

# annual 2012 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

## Nineteenth Regular Session of the CEC Council

**New Orleans, 11 July 2012**—Today, following a successful meeting of the Council of the Commission for Environmental Cooperation (CEC), we are pleased to report that our discussions with key community, university and government partners from across North America have reinforced the accomplishments of our collective work, as well as the challenges we face as a region.

During our public dialogue which included students and professors from our three countries, we exchanged ideas with them and other members of the public on ways to collaboratively protect, sustain and restore the health of people, communities and ecosystems.

### **Progress through community partnerships**

We also heard from our partners in the North American Partnership for Environmental Community Action (NAPECA). They reported on how their community-based projects are already producing results that can be shared across our region. These include environmental health initiatives that protect children from waterborne diseases in Mexico, replacing wood-burning stoves and other improvements to enhance indoor air quality for Alaskan native populations, and building the capacity of indigenous communities in Canada and the US to adapt to climate changes affecting their livelihoods.

Our Joint Public Advisory Committee—informed by a two-day workshop—also provided us with their views on policy and action for a resilient future for North America.

### **Modernizing the Submissions on Enforcement Matters Process**

Delivering on earlier commitments, today we also took decisive action to modernize the implementation of the Submissions on Enforcement Matters (SEM) process, making a number of improvements to increase timeliness, transparency, and accessibility, and bring greater clarity to this valuable information-sharing mechanism. Among the most significant changes, the revisions to the *Guidelines on Submissions on Enforcement Matters under Articles 14 and 15 of the North American Agreement on Environmental Cooperation (NAAEC)* establish target deadlines for key steps in the SEM process to reduce the average processing time by half. Additionally, the changes call for Parties to follow up on concluded submissions with information on any new developments and actions taken regarding matters raised in such submissions. These revisions and changes are the culmination of a year-long collaboration between the Parties and the JPAC, the CEC Secretariat, and members of the North American public.

In line with our commitment to a robust and effective public submission process, and building on the collaboration and momentum of the past year's efforts, we have directed that additional steps be taken to enhance the SEM process, such as establishing new online tools to help with the preparation of a submission, increasing public outreach to build awareness of the process, and assessing compliance with the deadlines. Together these actions are expected to ensure that the public submission process remains a critical mechanism for facilitating public participation, supporting government transparency, and promoting the effective enforcement of environmental law in North America.

### **Strengthening our commitment to greening the North American economy**

Noting the important international developments on building paths to foster greener economies, we discussed actions to strengthen this area of our cooperative work so that it can then be reproduced at the local, national, regional and international levels. We have instructed our officials to consider specific initiatives in areas such as electronic waste, short lived climate forcers, advancing on trilateral clean energy initiatives, and other specific economic integrated sectors in North America.

We thank the Panel for its final report and for its recommendations for a new framework. Earlier this year, the CEC Executive Director participated in the meeting of the NAFTA Free Trade Commission. Pursuant

to Article 10(6) of the NAAEC, we look forward to working with the Free Trade Commission, through the relevant officials, to ensure ongoing cooperation and communication.

**Looking to the future in trilateral cooperation**

In continuing our efforts from 2009 to build a more effective and efficient organization, we further direct our officials to develop fewer, more strategic projects that will produce significant results under the next operational plan.

We look forward to the 2013 Council Session in Mexico.

*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 Elvira Quesada, and US Environmental Protection Agency Administrator Lisa P. Jackson. 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). On October 26, 2012 the Council appointed Dr. Irasema Coronado as the seventh executive director of the CEC Secretariat. The new director began a three-year term on 1 December. Dr. Coronado was formerly a JPAC member appointed in May 2010 by President Barack Obama and served as JPAC chair in 2011. More information at: [www.cec.org](http://www.cec.org)

In July 2012, the Council held its annual regular session in New Orleans, where it entertained a dialogue with key communities, universities and government partners during the public session. The result was an exchange of ideas on how to collaboratively protect, sustain and restore the health of people, communities and ecosystems. During the public session, selected grantees of the North American Partnership for Environmental Community Action (NAPECA) gave presentations on the environmental health and climate change adaptation initiatives underway. The Council also announced modifications to the SEM Guidelines, which will be discussed below. Finally, following an in-camera discussion on strengthening its commitment to greening the North American economy, the Council reported that officials have been instructed to consider, for the next CEC Operational Plan, specific initiatives in areas such as electronic waste, short-lived climate forcers, advancing trilateral clean energy initiatives, and other specific economic integrated sectors in North America.

## 2. Cooperative Work Program

Since 2009, the Council set forth an agenda to ensure the CEC is positioned to deliver results in three environmental priorities, namely: Healthy Communities and Ecosystems, Climate Change—Low-Carbon Economy, and Greening the Economy in North America.

Across the three CEC priorities, the Mapping North American Environmental Issues project has been developing map layers and datasets. Products in 2012 included a summary report on the experience in the development of the interactive portal for the North American Environmental Atlas project; a 20’x24’ floor map highlighting examples of community and ecosystem resilience in North America featured at the CEC annual Council Session; and a North American Airports map layer. The North American Environmental Atlas also launched an updated online map viewer interface.

### ***(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 commit to build upon and renew collaborative efforts within the CEC to protect, sustain and restore the health of people,

communities and ecosystems using integrated and comprehensive approaches and partnerships. There are four strategic objectives: improve environmental health of vulnerable communities in North America, increase the resilience of shared ecosystems at risk, enhance regional approaches to sound management of chemicals, and strengthen regional wildlife law enforcement.

***(i) Increased Resilience of Shared Ecosystems at Risk***

Building upon CEC's past efforts, the North American Grasslands project is collecting best management practices to promote sustainable ranching and biodiversity conservation. This initiative is creating a continent-wide partnership of agencies working on grassland conservation and sustainable use. To date, the CEC has compiled over 60 management practices and is making them available from a web-based platform. The project has also funded several on-the-ground initiatives to implement these practices with local ranchers. A bilingual (English-Spanish) glossary of terms associated with range management and marketing of grasslands and grass-fed beef was also developed and will be part of the web-based platform. A large component of this project has been to build a North American Grasslands Alliance comprised of government agencies, nongovernment organizations, academic institutions, cattlemen associations and rancher alliances. Lastly, the CEC contributed to ongoing grassland bird monitoring during the 2011–2012 survey season in northern Mexico.

Following the commitment from US state and federal natural resource management agencies, Mexico's federal environmental authorities, and the International Boundary Water Commission to increase binational conservation for the Río Grande in the Big Bend National Park region, the Big Bend-Río Bravo ad hoc Working Group (BBRB WG) sustained efforts in 2012 by expanding the binational, public-private network of conservation partners in the region. Deliverables this year include: development for public consultation of the "Conservation Assessment for the Big Bend-Río Bravo Region" draft report, advancement of conservation science related to ecosystems at risk, and support of sustainable economic development of border communities in Coahuila, Mexico. Building on the above, the BBRB WG will continue implementing recommendations from the public consultation to the Conservation Assessment report. Other actions include improving the health and resilience of priority ecosystems and rural communities, and developing strategies for implementing conservation goals.

The North American Invasive Species Network (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 in North America. As a biannual project, in 2011–2012 the CEC supported NAISN in recruiting new partners and extended its network, conducting workshops to increase capacity and awareness on invasive species introduction and spread, and developing a website and platform database to increase data-sharing among data providers and users.

The North American Marine Protected Areas Network (NAMPAN) has been focusing on community-based education and awareness of Marine Protected Areas (MPAs). In collaboration with the International Council for the Exploration of the Sea, the CEC has developed guidelines for designing marine protected area networks and a companion guide for planners and managers to design marine protected area networks. In 2012, the CEC worked with the Coastal Ecosystem Learning Center aquariums to produce five short films on the benefits of marine protected areas. These were launched on World Oceans Day in June 2012 at the National Geographic and the Smithsonian Natural History Museum and are being shown around the continent at participating aquariums. They are available in the three CEC official languages.

***(ii) Pollutant Release and Transfer Register***

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

Canada, the United States, and Mexico, 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 next edition of the report will be published in 2013 and will present analyses of North American PRTR data from 2005-2010, with a focus on reporting from two sectors common to the three countries: pulp and paper mills and fossil fuel-based power plants. The objective is to link PRTR data and corporate environmental sustainability, with the report presenting examples of pollution prevention and reduction efforts undertaken by facilities in these two sectors. The Taking Stock Online website and database, featuring 2010 data from the three countries, will be published in 2013. The website 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 October, the NAPRTR Project held a public meeting in Toronto. Conducted on 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. The focus of the 2012 meeting was to obtain comments and suggestions relative to updating the Action Plan to Enhance the Comparability of PRTRs in North America. This feedback will be incorporated into a revised, draft Action Plan for discussion with the three national PRTR programs, with the aim of developing a final Action Plan document containing specific actions for consideration by the CEC Council.

