cuts vehicle greenhouse gas emissions by half. The standards will save American families \$1.7 trillion dollars in fuel costs, and by 2025 will result in an average fuel savings of more than \$8,000 per vehicle. The program will also save 12 billion barrels of oil, and by 2025 will reduce oil consumption by more than 2 million barrels a day—as much as half of the oil imported from OPEC every day. The large fuel economy improvement in model year 2012 is consistent with longer-term trends. Fuel economy has increased by 2.6 mpg, or 12 percent, since 2008, and by 4.3 mpg, or 22 percent, since 2004. The average carbon dioxide emissions of 376 grams per mile in model year 2012 also represented a record low. While EPA does not yet have final data for model year 2013, preliminary projections are that fuel economy will rise by 0.4 mpg, and carbon dioxide emissions will decrease by 6 grams per mile in 2013.
- EPA announced the availability of \$4 million in grant funding to establish clean diesel projects aimed at reducing emissions from marine and inland water ports, many of which are in areas that face environmental justice challenges. Most of the country's busiest ports are located near large metropolitan areas and, as a result, people in nearby communities can be exposed to high levels of diesel emissions. Older diesel engines can emit large amounts of air pollutants, such as nitrogen oxides (NO_x) and particulate matter (PM). These pollutants are linked to a range of serious health problems including asthma, lung and heart disease, other respiratory ailments, and even premature death. Clean diesel projects at ports, employing readily available technology, will make immediate emissions reductions and provide health benefits. This grant competition is available under the Diesel Emission Reduction Act (DERA) Program and is the first competition to focus on solely reducing emissions at ports. DERA funds are used to clean up the legacy fleet of diesel engines that were produced before more recent environmental standards. This grant competition is intended to help solve some of the complex air quality issues in port communities. Under this competition, EPA anticipates awarding between two and five assistance agreements to port authorities through the DERA program. Port authorities, governmental or public agencies that operate ports, are able to work directly with a variety of fleet owners to lower emissions from different types of equipment used in a port setting. Projects may include drayage trucks, marine engines, locomotives, and cargo handling equipment at marine or

⁶ <www3.epa.gov/climatechange/ccs/>

inland ports. Priority will be given to ports located in areas of poor air quality. The objectives of the assistance offered under this program are to achieve significant reductions in diesel emissions in terms of tons of pollution reduced and reductions in diesel emissions exposure from fleets operating at ports. The program also seeks to build partnerships among port stakeholders to promote ongoing efforts to reduce emissions from port operations. Community groups, local governments, terminal operators, shipping carriers, and other business entities are encouraged to participate through partnerships with eligible port authorities.

- The Energy Department released two reports showcasing record growth across the US wind market—increasing America’s share of clean, renewable energy and supporting tens of thousands of jobs nationwide. The United States continues to be one of the world’s largest and fastest growing wind markets. In 2012, wind energy became the number one source of new US electricity generation capacity for the first time—representing 43 percent of all new electric additions and accounting for \$25 billion in US investment. President Obama’s Climate Action Plan makes clear that the growth of clean, renewable wind energy remains a critical part of an all-of-the-above energy strategy that reduces harmful greenhouse gas emissions, diversifies our energy economy and brings innovative technologies on line. The Obama Administration has committed to another doubling of the renewable electricity generation from energy resources like wind power by 2020.⁷
- As part of President Obama’s plan to cut carbon pollution the Energy Department is implementing four research and development projects to bring next generation biofuels on line faster and drive down the cost of producing gasoline, diesel and jet fuels from biomass. The projects—located in Oklahoma, Tennessee, Utah and Wisconsin—represent a \$13 million Energy Department investment. The Energy Department continues to take steps to speed the development of clean, renewable biofuels, with the goal of producing cost-competitive drop-in biofuels at \$3 per gallon by 2017. These projects will help maximize the amount of renewable carbon and hydrogen that can be converted to fuels from biomass and improve the separation processes in bio-oil production to remove non-fuel components—further lowering production costs.⁸
- [New data](#) submitted by President Obama’s Better Buildings Challenge partners shows that they have improved facility energy efficiency by more than 2.5 percent per year on average compared to their baseline years, equal to about \$58 million in annual energy savings. These efforts support President Obama’s broader goal of doubling American energy productivity by 2030. In 2011, President Obama launched the Better Buildings Challenge to catalyze revolutionary change in energy use and achieve record-breaking energy bill savings. More than 110 organizations—including a diverse set of public and private sector partners from local governments, school districts and universities to commercial real estate, healthcare and manufacturing—are partnering with the Energy Department to achieve portfolio-wide energy savings and share successful strategies that maximize efficiency. In addition, the Challenge includes a network of financial and utility allies to assist partners in overcoming financial and data access barriers across the marketplace. Over the first year of the Challenge, these partners have also completed more than 50 showcase projects that highlight innovative, cost-effective energy