### ***(iii) Enhancing North American Air Quality Management***

Since Council Resolution 01-05 (issued in 2001), the CEC has been working towards comparability of air emissions inventory information in North America, keeping in mind facilitating the development of comparable air emissions data for use in transborder air quality planning; and, enhancing the availability of air emissions information in North America. The CEC has been carrying out extensive work in recent years on the development of North American air emissions inventories.

In 2012, AirNow—a system developed by the US EPA to provide the public with easy access to national air quality information—was implemented at a pilot site in Mexico. As part of this project, a report assessing the comparability of greenhouse gas and black carbon emissions in North America was produced. The report provides an understanding of the gaps, inconsistencies, and similarities among the national inventories, taking into account particular circumstances, priorities and capacities for each country. AirNow identifies opportunities to improve comparability, enabling Canada, Mexico and the United States to share results and strengthen capacities, while the countries work towards advancing domestic mitigation objectives, standards, regulations, and policies over the next five years.

### ***(iv) 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, bioaccumulative, and toxic chemicals in North America.

As part of SMOC activities, experts across North America are working with Mexican officials to develop capacities in this country, including: the National Chemical Inventory listing nearly 6,000 chemicals—based on a compilation of chemicals produced in Mexico through various government authorities; continued investigation of dioxin sources in Mexico including a dioxin exposure workshop and data integration between the Mexican Dioxin Air Monitoring Network, the Canadian National Air Pollution Surveillance, and the US National Dioxin Air Monitoring Network. Other activities in 2012 included a study on the fate of mercury waste in North America; sustained work on Polybrominated Diphenyl Ethers (PBDEs) in landfill and sewage sludge leachate in Mexico; and, a PBDE laboratory training for technicians in Mexico. Finally, the CEC is developing the closure report for the North American Regional Action Plan on Lindane.

The Environmental Monitoring and Assessment North American Regional Action Plan (EM&A NARAP) 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 2012, 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, for a total of seven. Also, the Proname web microsite—developed in 2011—was updated in 2012 to provide general information on the program and to allow access to environmental monitoring results as they become available. The Proname web microsite allows the public and the expert community to have a first portrait of environmental contamination and trends in North America, with a particular emphasis on Mexico. Decision-makers will benefit from early warning information and trends analysis, both domestically and regionally.

As part of the EM&A NARAP, efforts continued in 2012 on adoption of quality assurance/quality control protocols for analytical chemistry and data reporting and producing results validated on a continental scale. In this regard, Proname protocols sites were validated, laboratory technicians were trained, and two exercises for comparing results from analytical procedures within labs were performed. Also, under the EM&A NARAP activities, Mexico carried out a series of workshops to develop a draft for its National Biological Human Monitoring Plan. Also the CEC developed a report articulating efforts with the Strategic Approach to International Chemicals Management (SAICM) and its 20 indicators approved at the second session of the International Conference on Chemicals Management.

#### ***(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.

In 2012, the EWG started the implementation of the intelligence-led approach to regional environmental and wildlife enforcement. This project focuses on the transboundary movements of hazardous waste, including e-waste, ozone layer-depleting substances, non-compliant engines in motorcycles and wildlife. The EWG held a workshop aimed at raising awareness on the regulatory and enforcement landscape in hazardous wastes and ozone layer-depleting substances; implemented a workshop aimed at sharing experiences in the use of electronic media for conducting investigations in environmental and wildlife enforcement; and contributed to share information and best practices in identifying non-compliant engines in motorcycles imported to North America.

In September the CEC presented a seminar in Mexico on the topic “Human Rights and Access to Environmental Justice: Non-Judicial Mechanisms and Means for Citizen Participation.” The joint publication issued by the CEC and UNAM’s Institute for Legal Research, “Environmental Legislation in North America: Experiences and Best Practices for its Implementation and Adjudication,” that builds on a three-year CEC initiative on the subject was formally presented.

***(vi) 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 marked a triggering year for 19 NAPECA projects—selected in 2011—as implementation started in 2012 and will continue to monitor delivering of results during 2013. Ongoing NAPECA projects range from species’ conservation, watershed management, and monitoring pollutants, to environmental justice. As a result, the CEC has been closely following-up project implementation in 2012. The second NAPECA Call for Proposals is expected to take place in the summer of 2013, for a new set of grants to be implemented in 2014-2015. A total of \$1.2 million will be awarded to the grant program.

***(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.

Based upon a 2011 project, the CEC is supporting the development of methodologies to estimate carbon stored in ecosystems across North America. This project will assist efforts to monitor continental land cover change and model landscape-level ecosystem carbon change as North America improves its capacity to store carbon and reduce GHG emissions. Key goals of the project include: develop trilaterally-agreed modelling methods and products; support carbon dynamics modelling in Mexican forest ecosystems for long-term carbon dynamics assessment; support the development of a national-scale carbon accounting system for Mexico; and provide recommendations for a North American modelling and analysis approach to support REDD+ in Mexico.

In addition, a scoping study on blue (coastal) carbon was commissioned to look at the amount of carbon stored in mangroves, salt marshes and sea grasses in North American marine protected areas as a way to reduce carbon emissions and mitigate climate change effects.

***(C) Greening the Economy in North America***

Regarding the Greening the Economy in North America priority, the CEC intends to work 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.

The CEC initiated the final phase of a study to characterize and quantify flows of used and end-of-life electronics in North America. Results of this study will be available in mid-2013 and are expected to improve understanding of the transboundary movements of used and end-of-life computers and monitors in and from North America. The CEC also conducted a needs-analysis assessment to raise awareness of environmentally sound management practices that could best benefit small and medium-size enterprises in

the recycling and refurbishing sector in North America. The next step of this initiative will include development of an online and in-presence course on environmentally sound management practices, to be completed next year.

Finally, as part of the CEC's follow-up to green building in North America, the CEC held a conference on financing the development and retrofitting of commercial buildings on the margins of the 2012 GreenBuild Conference in San Francisco.

**Commission for Environmental Cooperation  
Financial report - Cooperative Work program  
Projects**

(Thousands of Canadian dollars)

Project Title	2012 annual budget	Total Expenses
<b>HEALTHY COMMUNITIES AND ECOSYSTEMS</b>		
<b>Improved Environmental Health of Vulnerable Communities in North America</b>	<b>485.2</b>	<b>379.7</b>
Improving Indoor Air Quality to reduce exposure to Airborne Contaminants, Including Fine Particulates and Chemical Compounds in Alaskan Native Populations and other Indigenous Communities in North America	310.2	281.0
Capacity Building to Improve the Environmental Health of Vulnerable Communities in North America	175.0	98.7
<b>Increased Resilience of Shared Ecosystems at Risk</b>	<b>994.0</b>	<b>855.0</b>
North American Grasslands: Management Initiatives and Partnerships to Enhance Ecosystem and Community Resilience	305.0	293.8
Big Bend-Rio Bravo Collaboration for Transboundary Landscape Conservation / North American Invasive Species Network	584.0	457.0
Engaging Communities to Conserve Marine Biodiversity through NAMPAN	105.0	104.2
<b>Pollutant Release and Transfer Registers (PRTR)</b>	<b>305.0</b>	<b>202.7</b>
Tracking Pollutant Releases and Transfers in North America (North American PRTR Project)	305.0	202.7
<b>Enhanced Regional Approach to Sound Management of Chemicals</b>	<b>634.5</b>	<b>546.4</b>
Approaches for Identifying and Tracking Chemicals in Commerce in North America	86.0	85.7
Risk Reduction Strategies to Reduce the Exposure to Chemicals of Mutual Concern	283.5	233.4
Environmental Monitoring and Assessment of Chemicals of Mutual Concern	265.0	227.3
<b>Strengthening Regional Environmental and Wildlife Law Enforcement</b>	<b>382.0</b>	<b>228.9</b>

Enhancing Environmental Law Enforcement in North America	382.0	228.9
<b>CLIMATE CHANGE-LOW-CARBON ECONOMY</b>		
<b>Improved Comparability of Emissions Data, Methodologies and Inventories Among the Three North American Partners</b>	<b>55.0</b>	<b>5.0</b>
Improving Comparability of Emissions Data, Methodologies and Inventories in North America	55.0	5.0
<b>Engagement of Experts and Strengthened Information Sharing in Climate Change and Low-Carbon Economy</b>	<b>500.0</b>	<b>372.8</b>
Ecosystem Carbon Sources and Storage: Information to Quantify and Manage for Greenhouse Gas Emissions Reductions	320.0	306.2
North American On-line, Interactive Informational Platform on Climate Change	180.0	66.6
<b>GREENING THE ECONOMY IN NORTH AMERICA</b>		
<b>Improved Private Sector Environmental Performance in North America</b>	<b>540.0</b>	<b>469.4</b>
Improving Conditions for Green Building Construction in North America	185.0	141.4
Improving the Economic and Environmental Performance of the North American Automotive Industry Supply Chain	120.0	109.6
Sound Management of Electronic Wastes in North America	235.0	218.4
<b>Projects</b>	<b>3,895.7</b>	<b>3,059.9</b>



## 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 Canada, Mexico, and the United States. Lead is a persistent, bio-accumulative, and toxic substance and how lead-acid batteries are recycled is an important economic, public health and environmental issue. The SLAB report was initiated in 2012 following concerns that a surge in SLAB exports to Mexico was explained by stronger environmental legal frameworks and enforcement in the US.

The SLAB draft report was completed on November 30, 2012. The final report was then submitted to Council in 2013 for a 60-day objection of publication. Key findings of the SLAB draft report included: between 2004 and 2011 SLAB exports from US to Mexico increased in the range of 449–525 percent, and 221 per cent to Canada; lack of equivalent regulatory frameworks regarding levels of environmental and health protection with respect to secondary lead smelters in North America; and inconsistency in the national cross-border accounts in all three countries, as these do not accord with shipping or receiving volumes of SLABs from either sending or receiving countries. The SLAB draft 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 SLABs draft report also presented recommendations to environmental authorities in North America that will enhance the protection of our shared environment, and the health of workers and communities.

## Submissions on Enforcement Matters

Articles 14 and 15 of the NAAEC provide a mechanism whereby any person or nongovernmental organization in North America can file a submission asserting that a Party to the Agreement is failing to effectively enforce its environmental laws. 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").

Following a Council announcement in 2011 to modernize the SEM process, Council-appointed officials (the "SEM Task Force") worked with the Secretariat's SEM Unit and JPAC in order to improve timeliness, transparency, and accessibility, and bring greater clarity to this valuable information-sharing mechanism. Revisions to the SEM Guidelines now establish target deadlines for key steps in the SEM process, allow for electronic-filed submissions, provide additional time for submitters to file a revised submission, and increase transparency and availability of submissions-related documents. The Council committed itself to implement follow-ups on concluded submissions with information on any new developments and actions taken regarding matters raised in submissions filed before the Secretariat. Also, in order to ensure that the public submission process remains a critical mechanism for facilitating public participation and supporting government transparency, the Secretariat, JPAC and the Council have been working to implement new online tools that will help with the preparation of a submission and assess compliance with the deadlines.

SEM outreach activities in 2012 included the co-organization of a seminar with the National Commission of Human Rights (*Comisión Nacional de Derechos Humanos*) on Human Rights and Access to Environmental Justice. [See §(A)(v) above.] 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.

With respect to the status of submissions, between the 1994 entry into force of the NAAEC and 2012, eighty submissions have been filed with the Secretariat: thirty concerning Canada, forty concerning Mexico, nine concerning the US, and one concerning both Canada and the US. During that time, the Secretariat has dismissed or terminated sixty-eight submissions: Twenty-six submissions did not warrant further consideration, based on Article 14(1) or (2); eighteen were dismissed following the concerned Party's response; and five others have been withdrawn. Twenty-six factual records have been recommended to the Council—the last one in 2008. In two cases, the Council has voted against the Secretariat's recommendation to develop a factual record. The Secretariat has published sixteen factual records.

During 2012, the Secretariat continued its work on the development of three factual records (Coal-fired Power Plants, Environmental Pollution in Hermosillo II, and consolidated submissions Ex Hacienda El Hospital II and Ex Hacienda El Hospital III); submitted the Lake Chapala II final factual record to the Council for its vote on whether to make the final factual record publicly available, and publicly released the Quebec Automobiles final factual record in accordance with Council Resolution 12-09. The Secretariat continued its review to determine whether the following submissions warranted the development of a factual record: Wetlands in Manzanillo, filed in 2009; Iona Wastewater Treatment, filed in 2010 and Sumidero Canyon II, filed in 2011. The Secretariat determined that the submission on PCB Treatment in Grandes-Piles, Quebec, did not meet all the criteria for admissibility contained in Article 14 and terminated the process with respect to this submission. The Secretariat also requested a response from Canada regarding the Protection of Polar Bears submission, and continued its review of the Alberta Tailings Pond revised submission to determine whether it meets the criteria of Article 14(1).

The Secretariat also reviewed two new submissions to determine whether they meet Article 14(1) criteria: the BC Salmon Farms submission, asserting that Canada is allegedly exposing wild salmon to amplified levels of parasites, toxic chemicals and concentrated waste; and, the St. Lawrence River Wind Farms submission, asserting that Canada and Quebec are failing to effectively enforce various environmental laws concerning migratory birds, endangered species, and local municipalities.

## Joint Public Advisory Committee

The Joint Public Advisory Committee (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.

In March, representatives from JPAC, the Secretariat and the Council, met as a task force in Mexico City to follow up discussions on SEM process modernization. The Council's SEM Task Force agreed to provide proposed revisions to JPAC prior to the committee's session in Toronto and supported a 30-day public consultation. The Toronto public meeting—held in April on the topic, "North America's Energy Future: Powering a Low-carbon Economy for 2030 and Beyond" to discuss the current status of renewable energy in the region as well on as its future outlook, including a discussion on challenges for remote communities that focused on Alaska—also hosted the presentation of the proposed revisions to the SEM Guidelines by Council's SEM Task Force.

In April, JPAC members launched a 30-day public consultation on the proposed changes to the SEM Guidelines. Following public consultation, JPAC members submitted Advice to Council 12-01, with recommendations for Council's consideration. JPAC reiterated that the SEM process has the potential to

significantly impact serious, unresolved environmental enforcement practices and that JPAC remained committed to helping ensure that the SEM process reaches its potential, as an effective and independent accountability mechanism. JPAC also included general comments and recommendations regarding proposed changes to the Guidelines.

In July, JPAC met in New Orleans on the margins of the CEC Council Session. Centered on community and ecosystem resiliency, the meeting was structured as a workshop to encourage participation from attendees. Activities included panel discussions, sharing personal stories and experiences, brainstorming ideas, and crafting recommendations for the CEC Council. The output of this facilitated learning, discussion and collaborative effort was a report: “Resilient Future, Voices of North Americans on Policy and Action”.

JPAC members also met in-camera with the Council, during which they provided feedback on the SEM Guidelines, a report on the outcome of their meeting in Toronto, and on their workshop on resilient communities. JPAC also noted that 2014 represented the 20th anniversary of the CEC, and recommended that the collective goal for 2013 should be to look at improving the CEC.

In September, the JPAC Chair sent a letter to Council to follow-up discussions at the Council Session regarding a possible review of the NAAEC and the CEC. JPAC expressed its support in the ongoing review of the SEM Guidelines. JPAC welcomed an opportunity to participate in planning and implementing the 20-year review. In October, JPAC met with Council representatives in Cuernavaca to discuss options for the 20th anniversary of the CEC. The body also recommended more transparency in the selection and rationale of Council-directed grants as well as the Operational Plan for 2013–2014. JPAC discussed opening a dialogue on a process to be more inclusive with the North American community.

In December, JPAC held a meeting on North America’s ecosystems under stress. The meeting addressed pollution emitted into the air and water, and the overconsumption of natural resources. The workshop addressed ecosystems’ and human communities’ vulnerability to a changing environment, as well as vulnerable natural and human systems in North America. Participants learned about new tools for assessing vulnerability, mapping environmental stressors and changes, and developing capacity for improving the health of vulnerable human communities.

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# Country Reports

2012 Country Progress Report

Country Report on Implementation of the Commitments Derived from the NAAEC

PART I: Government of Canada

**Significant Successes**

*Strategic Initiatives*

- In 2012, Canada released the final Recovery Strategy for the Woodland Caribou, Boreal population (boreal caribou). The recovery strategy focuses on achieving self-sustaining local populations in all boreal caribou ranges throughout Canada. The recovery strategy follows engagement with the public, Aboriginal communities, government, industry stakeholders, environmental non-governmental organizations (ENGOS) and academia across Canada.
- The Government of Canada announced a second phase of the Federal Contaminated Sites Action Plan, which earmarked \$1 billion over three years (from 2012 through to 2014) for remediation activities at approximately 1,100 contaminated sites, as well as the assessment of about 1,650 sites. The funding also supports skills development, training, and employment of Canadians, including Aboriginal communities and others who live in northern and rural areas. In total, this phase is expected to create 7,300 jobs in waste management and remediation across Canada.
- Canada's environmental assessment legislation was updated in 2012 to ensure a modern approach that responds to Canada's current economic and environmental context (*Canadian Environmental Assessment Act 2012*). The resulting changes are intended to provide greater clarity for industry by making the review process for major projects more predictable and timely through the establishment of timelines for environmental reviews. In addition, legislative changes will reduce regulatory burden and duplication by enabling greater harmonization with provincial environmental assessment processes. New enforceable conditions in environmental assessment decision statements and capturing the "polluter pays" principle in law will ensure that proponents of resource development and other economic projects comply with required mitigation measures to strengthen environmental protection.