⁷ <<http://energy.gov/2013-wind-report>>

⁸ <<http://energy.gov/articles/energy-department-announces-new-investment-accelerate-next-generation-biofuels>>

saving strategies. Better Buildings Challenge financial allies have also extended more than \$1.1 billion in private financing for energy efficiency improvements.⁹

- NOAA has installed Science On a Sphere® around the world. The 3-D display system, illuminates awe-inspiring animations of planet Earth and is used by educators, curators and scientists alike to explore global environmental data, such as swirling hurricanes, clouds and ocean currents. [Science On a Sphere®\(SOS\)](#) is seen by 33 million people annually in 15 countries, 27 US states, the District of Columbia and American Samoa. Using computers and video projectors, the system displays planetary data on an opaque carbon fiber sphere, and presenters can draw from more than 400 annotated datasets to highlight weather observations, climate models, ocean acidification plus the latest solar system imagery. Since the first installation, the presence of SOS has expanded around the world. Through an educational climate network, 15 SOS systems have been installed in Mexico alone. Each SOS installation is connected to a continually refreshed online data catalog, containing annotated environmental and other planetary datasets.¹⁰ Scientists and forecasters from NOAA and other federal agencies like NASA post near real-time datasets to this catalog, allowing SOS institutions to display the most recent events and cutting-edge models, such as daily global weather observations, hurricane tracks, and climate models. Science On a Sphere®, administratively and technically housed at NOAA's Earth System Research Laboratory in Boulder, uniquely extends NOAA's educational program goals designed to increase public understanding of the environment. Using NOAA's collective experience and knowledge of the Earth's land, oceans, and atmosphere, NOAA uses Science On a Sphere® as an instrument to enhance informal educational programs in science centers, universities, and museums across the world. NOAA's mission is to understand and predict changes in the Earth's environment, from the depths of the ocean to the surface of the sun, and to conserve and manage our coastal and marine resources.¹¹
- An instrument that measures the sun's energy output is in orbit after it was launched last night on the US Air Force's Space Test Program Satellite-3. The instrument, called the [Total solar irradiance Calibration Transfer Experiment \(TCTE\)](#), is funded by NOAA's next-generation Joint Polar Satellite System ([JPSS](#)) and designed to continue measurements of the total energy output of the sun. These measurements are used to measure light from the sun at all wavelengths, which is the primary energy source that drives climate on Earth, and determine if solar changes influence the Earth's climate. The instrument was assembled by the [Laboratory for Atmospheric and Space Physics \(LASP\)](#) at the University of Colorado, working with the TCTE program office at NASA's Goddard Space Flight Center in Greenbelt, Md., with a quick turnaround to get the instrument ready to fly on the Air Force satellite. "The resourcefulness and ingenuity of the LASP, NASA and NOAA team in building and integrating the TCTE in such a short period demonstrates responsive engineering at its finest," said Kevin Carmack, Polar Free-Flyer project manager at NASA Goddard.¹²
- In partnership with State and Tribal agencies, the Obama Administration released the first nationwide strategy to help public and private decision makers address the impacts that climate change is having on natural resources and the people and economies that depend on them. Developed in response to a request by Congress, the National Fish, Wildlife, and Plants Climate Adaptation Strategy is the product

⁹ <http://apps1.eere.energy.gov/buildings/commercial/email/bba_newsletter_march_2013.html>