*Funding & Land Conservation Initiatives*

- In its commitment to environmental conservation and protection, including support of non-governmental organizations and communities, the Government of Canada announced the following initiatives in 2012:
  - Canada significantly increased the size of its national parks with the expansion of the Gulf Islands National Park Reserve and the creation of the Nááts'ihch'oh National Park Reserve in the Northwest Territories. Canada also committed over \$140 million over the next ten years to establish Rouge National Urban Park in the Greater Toronto Area.
  - Canada initiated several fresh water initiatives, including an investment of \$16 million in the Great Lakes Nutrient Initiative. The investment will be over four years and will help address the complex

- problems of recurrent toxic and nuisance algae, and near shore water quality and ecosystem health in the Great Lakes, which supports more than 3,500 species of plants and animals. Canada also highlighted 46 projects that have received over \$3 million in funding under the Great Lakes Action Plan. In addition, Canada announced funding to clean up Randle Reef in Hamilton harbour, which contains sediment contaminated with persistent toxic chemicals and heavy metals, with \$46.3 million in funding from the federal government. Finally, the US and Canada signed an amended Great Lakes Water Quality Agreement to facilitate US and Canadian action on threats to Great Lakes water quality. New provisions address aquatic invasive species, habitat degradation and the effects of climate change, and support continued work on existing threats to people's health and the environment in the Great Lakes Basin in order to restore and maintain the chemical, physical and biological integrity of the waters.
- The Government of Canada and Nature Conservancy of Canada joined together to protect over 650 hectares of fragile habitat within New Brunswick, Ontario, and Prince Edward Island. The Government of Canada's \$225-million Natural Areas Conservation Program is an important on-the-ground initiative that works to preserve Canada's environment and conserve its precious natural heritage for present and future generations.

#### *Other Successes*

- Canada invested in a number of key initiatives to support climate change adaptation and mitigation efforts in developing countries. The investment is 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 played a central role in the run-up to, and throughout, the Rio+20 Conference, was elected one of the Conference's Vice-Presidents, and supported the launch of Sustainable Development Goals (SDGs), one of the main outcomes of the Conference. At the conference, Canada shared a number of policy tools and best practices, including the Chemicals Management Plan, our Strategic Environmental Assessment process, the Green Mining Initiative, development of greenhouse gas regulations, augmenting oil sands monitoring, and the establishment of the Federal Sustainable Development Strategy. Canada and the US also released the Clean Energy Dialogue Action Plan II at Rio, which outlines the next phase of activities the two countries will undertake to advance clean energy technologies.
- Canada joined the Global Alliance for Clean Cookstoves as part of Canada's commitment to reducing global emissions from short-lived climate pollutants.
- Canada reinforced its environmental partnership with China after the Annual General Meeting of the China Council for International Cooperation on Environment and Development, resulting in key recommendations to strengthen marine environmental protection, address regional air pollution challenges, and establish a balanced and green regional development strategy across the various regions of China.
- Canada continued to communicate, explain and promote initiatives in 2012. Canadian scientists authored over 700 articles which were published or accepted for publication. The Government of Canada also responded to over 29,000 inquiries from the general public, prepared responses to 4,683 letters, and processed more than 164,000 pages of records for public release.

## State of Environment

- The Government of Canada reported that per capita greenhouse gas (GHG) emissions are at an historic low. Two reports released in 2012, the *National Inventory Report* and *Canada's Emissions Trends Report 2012*, indicate that Canadians emitted an average of 20.3 tonnes of GHG in 2010, the lowest level since tracking began in 1990. The reports also indicated progress in de-linking economic growth in Canada with GHG emissions. Between 2005 and 2010, the economy grew by 6.3 per cent, whereas GHG emissions decreased by 6.5 per cent. Emissions in 2010, compared to 2005 levels, declined in almost all sectors, including oil and gas and electricity generation.
- The Government of Canada and the Government of Alberta took a major step forward in their partnership to improve environmental monitoring in the oil sands region. The *Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring* commits to a scientifically rigorous, comprehensive, integrated, and transparent environmental monitoring program for the region. It outlines the path forward to enhance the monitoring of water, air, land and biodiversity in the oil sands by demonstrating how more sites will be tested for more substances more frequently. The program is designed to provide an improved understanding of the long-term cumulative effects of oil sands development. Data from the new monitoring program will be made publicly available to allow independent scientific assessments and evaluations. This will encourage informed discussions and analysis on the impacts of oil sands development based on high-quality scientific information. Annual progress reports on implementation will be prepared for the first three years, with an external scientific peer review of the program at the end of the third year. Following that, a full external, scientific review of the new program will be conducted every five years.
- Canada joined the US, four other countries, and the United Nations Environment Programme to launch the Climate and Clean Air Coalition to Reduce Short Lived Climate Pollutants, which is aimed at rapidly improving air quality and combatting climate change. The Coalition has grown fast and now includes 26 countries, 23 non-state partners, and the European Commission.
- Canada announced that it was investing \$78.7 million over the following five years to strengthen weather monitoring infrastructure, ensuring Canadians have continued access to world-class weather, water, and climate monitoring data.
- Under the second phase of the Chemicals Management Plan, Canada continues to assess and manage, as required, existing and new substances under the Chemicals Management Plan.

## Legal and Policy Developments

### *GHG Emissions reductions*

- Canada took further actions to improve fuel efficiency and reduce GHG emissions from passenger cars, light trucks and heavy-duty vehicles. As a result of the light-duty vehicle regulations, 2025 vehicles will emit about half as many GHGs and consume up to 50 per cent less fuel than 2008 vehicles. For heavy-duty vehicles, the proposed regulations will improve fuel efficiency and reduce GHG emissions by up to 23 per cent by 2018, compared to vehicles sold in 2010.
- In 2012, the Government of Canada worked with the aviation industry to reduce aviation emissions and increase fuel efficiency, with a view of improving fuel efficiency by an average of at least two per cent per year until 2020.



- Final regulations to GHG emissions from coal-fired electricity generation were announced and Canada became the first country in the world to ban new coal plants that use traditional technology. The regulations apply a stringent performance standard to new electricity generation units and old units that have reached the end of their economic life. In 21 years, the regulations are expected to result in a cumulative reduction in GHG emissions of about 214 megatonnes – the equivalent of removing 2.6 million personal vehicles per year from the road. In addition, the improved air quality that will result from the regulations will have a direct impact on the health of Canadians.

### **Other Regulations**

- In 2012, the Government of Canada introduced changes to the *Fisheries Act* that will ensure that fisheries are productive and sustainable for future generations. The changes enhance compliance and protection and strengthen Canada's ability to enforce the rules by aligning penalties with the tougher provisions of the Canadian Environmental Enforcement Act. All fines collected as a result of convictions under the fisheries protection provisions of the Fisheries Act were directed to the Environmental Damages Fund to support further investments in initiatives to protect Canada's fisheries resources.
- The Government of Canada implemented new Wastewater System Effluent Regulations aimed at reducing the levels of harmful substances deposited to surface water from wastewater systems in Canada.
- Environment Canada issued a number of notices requiring the preparation and implementation of Pollution Prevention Plans for specified substances on the List of Toxic Substances (e.g., a pollution prevention plan for Isoprene was published in June 2012).

### **Other Regulatory Developments**

- In 2012, pursuant to the *Canadian Environmental Protection Act, 1999*, the Government of Canada added a number of substances to its Schedule 1 due to the risk they pose to human health and/or the environment. Proposed risk management approaches for these substances were also developed and Canadian stakeholders were consulted (e.g., the final risk assessment document and the risk management approach document for *perfluorooctanoic acid (PFOA) its salts and precursors* were published in August 2012).
- 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.
- *Health Canada published a Residential Indoor Air Quality Guideline for fine particulate matter and an Air Health Assessment for biodiesel.*
- *Health Canada, working in collaboration with all provinces and territories, finalized new or updated Guidelines for Canadian Drinking Water Quality documents (on protozoa, Escherichia coli, total coliforms, turbidity and heterotrophic plate counts), for use by all provinces and territories as a basis to regulate drinking water quality across the country. The department also finalized the third edition of the Guidelines for Canadian Recreational Water Quality.*

## Government Enforcement

- Environment Canada wildlife enforcement officers conducted a coordinated series of interprovincial and international border inspections in the summer of 2012 to look for evidence of illegal hunting of black bears and other species. The operation took place in 29 locations throughout Canada. More than 700 hunters and 125 fishermen were inspected while travelling between provinces or leaving the country, revealing 79 infractions. The operation was done in conjunction with provincial government departments responsible for wildlife enforcement, Canada Border Services Agency, the United States Fish and Wildlife Service, as well as the United States Customs and Border Protection.
- A number of high-profile actions were taken to address important violations of Canada's environmental laws and regulations:
  - Clark Builders was fined \$285,000 for the release of chlorinated water into the North Saskatchewan River.
  - Shell Canada pleaded guilty to federal charges and was fined \$225,000 for releasing a substance harmful to fish into fish-bearing waters.
  - In addition, over \$610,000 in fines were handed out for infractions under the *Canadian Environmental Protection Act*, the *Wild Animal and Plant and Regulation of International and Interprovincial Trade Act*, the *Ozone-Depleting Substances Regulations*, and the *Federal Halocarbon Regulations*.
  - Environment Canada signed a new agreement with the International Criminal Police Organization (INTERPOL) to assist with capacity building of wildlife law enforcement around the world. Under the agreement, Environment Canada is sharing customized wildlife officer training courses with INTERPOL on the illegal trade in endangered species with a focus on Africa.
- 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.
- In 2012, DFO:
  - Issued 55 warnings under the habitat protection provisions of the Fisheries Act;
  - Laid 9 charges under the habitat protection provisions of the Fisheries Act;
  - Proceeded with 4 alternative measures to prosecution;
  - Issued 23 Inspector's Directions; and
  - Successfully completed 7 convictions under the fisheries habitat protection provisions of the Fisheries Act.

## PART II: PROVINCIAL GOVERNMENTS

### ALBERTA

## **Significant Successes**

- In May 2012, the Government of Alberta brought together Environment and Water and Sustainable Resource Development to create the new ministry, Environment and Sustainable Resource Development

### *Climate Change:*

- Alberta is proud to have developed some of North America's most progressive environmental policies and initiatives, including the first mandated greenhouse gas (GHG) emissions reduction program for all large industry.
- Companies made approximately 7.5 million tonnes (MT) of GHG reductions in 2012, which contributes to a total of 39.9 MT of reductions to date.
- Companies paid approximately \$86 million into the Climate Change and Emissions Management Fund, which will be invested in projects and technology to reduce GHG emissions in Alberta.
- In 2012, the Climate Change Emissions Management Corporation processed six requests for proposals and approved 48 clean technology projects totaling \$182 million of investment.
  - The corporation has achieved an average 4:1 leverage ratio for every dollar it invests.
  - The estimated emissions reduction from these projects is seven million tonnes of carbon dioxide equivalent over 10 years.
- In total, since 2007:
  - Approximately 40 million tons of GHGs have been reduced from business-as-usual.
  - \$398 million has been paid into Alberta's clean energy technology fund – with more than \$217 million of that already invested into more than 53 clean energy projects.

## **State of Environment**

### *Air Quality*

- In 2012, Alberta had 'good' air quality days occurring 97 per cent of the time.
- Alberta released its Clean Air Strategy and Action Plan on October 10, 2012 – the system incorporates the new national Air Quality Management System.
- On October 11, 2012, Minister McQueen endorsed a new Canada-wide Air Quality Management System along with other provincial and territorial ministers under the Canadian Council of Ministers of the Environment. Alberta is helping to inform a collaborative approach with stakeholders to develop national standards and work toward continuous improvement of overall air quality in Canada.

### *FireSmart*

- Wildfire management programs help prevent the spread of plant diseases; assist in protecting Alberta's infrastructure and natural resources; help to ensure a sustainable supply of timber; and work to protect the health of Alberta's watersheds, sensitive soils, and Albertans living in forest communities.
- The FireSmart program, which provides funding for projects designed to lessen the risk of uncontrolled forest fires, is one way ESRD is practicing effective and preventative wildfire management.

- Sixteen grants totaling \$500,000 were made available in 2012-13 through this program.

#### *Bow Habitat Station Trout Pond*

- Bow Habitat Station fosters an awareness and appreciation of Alberta's fish, wildlife, water and aquatic ecosystems.
- In 2012-13, over 19,000 people explored the Discovery Centre and toured the Sam Livingston Fish Hatchery; almost doubling the numbers of visitors from the year prior.
- The Kids Can Catch Trout Pond opened in July 2012 and during the first season over 3,000 people enjoyed catch and release fishing while learning how to support sustainable fisheries.
- Other youth education programs delivered include the Fish in Schools Program, which expanded its enrolment in 2012 to almost 1,800 students provincially.

### **Legal and Policy Developments**

#### *Environmental Monitoring*

- Alberta is transitioning to an enhanced, provincial environmental monitoring system, beginning in the oil sands region.
- An arms-length, world-class agency will lead the enhanced system.
- The system will be:
  - centrally-coordinated;
  - integrated amongst various environmental media (air, water, land, biodiversity);
  - accessible and openly transparent; and
  - under scientific oversight.
- The arms-length agency will be the “voice of authority” on reporting environmental conditions to the public.

#### *Canada-Alberta Joint Oil Sands Monitoring Plan*

- In February 2012, Alberta and Canada announced the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring.
- The plan commits Alberta and Canada to a scientifically rigorous, comprehensive, integrated, and transparent environmental monitoring program for Alberta’s oil sands region.
- The program outlines the path forward to enhance the monitoring of water, air, land and biodiversity in the oil sands, including increased sampling for more substances more frequently.
- The program is designed to provide an improved understanding of the long-term cumulative effects of oil sands development.
- The plan improves the ability to detect changes in the environment and manage the cumulative impacts of development.
- By the time the three-year plan is fully-implemented in 2015:
  - the number of sampling sites will be higher and over a larger area;
  - the number and types of parameters being sampled will increase;
  - the frequency that sampling occurs each year will be significantly increased;
  - the methodologies for monitoring for both air and water will be improved; and
  - an integrated, open data management program will be created.

## **Government Enforcement**

### *Alberta Energy Regulator*

- Bill 2, the Responsible Energy Development Act (REDA), received Royal Assent on December 10, 2012.
- The legislation creates a single, arms-length regulator, called the Alberta Energy Regulator (AER) for upstream energy resource activities involving oil, gas, oil sands and coal.
- The new regulator is a key element to providing a streamlined and more effective process for the sustainable development of Alberta's energy resources while upholding strict environmental standards.
- The AER begins operations in June 2013.

### *Land-use Framework*

- Alberta's first regional land-use plan, the Lower Athabasca Regional Plan (LARP), was approved in September 2012. Alberta's oil sands region is included in the plan, which:
  - sets strong environmental limits;
  - conserves a significant parcel of sensitive lands;
  - provides certainty to industry;
  - diversifies the economy;
  - offers numerous recreational opportunities in the area; and
  - sets firm limits for air, land and water.
- Alberta's second land-use plan, the South Saskatchewan Regional Plan in southern Alberta entered Phase 2 consultations in fall 2012.
  - The draft plan is currently under development and will undergo another round of public consultation in 2013.

## MANITOBA

### **Significant Successes**

- In 2012, Manitoba Conservation and Water Stewardship released "TomorrowNow – Manitoba's Green Plan", an eight-year strategic action plan for all provincial departments, with a goal of making Manitoba one of the most sustainable places to live on Earth. The plan includes over 100 action items, centred on five basic themes:
  - Good for our economy - good for our environment
  - Changing our ways for a changing climate
  - Safeguarding the water, air and land
  - Nurturing our living world
  - Simple personal choices - big results
- Manitoba Conservation and Water Stewardship released "Building the Parks Province: Manitoba's Parks Strategy," a strategic review and public consultation document that outlines changes designed to

strengthen the province's parks system by focusing on key priority areas for investments and actions to 2020. Management plans were completed for twenty provincial parks, including the most visited park in the system - Birds Hill. Capital spending focused on environmental infrastructure including water and wastewater systems, and the "greening" of park facilities. Park visitation exceeded five million visitors in 2012, and campsite reservations increased by almost 5% over 2011.

- In 2012, Manitoba Education announced the launch of a new Grade 12 course called "Global Issues: Citizenship and Sustainability", to promote active democratic citizenship, ecological literacy and ethical decision-making, and to provide young people with tools they need to make informed choices for themselves and the environment. Manitoba Education and Manitoba Hydro also awarded Education for Sustainable Development (ESD) Grants to 16 schools, to promote sustainability in classrooms. Grants recognized the dedication and creativity that Manitoba educators and their students exhibit in the field of education for sustainable development. Projects included in-school compost and recycling programs, development of outdoor classrooms and community gardening projects, and projects that link schools to community such as working with elders, residents of nursing homes, and neighborhood groups.
- Manitoba continued to work with industry groups to expand and enhance provincial Extended Producer Responsibility programs under the *Household Hazardous Material and Prescribed Material Stewardship Regulation* and the *Electrical and Electronic Equipment Stewardship Regulation*. Programs to collect end-of-life electronics, or "e-waste", and other household hazardous waste (HHW) such as paint and fluorescent lighting were approved and began operating in 2012.