¹⁰ <<http://sos.noaa.gov/Datasets/index.html>>

¹¹ <www.noaanews.noaa.gov/stories2013/20131122_sos.html>

¹² <www.noaanews.noaa.gov/stories2013/20131120_solarinstrument.html>

of extensive national dialogue that spanned nearly two years and was shaped by comments from more than 55,000 Americans. Fish, wildlife, and plant resources provide important benefits and services to Americans every day, including jobs, income, food, clean water and air, building materials, storm protection, tourism and recreation. For example, hunting, fishing and other wildlife-related recreation contribute an estimated \$120 billion to our nation's economy every year, and marine ecosystems sustain a US seafood industry that supports approximately 1 million jobs and \$116 billion in economic activity annually. The Climate Adaptation Strategy provides a roadmap of key steps needed over the next five years to reduce the current and expected impacts of climate change on our natural resources, which include: changing species distributions and migration patterns, the spread of wildlife diseases and invasive species, the inundation of coastal habitats with rising sea levels, changing productivity of our coastal oceans, and changes in freshwater availability.

The Climate Adaptation Strategy builds upon efforts already underway by federal, state, tribal governments and other organizations to safeguard fish, wildlife and plants and the communities that depend on them, and provide specific voluntary steps that agencies and partners can take in the coming years to reduce costly damages and protect the health of our communities and economy. The strategy does not prescribe any mandatory activities for government or nongovernmental entities, nor suggest any regulatory actions.¹³ Implementation of the strategy will provide public and private decision makers with the information and tools they need to consider and respond to climate change as part of their ongoing activities.

The Strategy identifies seven key steps to help safeguard the nation's fish, wildlife and plants in a changing climate:

- Conserve habitat to support healthy fish, wildlife, and plant populations and ecosystem functions;
- Manage species and habitats to protect ecosystem functions and provide sustainable commercial, subsistence, recreational and cultural use;
- Enhance capacity for effective management;
- Support adaptive management through integrated observation and monitoring and use of decision support tools;
- Increase knowledge and information on impacts and responses of fish, wildlife, and plants;
- Increase awareness and motivate action to safeguard fish, wildlife, and plants; and
- Reduce non-climate stressors to help fish, wildlife, plants, and ecosystems adapt.

The draft Strategy received nearly 55,000 comments from 54,847 individuals, 51 nongovernmental organizations, 17 governmental entities, and 5 tribes. Input and suggestions provided in the comments were carefully reviewed and incorporated into the final document.

The partnership was co-led by Interior's US Fish and Wildlife Service, the Department of Commerce's National Oceanic and Atmospheric Administration, and the New York State Department of Environmental Conservation (representing state fish and wildlife agencies). An intergovernmental steering committee that included representatives from 15 federal agencies, five state fish and wildlife agencies, and two inter-tribal commissions oversaw development of the strategy with support from the Association of Fish and Wildlife Agencies.¹⁴

¹³ <www.st.nmfs.noaa.gov/ecosystems/climate/other-resources/nfwp-climate-adaptation-strategy>

¹⁴ <www.noaanews.noaa.gov/stories2013/20130326_climate_adaptation_strategy.html. The National Fish, Wildlife and Plants Climate Adaptation Strategy can be found on the web at <www.wildlifeadaptationstrategy.gov>

- The US Fish and Wildlife Service is implementing a multi-faceted Urban Wildlife Refuge Initiative to make its programs reflect the diverse perspectives, values and cultures of America. The initiative strives to make the Service’s programs far more relevant to millions of Americans—80 percent of whom live in big and small cities—giving them myriad ways to participate in wildlife conservation and recreation. This initiative grows out of the Service’s Conserving the Future process, which set a strategic path for the National Wildlife Refuge System for the next decade and beyond. The initiative is built on four major elements:
 - “Standards of Excellence for Urban National Wildlife Refuges” to help national wildlife refuges engage urban Americans in new and more effective ways. The standards are aimed at national wildlife refuges within 25 miles of urban areas with 250,000 people or more, but also can benefit refuges serving more rural communities.
 - Urban Wildlife Refuge Partnerships in geographically dispersed communities to expand the Service’s conservation programs. Eight partnerships were established in 2013 and more will be established by 2015.
 - A Director’s Order that authorizes and encourages all Service programs to conduct cooperative fish and wildlife conservation, education and outreach in urban communities. These areas are partnership-based lands, not managed by the Service, where people can enjoy outdoor experiences that foster connections with fish and wildlife resources and promote active engagement of people in the natural world.
 - A first-ever Urban Academy for staff and partners at the National Conservation Training Center in West Virginia on September 23-25, 2013. The purpose is to train staff on cultural diversity, how to overcome barriers to outdoor recreation, and create partnerships that engage new audiences in order to foster a new conservation constituency.