### **State of the Environment**

- In 2012, the provincial Office of Drinking Water focused on expanding regulatory oversight of semi-public water systems, including hospitals, schools, daycare facilities and personal care homes; the ongoing monitoring of construction and operation activities associated with the 417 public water systems that comprise the primary drinking water supplies for over 85% of Manitobans; and the implementation of new chemical, physical and microbiological standards for those public water systems. Significant achievements included the analysis of water quality (bacteriological, chemical, and physical parameters) for all 417 public water systems as well as 344 semi-public water systems; the completion of 250 routine and unscheduled on-site inspections of public water systems and 47 inspections of semi-public water systems, and the completion of report cards (annual audits) assessing the performance of all 417 public water systems with regard to meeting the conditions outlined in their operating licenses.
- The development and implementation of Integrated Watershed Management Plans continued in 2012, with the completion of the Willow Creek Integrated Watershed Management Plan by the East Interlake Conservation District. Twenty-three plans have been initiated in Manitoba since 2006, and are being implemented locally through Manitoba's Conservation District programs, which work with local landowners and community groups to undertake erosion control, surface water management, water quality improvement, riparian area management and watershed extension.
- In 2012, Manitoba Conservation and Water Stewardship provided funding for ten projects through the Endangered Species and Biodiversity Fund (ESBF) for projects to inventory and monitor endangered plants and animals or wildlife species of conservation concern, including piping plover, woodland

caribou and others. As a condition of the funding, organizations receiving grants provided the Manitoba Conservation Data Centre with approximately 2,000 place-based observations of plant and animal species of concern, which were added to its database to guide future conservation action for these species.

- In 2012, Manitoba reached its goal of planting six million trees across Manitoba through the successful Trees for Tomorrow program. The program was launched in 2008, with a target of planting five million trees by 2012, and in 2011, the goal was increased to six million trees. Two million tree seedlings were distributed in the final year alone, to enable Manitobans to help reduce greenhouse gases and soil erosion, create wildlife habitat, enhance the beauty of property and provide health benefits for families around the province.

### **Legal and Policy Developments**

- The province and the Manitoba Métis Federation agreed in 2012 to legally recognize Métis Natural Resource Harvesting rights in part of Manitoba. Based on rulings by the Supreme Court of Canada involving aboriginal rights for Métis people, the government of Manitoba is partnering with the Manitoba Métis Federation (MMF) to recognize Métis rights to harvest natural resources for food and domestic use in Manitoba, and to acknowledge the Métis peoples' commitment to conserve and respect the resources that sustain those rights. The agreement provides for the recognition of Métis harvesting rights in mutually agreed-to regions of the province, and relies on the MMF's Métis Laws of the Hunt as the basis for the development of new provincial regulations to govern Métis harvesting.
- Manitoba's protected areas network was expanded by permanently protecting more than 370,000 hectares of land in 2012, including the designation of the Little Grand Rapids First Nation Traditional Use Planning Area and the Pauingassi First Nation Traditional Use Planning Area. These two areas protect boreal forest and associated wetlands, and the cultural identity of the First Nations and their relationship with the land.
- *The Contaminated Sites Remediation Act* was amended in 2012, and is awaiting proclamation. The changes strengthen legislation by requiring the owner or occupier of a site that is contaminated to a level above the environmental quality standards to report it to Manitoba Conservation and Water Stewardship. Under the amended legislation, sites that pose an immediate risk would continue to be designated as contaminated, while sites that could pose a risk would be designated as impacted.
- In 2012, Manitoba listed twenty-seven additional species as Extirpated, Endangered or Threatened under *The Endangered Species Act*. One species was up-listed: the trumpeter swan was previously listed as Extirpated, but was upgraded to Endangered due to the return of a small but recovering breeding population documented in Manitoba since 2002.

### **Government Enforcement**

- Manitoba reported 78 prosecutions under *The Environment Act* and *The Dangerous Goods Transportation and Handling Act*, and related Regulations, for the 2012-13 fiscal year. Fines levied as a result totaled \$56,437.

- Manitoba Conservation and Water Stewardship laid charges against the City of Winnipeg under *The Environment Act* as a result of a plant malfunction at the city's South End Water Pollution Control Centre that released partially treated sewage into the Red River over a seven-week period in 2011. An independent review was completed which included recommendations to ensure this type of incident is not repeated.

## QUÉBEC

### Significant Successes

#### *The 2013–2020 Climate Change Action Plan*

- The 2013–2020 Climate Change Action Plan (CCAP 2020) ([http://www.mddelcc.gouv.qc.ca/communiqués\\_en/2012/c20120603-pacc.htm](http://www.mddelcc.gouv.qc.ca/communiqués_en/2012/c20120603-pacc.htm)), made public in June 2012, along with the accompanying Government Strategy for Climate Change Adaptation ([http://www.mddelcc.gouv.qc.ca/changements/plan\\_action/strategie-adaptation2013-2020-en.pdf](http://www.mddelcc.gouv.qc.ca/changements/plan_action/strategie-adaptation2013-2020-en.pdf)) represent total investments of nearly \$2.7 billion. The CCAP 2020 will be implemented through 30 priority actions, with particular focus on the areas of sustainable mobility, land use, and energy sectors, where Québec can achieve significant GHG emission reductions. With the goal of reducing GHG emissions to 20 percent below 1990 levels by 2020, the CCAP 2020 is the largest investment in the fight against climate change in Québec history.
- The adoption of the Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission (GHG) allowances (<http://www.mddelcc.gouv.qc.ca/changements/carbone/reg-mod-reg-spede-en.pdf>) in December 2012 gives the green light for the carbon market between Québec and California. With this regulatory amendment, Québec has taken an important step in implementing actions under the Western Climate Initiative (WCI) aimed at building a broad North American carbon market, which is a major advance in the fight against climate change.

#### *Sustainable water development*

- The Regulation to amend the Regulation respecting the quality of drinking water takes into account recent scientific and technological advances in this area so that Quebecers have access to high quality drinking water. The improvements to the Regulation respecting the quality of drinking water also put forward certain standards that are stricter than others in force in North America. For more information, see <http://www.mddelcc.gouv.qc.ca/infuseur/communique.asp?no=2046>. (French only)

#### *Act to amend the Environment Quality Act*

- Measures under the *Act to amend the Environment Quality Act in order to reinforce compliance*, which came into effect on 1 February 2012, better equip the Ministry of Sustainable Development, the Environment, Wildlife and Parks (*ministère du Développement durable, de l'Environnement, de la Faune et des Parcs*—MDDEFP) to enforce compliance with the *Environment Quality Act*. These amendments give Québec even more effective methods of intervening in situations that impact the environment. Among these measures are stronger criminal processes, increased ministerial powers,



and the implementation of administrative monetary penalties. For more information, see <http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=5&file=2011C20A.PDF>.

#### *Creation of protected areas*

- The MDDEFP granted \$4.35 million to the Partenaires pour la nature program, which aims to support conservation initiatives by the private sector in order to expand the network of protected areas on private land. Additionally, in December 2012, the Québec government announced that it would move forward with the creation of Parc National Tursujuq ([http://www.mddelcc.gouv.qc.ca/communiqués\\_en/2012/c20121214-Tursujuq.htm](http://www.mddelcc.gouv.qc.ca/communiqués_en/2012/c20121214-Tursujuq.htm)). Created under the *Parks Act* ([http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/P\\_9/P9\\_A.html](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/P_9/P9_A.html)), this new protected area will become the largest provincial park in Québec and the largest park in eastern North America. With an area of over 26,000 square kilometers, the future Parc National Tursujuq will, by itself, triple the area of Québec's park system.

#### *Continued strategic environmental assessment of shale gas*

- In April 2012, the final version of the Implementation Plan for the Strategic Environmental Assessment (SEA) on Shale Gas was published. The goal of the SEA was to document the environmental, social, and economic impacts of shale gas exploration and possible exploitation in the St. Lawrence Lowlands. A preliminary version of the plan was submitted for public consultations and was revised and enriched in light of the received comments. See: [http://www.bape.gouv.qc.ca/sections/mandats/gaz\\_de\\_schiste-enjeux/documents/DB90ang.pdf](http://www.bape.gouv.qc.ca/sections/mandats/gaz_de_schiste-enjeux/documents/DB90ang.pdf)

#### **State of the Environment**

- In 2012, the MDDEFP released 14 new publications documenting the state of the environment (list available) on its own website or those of its agencies and partners. [http://www.mddefp.gouv.qc.ca/publications/rech\\_chrono.asp?methode=chrono](http://www.mddefp.gouv.qc.ca/publications/rech_chrono.asp?methode=chrono)
- Among the most recent documents in 2012, Québec produced an overview of air quality in Québec and its relation to health for the years 1975–2009, ([http://www.inspq.qc.ca/pdf/publications/1432\\_BilanQualiteAirOclienSante1975-2009.pdf](http://www.inspq.qc.ca/pdf/publications/1432_BilanQualiteAirOclienSante1975-2009.pdf)), a progress report on Québec's implementation of its Sustainable Development Strategy 2008–2013 (year 2010–2011) ([http://www.mddep.gouv.qc.ca/developpement/strategie\\_gouvernementale/rapport/2010-2011.pdf](http://www.mddep.gouv.qc.ca/developpement/strategie_gouvernementale/rapport/2010-2011.pdf)), and a report on temperature trends from 1961 to 2010.
- In the area of water, the MDDEFP website also published an overview of drinking water quality in Québec from 2005–2009 (<http://www.mddefp.gouv.qc.ca/eau/potable/bilans/bilan2005-2009.pdf>), a portrait of the quality of Québec's surface waters from 1999–2008 (<http://www.mddep.gouv.qc.ca/eau/portrait/eaux-surface1999-2008/>), and a management overview of the bodies of water affected by blue-green algae blooms in 2011 ([http://www.mddelcc.gouv.qc.ca/eau/algues-bv/bilan/Bilan\\_ABV\\_2007-2012.pdf](http://www.mddelcc.gouv.qc.ca/eau/algues-bv/bilan/Bilan_ABV_2007-2012.pdf)).
- The MDDEFP website also issued 36 environmental analyses in 2012 (<http://www.mddefp.gouv.qc.ca/evaluations/lisproan.htm>).

## Legal and Policy Developments

### Laws passed:

- *An Act Respecting Compensation Measures for the Carrying out of Projects Affecting Wetlands or Bodies of Water* (M-11.4)  
([http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=//M\\_11\\_4/M11\\_4\\_A.htm](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=//M_11_4/M11_4_A.htm))

### Regulations passed:

- *Regulation to amend the Regulation respecting the quality of drinking water* (Q-2, r. 40)
- *Regulation to amend the Agricultural Operations Regulation* (Q-2, r. 26)  
(<http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=1986.PDF>)
- *Regulation to amend the Regulation respecting a cap-and-trade system for greenhouse gas emission allowances* (Q-2, r. 46.1)  
([http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q\\_2/Q2\\_R46\\_1\\_A.htm](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/Q_2/Q2_R46_1_A.htm))
- *Regulation respecting the delegation of management of certain parts of a cap-and-trade system for greenhouse gas emission allowances* (Q-2, a. 46.13, 2nd para.)  
([http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=2012A/23\\_90.PDF](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=2012A/23_90.PDF))
- *Regulation to amend the Regulation respecting mandatory reporting of certain emissions of contaminants into the atmosphere* (Q-2, a. 2.2, 46.1 and 46.2)  
([http://www.mddelcc.gouv.qc.ca/air/declar\\_contaminants/reglement-en.pdf](http://www.mddelcc.gouv.qc.ca/air/declar_contaminants/reglement-en.pdf))
- *Regulation respecting aquaculture and the sale of fish* (C-61.1, r.7)  
([http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/C\\_61\\_1/C61\\_1R7\\_A.HTM](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/C_61_1/C61_1R7_A.HTM))

### Other texts:

- *Ministerial order* concerning the establishment of a list of threatened or vulnerable plant species likely to be so designated  
(<http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=3626.PDF>)
- *Ministerial order* concerning the extension of the setting aside of three areas as proposed aquatic reserves and twenty-nine areas as proposed biodiversity reserves  
(<http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=1&file=1950.PDF>)
- *Ministerial order* concerning the extension of the setting aside of land for three proposed ecological reserves  
(<http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=13&file=1236-A.PDF>)

## Government Enforcement

- The MDDEFP had 281 inspectors in 2012.
- The MDDEFP filed 106 reports of infractions with the Director of criminal prosecution of Québec.
- MDDEFP inspectors and investigators carried out 16,338 inspections and conducted 249 investigations.
- The MDDEFP published, on its website, 54 press releases related to criminal judgments of over \$2000 for infractions committed under environmental laws and regulations ([http://www.mddep.gouv.qc.ca/Infuseur/mois\\_condamnations.asp](http://www.mddep.gouv.qc.ca/Infuseur/mois_condamnations.asp)).
- 4,952 authorizations were issued under the *Environment Quality Act* ([http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/O\\_2/Q2\\_A.htm](http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=2&file=/O_2/Q2_A.htm)).
- In 2012, 68 establishments held depollution attestations, 48 for the first order and 20 for the second order.
- Two attestations were issued in 2012, one for a mine and another for a pelletization plant.
- 7,297 notifications of default (non-compliance notifications and warning letters) were sent.
- MDDEFP investigators carried out 51 entry authorizations or search warrants.
- 10 advance notice of orders and 14 orders were issued.
- 136 people were found guilty of infractions following criminal judgments, for a total of \$397,400 in fines.

## Mexico Progress Report, 2012

## Country Report on Implementation of the Commitments Derived from the NAAEC

**Introduction**

The information contained in this section of the *2012 Annual Report* covers the period from 1 September 2011 to 31 August 2012, and is based on the corresponding annual report by the Secretariat of the Environment and Natural Resources (*Secretaría de Medio Ambiente y Recursos Naturales*—Semarnat). Without seeking to be exhaustive, the objective is to highlight some of the activities and progress made with respect to environmental conservation and the sustainable use of ecosystems in Mexico. The information includes activities carried out by Semarnat's autonomous and decentralized agencies: National Water Commission (*Comisión Nacional del Agua*—Conagua), National Protected Natural Area Commission (*Comisión Nacional de Áreas Naturales Protegidas*—Conanp), National Commission for the Knowledge and Use of Biodiversity (*Comisión Nacional para el Conocimiento y Uso de la Biodiversidad*—Conabio), National Forestry Commission (*Comisión Nacional Forestal*—Conafor), Mexican Water Technology Institute (*Instituto Mexicano de Tecnología del Agua*—IMTA), National Institute of Ecology (*Instituto Nacional de Ecología*—INE), and the Office of the Federal Attorney for Environmental Protection (*Procuraduría Federal de Protección al Ambiente*—Profepa).

**Significant Successes**

- With regard to Protected Natural Areas (*Áreas Naturales Protegidas*—ANPs), there was a total of 174 ANPs in Mexico as of July 2012, corresponding to a land area of over 25.3 million hectares, equivalent to 12.9% of national territory. Between January and July 2012, 25 management programs were developed for the same number of ANPs, which together cover a land area of 2.9 million hectares (11.42% of the total land area protected by decree).
- In 2012 the Sustainable Development Conservation Program (*Programa de Conservación para el Desarrollo Sostenible*—Procodes) had an authorized budget of 210 million pesos to be used in 208 priority conservation regions, of which 145 were Protected Natural Areas (*Áreas Naturales Protegidas*—ANPs). The environmental contingency resources used by Procodes supported the establishment of 41 community forest fire prevention corps in 34 priority conservation regions, of which 27 were ANPs. These efforts benefited a total of 420 persons in 85 municipalities located in 19 Mexican states.
- During the Species Conservation Action Programs (*Programas de Acción para la Conservación de Especies*—PACE) carried out between 2006 and 2012, 27 PACE were implemented for conserving the following species: vaquita, Mexican wolf, golden eagle, jaguar, leatherback sea turtle, loggerhead sea turtle, Kemp's ridley turtle, hawksbill sea turtle, olive ridley sea turtle, Pacific black sea turtle, pronghorn, bison, horned guan, yellow-headed parrot, yellow-naped parrot, California condor, humpback whale, manatee, coral, black bear, thick-billed parrot, scarlet macaw, black sapote, military macaw, blue whale, spider monkey, saraguato monkey, neotropical birds of prey, and tapir.

- Between 1 September 2011 and 31 August 2012, 798 wildlife conservation management units (*Unidades de Manejo para la Conservación de la Vida Silvestre—UMA*) were incorporated into the UMA system (739 open-management units and 59 intensive-management units), with a total land area of de 1,561,748 hectares.
- With regard to ozone layer protection as specified in the Montreal Protocol and within the framework of the National Plan for Eliminating Chlorofluorocarbons (*Plan Nacional de Eliminación de Clorofluorocarbonos*), the following activities were carried out: training was provided to 7,800 refrigeration technicians (of whom 2,100 received gas recovery equipment at no cost); 230 refrigerant gas recovery systems were donated to the most outstanding technicians, between September 2011 and August 2012; and 48.2 metric tons of fluorinated refrigerants (hydrochlorofluorocarbons and hydrofluorocarbons) were received at fourteen refrigerant recycling centers operating in Mexico.
- During 2011 Air Quality Management Programs (*Programas de Gestión de la Calidad del Aire—Proaires*) went into effect in Mexicali, Jalisco and the Valle de México metropolitan area. Thus, at the end of the year, a total of twelve programs were operating.
- During the period from January to June 2012, Profepa conducted 1,184 inspections, 242 operations and 1,041 oversight actions, resulting in the precautionary seizure of 29,042 specimens of wild flora and fauna and 47,359 wildlife products. In addition, 68 persons were sent before the Federal Public Ministry due to alleged environmental criminal acts.
- At the end of 2011, a total of 6,445 inspections had been conducted, with 5,080 (78.82%) conducted in micro and small businesses, and the remaining 1,365 (21.18%) in medium and large-sized companies. Of all the establishments inspected during the year, 2,630 (40.95%) were found to be in compliance with applicable standards, while minor irregularities were found in 3,718 (57.54%), and serious irregularities in 97 establishments (1.51%), resulting in 24 partial shutdowns and 73 full closures. A total of 5,406 administrative proceedings were conducted, and fines were levied for a total of 72.69 million pesos. From January to August 2012, a total of 4,212 inspections were conducted in establishments with a high risk of contamination, corresponding to 3,334 (79%) micro and small businesses, and 916 (21%) medium and large-sized companies. Of all the installations inspected during 2012, 39% were found to be in compliance with applicable standards, while minor irregularities were found in 59%, and serious irregularities in 2%, resulting in 28 partial shutdowns and 38 full closures.
- As a result of proceedings initiated due to irregularities detected during the period from January to August 2012, fines totaling 63.76 million pesos were levied.
- At the end of 2011, inspections had been conducted in 652 companies (12% of registered establishments) identified as sources of air pollution emissions, and 733 inspection visits had been conducted to verify the controlled release of combustion gases, CO<sub>x</sub> (carbon-based oxides), SO<sub>x</sub> (sulfur oxides) and NO<sub>x</sub> (nitrogen oxides), as well as suspended particles. During the period from January to August 2012, a total of 497 inspection visits were conducted to verify the controlled release of these pollutants.
- During 2011, Profepa inspection offices reviewed 14,247 transboundary movements of hazardous wastes to verify compliance with non-tariff restrictions. Of the reviews conducted, 10,525 corresponded to import authorizations, 319 to export authorizations, and 3,403 to notices for returning hazardous wastes generated by companies that temporarily imported components or merchandise, bringing in revenues of 6.31 million pesos. During the period from January to August 2012, the