The National Wildlife Refuge System has scores of wildlife refuges in urban areas, including Denver, Minneapolis, Philadelphia, San Francisco, Detroit and Boston, among other cities. More than 47 million people annually visit national wildlife refuges.¹⁵

Government Enforcement

- The US Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) have announced an expanded partnership to support water quality trading and other market-based approaches that provide benefits to the environment and economy. Water quality trading provides a cost-effective approach for regulated entities to comply with EPA Clean Water Act requirements, including water quality-based effluent limits in National Pollutant Discharge Elimination System permits. Trading would allow regulated entities to purchase and use pollutant reduction credits generated by other sources in a watershed. Cost savings and other economic incentives are key motivators for parties engaged in trading. Water quality trading can also provide additional environmental and economic benefits, such as air quality improvements, enhanced wildlife habitat, carbon capture and storage, and new income and employment opportunities for rural America.
- EPA and USDA are working together to implement and coordinate policies and programs that encourage water quality trading. The Department and the Agency will identify opportunities to work collaboratively to help improve water quality trading programs across the country. Cooperative

¹⁵ <www.fws.gov/refuges/>

management and technical assistance will improve resource management and public services, and accelerate implementation.¹⁶

- [NOAA Fisheries](#) announced final regulations requiring the United States Navy to implement protective measures during training and testing activities in the Atlantic Ocean and Gulf of Mexico to reduce effects on marine mammals.

The Navy requested an authorization under the [Marine Mammal Protection Act](#), because the sound generated by active sonar, the sound and pressure generated by detonating explosives, and other associated activities could affect the behavior of some marine mammals, or cause a temporary loss of their hearing sensitivity or other injury.¹⁷

The Navy's current authorization expires in January 2014. The purpose of the Navy training and testing is to ensure the readiness of naval forces. Under the MMPA, this new authorization is limited to five years, and expires in November 2018.

NOAA Fisheries recently made a final determination that the effects of these Navy operations would have a negligible impact on the overall species or stocks involved. Based on that final determination, NOAA is requiring that the Navy use mitigation measures and, if properly followed, expects the exercises will not result in serious injury or death to a large number of marine mammals. The final rule allows for a small number of incidental injuries to marine mammals from sonar, as well as vessel strikes and explosions.

Under the authorization, the Navy will use the following mitigation measures to minimize effects on marine mammals, including:

- establishing marine mammal mitigation zones around each vessel using sonar;
- using Navy observers to shut down sonar operations if marine mammals are seen within designated mitigation zones;
- using mitigation zones to ensure that explosives are not detonated when animals are detected within a certain distance;
- implementing a stranding response plan that includes a training shutdown provision in certain circumstances, and allows for the Navy to contribute in-kind services to NOAA Fisheries if the agency has to conduct a stranding response and investigation; and
- using specific mitigation measures at certain times to reduce effects on North Atlantic right whales.

These measures should minimize the potential for injury or death and significantly reduce the number of marine mammals exposed to levels of sound likely to cause temporary loss of hearing.

Additionally, the final rule includes an adaptive management component that requires that the Navy and NOAA Fisheries meet yearly to discuss new science, Navy research and development, and Navy monitoring results to determine if modifications to mitigation or monitoring measures are appropriate.

NOAA Fisheries and the Navy have worked to develop a robust monitoring plan to use independent, experienced vessel-based marine mammal observers (as well as Navy observers), and passive acoustic monitoring to help better understand how marine mammals respond to various levels of sound and to assess the effectiveness of mitigation measures. Additionally, an Integrated Comprehensive Monitoring Plan developed by the Navy (with input from NOAA Fisheries) will better prioritize monitoring goals

¹⁶ <www.usda.gov/wps/portal/usda/usdamediafb?contentid=2013/12/0226.xml&printable=true>

¹⁷ <www.sciencedaily.com/releases/2009/01/090124122305.htm>

and standardize data collection methods across all US Navy range complexes. The final rulemaking is posted.¹⁸

- The Department of the Interior today announced changes to regulations enabling the US Fish and Wildlife Service to better monitor and address the long-term impacts of renewable energy projects and other activities on federally-protected eagles. In addition to these immediate changes, the Service will continue its comprehensive review of all eagle permitting regulations to determine if other modifications are necessary to increase their efficiency and effectiveness. The revised rule, a result of extensive stakeholder engagement and public comment, extends the maximum permit tenure to 30 years, subject to a recurring five-year review process throughout the permit life. Only applicants who commit to adaptive management measures to ensure the preservation of eagles will be considered for permits with terms longer than five years. Any such increased measures, which would be implemented if monitoring shows that initial permit conditions do not provide sufficient protection, will be negotiated with the permittee and specified in the terms and conditions of the permit. All permits will be closely monitored to ensure that allowable take numbers are not exceeded and that conservation measures are in place and effective over the life of the permit. Steps taken today will increase transparency and accountability by making annual reports and five-year compilations of eagle fatalities available to the public. The revised regulations also increase the fees charged for processing programmatic permit applications to reflect the true cost to the Service of developing adaptive conservation measures and monitoring the effectiveness of the terms and conditions of the permits. Permits also will now be transferable to new owners of projects, provided that any successor is qualified and committed to carrying out the conditions of the permit.¹⁹

Future Plans in Implementing the Agreement

- Department of the Interior Climate Science Centers are awarding nearly \$7 million to universities and other partners for research as part of President Obama's [Climate Action Plan](#) to reduce carbon pollution, move our economy toward clean energy sources and begin to prepare our communities for the impacts of climate change. The 50-plus studies, conducted with fiscal year 2013 funding, will focus on how climate change will affect natural resources as well as management actions that can be taken to help offset such impacts. The research will help guide managers of parks, refuges and other cultural and natural resources to plan how to help species and ecosystems adapt to climate change. Each of the Department of the Interior's eight [Climate Science Centers](#) (CSCs) worked with states, tribes, federal agencies, [Landscape Conservation Cooperatives](#) (LCCs), universities supporting the CSCs, and other regional partners to identify the highest priority management challenges in need of scientific input, and to solicit and select research projects. The eight [Interior Climate Science Centers](#) form a national network and are coordinated through the [National Climate Change and Wildlife Science Center](#), located at the headquarters of USGS. CSCs and LCCs have been created under [Interior's strategy to address the impacts of climate change](#) on America's waters, land, and other natural and cultural resources. Together, Interior's CSCs and LCCs are assessing the impacts of climate change and other landscape-scale stressors that typically extend beyond the borders of any single national wildlife refuge,

¹⁸ <www.noaanews.noaa.gov/stories2013/20131114_mmpa.html>

¹⁹ <www.fws.gov/pacific/eagle/all_about_eagles/laws_and_regulations.html>

national park or Bureau of Land Management unit and will identify strategies to ensure that resources across landscapes are resilient in the face of climate change.²⁰

- NOAA awarded \$27.2 million to sustain current critical ocean, coastal, and Great Lakes observing efforts and to support innovative marine sensor technologies, with a goal of helping provide a better understanding of coastal and marine environment. The funding is provided through the [US Integrated Ocean Observing System](#) (IOOS[®]), other federal agencies, and NOAA programs. The awards include \$2.9 million for marine sensor innovation projects to enhance our understanding of the coastal and marine environment. In addition to the marine sensor innovation projects introduced this year, the US IOOS awarded \$24.3 million to sustain critical coastal, ocean, and Great Lakes efforts. As part of this effort, the US IOOS Program and NASA will continue to jointly fund, at \$250,000 each per year, projects to improve satellite sea surface temperature data from existing and new sensors, produce a blended output of sea surface temperature data from US and international datasets, and target these products for coastal applications and regional IOOS usage.
- President Obama has requested \$1.6 billion in fiscal year 2014 for US Fish and Wildlife Service an increase of \$76.4 million over the 2012 enacted level, to fund the agency's high priority needs. The budget also includes approximately \$1.2 billion available under permanent appropriations, most of which will be provided directly to States to support fish and wildlife conservation and outdoor recreation. The Service's 2014 budget request contains costs in a number of areas by identifying administrative efficiencies, program reductions, and other savings, while proposing select increases.²¹ Specific areas of the budget proposal include¹⁶:
 - America's Great Outdoors
 - New Energy Frontier
 - Cooperative Landscape Conservation
 - National Wildlife Refuge System
 - Law Enforcement
 - Endangered Species
 - Fish and Aquatic Conservation
 - Ecosystem Restoration
 - Migratory Birds
 - International Affairs

Conclusion

Calendar year 2013 was another outstanding year for the United States in fulfillment of our obligations under the North American Agreement for Environmental Cooperation. The success achieved in enforcing our environmental laws and safeguards, increasing levels of environmental protection, researching the technology to better understand our environment, and investing in infrastructure and strategies to combat climate change was encouraging. Additionally, the development of clean energy projects, the funding of monitoring networks, and inter-agency agreements to address pollution and waste management are clear signals that US federal agencies are employing a comprehensive approach to environmental management.

²⁰ <www.doi.gov/news/pressreleases/interior-announces-funding-for-new-scientific-studies-as-part-of-president-obamas-climate-action-plan>

²¹ <www.fws.gov/home/newsroom/presidentrequestsFY2014.html>

Moving forward, we will seek to expand the inter-agency dialogue on the North American environment. We are steadfast to the commitments made under the North American Agreement for Environmental Cooperation and will continue to seek new ways to further protect and improve the state of our environment in the years to come.

2013 Financial Report

Commission for Environmental Cooperation
Financial Report
As of 31 December 2013
(thousands of Canadian dollars)

DESCRIPTION	2013 budget	Results	Variance	%
REVENUES				
Parties' Contributions (\$ 9,000 US at par)	9,000.0	9,000.0	0.0	
2013 Mexico additional contribution	102.5	102.5	0.0	
Interest	0.0	15.6	15.6	
Gain (loss) on foreign exchange	0.0	452.1	452.1	
Other Income	0.0	79.8	79.8	
TOTAL REVENUES	9,102.5	9,650.1	547.6	6.02%
EXPENSES				
Cooperative work program				
Projects	2,665.0	1,961.0	704.0	26.42%
Work Program, Salaries, Benefits and Professional Development	1,278.1	1,333.2	(55.1)	-4.31%
North American Partnership for Environmental Community Action (NAPECA)	600.0	600.0	0.0	0.00%
Tracking Pollutant Releases and Transfers in North America (North American PRTR Project)	35.0	25.3	9.7	27.83%
Mexico Liaison Office	216.7	204.7	12.0	5.52%
Managing CEC Environmental Information	57.8	51.8	6.1	10.50%
Monitoring, Evaluation and Reporting	56.8	52.9	3.9	6.92%
	4,909.4	4,228.8	680.6	13.86%
Secretariat report (Article 13)	7.5	6.3	1.2	15.63%
Submissions on Enforcement Matters (Articles 14 & 15)	717.9	693.9	24.0	3.34%
Council Support	353.8	348.2	5.6	1.58%
JPAC Support	454.3	457.5	(3.2)	-0.70%
Communications	722.4	658.2	64.2	8.88%
Administration & Management				
Executive Director's Office	63.4	42.7	20.7	32.61%
External Administrative Support (Insurance, audit, fiscal expertise, banking, legal)	204.9	195.1	9.8	4.80%
Relocation/orientation, Recruitment	67.0	48.1	18.9	28.26%
Operating Expenses (Telecommunications, rent, operating equipment, office supplies)	686.3	694.6	(8.3)	-1.20%
Administration & Management Salaries	915.6	908.6	7.0	0.76%
	1,937.2	1,889.0	48.2	2.49%
TOTAL EXPENSES	9,102.5	8,282.0	820.5	9.01%