number of reviews of this type of transboundary movements totaled 9,160, corresponding to 1,722 returns notices, 235 exports and 7,203 imports, bringing in revenues of 4.6 million pesos.

- During 2011 authorities responded to a total of 426 environmental emergencies; 275 were caused by spills of hydrocarbons or other chemicals, 50 by explosions, 63 by leaks, 36 by facility fires, and two by other causes. During the period from January to August 2012, authorities responded to a total of 408 environmental emergencies; 277 were caused by spills of hydrocarbons or other chemicals, 43 by explosions, 51 by leaks, 33 by facility fires, and four by other causes.
- From January to June 2012 Mexico's installed capacity for hazardous waste management was increased by 230,630 metric tons in eight authorized plants. As well, 1,316 industrial establishments received authorization, with a cumulative installed capacity of 17.875 million metric tons of hazardous wastes.
- In order to define viable solutions from technical, economic, social, political and environmental perspectives for the medium and long term, IMTA implemented a regional planning process for promoting water sustainability in Mexico's thirteen hydrological-administrative regions.
- IMTA implemented a computerized system for the National Information System on Water Quantity, Quality, Uses and Conservation (*Sistema Nacional de Información sobre la Cantidad, Calidad, Usos y Conservación del Agua*). It is organized according to the three (social, economic and environmental) areas of sustainable development, with defined systems for each area.
- IMTA participated with Semarnat in implementing applicable standards for all establishments that release pollutants into the air and discharge wastewater into receiving water bodies. Included are establishments in the following industries: chemical, oil and petrochemical, paint and dye, automotive, cellulose and paper, metallurgical, glass, electricity generation, asbestos, cement and lime, including companies that generate hazardous wastes.

### **State of the Environment**

- Mexico's National Emissions Inventory (*Inventario Nacional de Emisiones—INEM*) was published for 2005 and 2007, presenting the amounts of criteria pollutants and of some greenhouse gases released into the atmosphere during those years. As of June 2012, the 2008 Inventory had been 90% compiled and completed.
- With the aim of strengthening the implementation of the *Registro de Emisiones y Transferencia de Contaminantes* (RETC—Mexico's pollutant release and transfer register) in Mexican states, four regional workshops were held in Oaxaca, Campeche, Zacatecas and Mexico City (the Federal District). As a result, the RETC was implemented in Yucatán and Quintana Roo. During the second half of 2012, RETC data 2011 were published.
- In 2012 the Guide for Developing Electronic Waste Management Plans in Mexico (*Guía para la Elaboración de Planes de Manejo de Residuos Electrónicos en México*) was published in order to provide input to the process of complying with regulations on wastes requiring special handling, and in this way, promote the importance of such plans.
- Within the framework of the National Environmental Monitoring and Assessment Program (*Programa Nacional de Monitoreo y Evaluación Ambiental—Proname*), two additional sites were monitored in 2012 for persistent, bioaccumulative and toxic substances in environmental and biological matrices in Mexican ecosystems, specifically the Mapimí Biosphere Reserve in Durango (an ANP) and Salamanca, Guanajuato (an industrial site). Monitoring thus occurred in a total of seven

sites, bringing Mexico into compliance with its commitments through the Stockholm Convention and with the Commission for Environmental Cooperation (CEC).

- The second operating stage of the Mexican Dioxin and Furan in Air Monitoring Network (*Red Mexicana de Monitoreo de Dioxinas y Furanos en Aire Ambiente*—RMMDFA) continued at two sentinel sites, one for in-depth monitoring and the other, semi-urban. Four samplings were obtained and sent for analysis at the environmental chemistry laboratory of the US Environmental Protection Agency.
- Mexico connected its first pilot network—corresponding to the Monitoring Network of the Monterrey Metropolitan Area (*Red de Monitoreo del Área Metropolitana de Monterrey*)—to the AIRNow platform. Also, a second training workshop was provided to INE personnel on the validation of AIRNow air quality and meteorological data in the computerized infrastructure acquired specifically by INE for this purpose.

### **Changes in Level of Protection**

- Mexico participated in the work carried out by the Environment Policy Committee (EPOC) of the Organization for Economic Cooperation and Development (OECD), and in the meetings of its subsidiary bodies, primarily in the areas of climate change, water, waste management, and environment information instruments. Especially worth mentioning is the development of Mexico's third Environmental Performance Evaluation, which was initiated in June 2011 and completed in June 2012, as part of the work carried out by EPOC's working group on environmental performance. This evaluation includes a review of achievements and areas of opportunity, and a series of recommendations on climate change, biodiversity, forests and green growth.
- Draft amendment to Mexican Official Standard PROY-NOM-144-SEMARNAT-2004, published on 18 October 2011 in the Federal Official Gazette (*Diario Oficial de la Federación*—DOF). The purpose of this standard is to establish phytosanitary measures for wood packaging material used in international trade of goods and merchandise, as well as the corresponding technical specifications and the use of an internationally recognized label to accredit the application of these phytosanitary measures. It also establishes guidelines for visual verification of the wood packaging material used for introducing goods and merchandise at the country's points of entry, with the aim of reducing the risk of pests entering the country.
- Draft amendment to Mexican Official Standard PROY-NOM-016-SEMARNAT-2003, published 17 May 2012 in the DOF, for specifying the sanitary regulations for the importation of green sawn timber. The draft amendment is a result of the interception of quarantine pests in shipments of green sawn timber during the period from 2006 to 2012. This made it necessary to update the list of quarantine pests and reinforce some of the technical specifications for applying phytosanitary treatments of imported green sawn timber, as well as procedures for verifying compliance with the standard, with the aim of reducing the risks of introducing and spreading significant quarantine pests in the country. The draft amendment is also intended to increase the level of phytosanitary security in imported sawn timber and at the same time benefit individuals by facilitating NOM application and verification in order to assure compliance.
- On 27 June 2012 the full National Advisory Committee for Environmental and Natural Resources Standardization (*Comité Consultivo Nacional de Normalización de Medio Ambiente y Recursos Naturales*—Comarnat) approved the publication of the Draft Mexican Official Standard PROY-NOM-

005-SEMARNAT-2012, which establishes criteria for the sustainable use of non-wood forest resources in forest ecosystems, temperate-cold forests, rainforests and arid and semi-arid zones, with technical specifications. This draft standard will soon be published in the DOF, and is aimed at systematizing and clarifying (in a single standard) the contents of eleven Official Mexican Standards currently in effect in the area of non-wood forest resources. Ten of the eleven standards are based on the Forestry Law of 1992.

- On 19 December 2012 an agreement was published to establish the classification and codification of goods, the importation and exportation of which are subject to Semarnat regulations. The purpose is for Mexico to implement an efficient system for controlling exports of chemical weapon precursors, dual-use chemicals and related computerized systems and technology, as well as dual-use biological equipment and biological agents. These measures are aimed at preventing the proliferation of chemical and biological weapons and weapons of mass destruction, and fulfilling international commitments and responsibilities in the areas of disarmament, weapons control, and non-proliferation of chemical and biological weapons. It was necessary to update the system of non-tariff regulations applicable to the transboundary movements of substances contained in the lists specified by the Australia Group, the Wassenaar Agreement, and the Federal Law for the Control of Chemicals Susceptible to Diversion for Chemical Weapons Manufacture (*Ley Federal para el Control de Sustancias Químicas Susceptibles de Desvío para la Fabricación de Armas Químicas*), and in this way, comply with Mexico's international commitments.
- In February 2012 an amendment to Article 4 of Mexico's National Constitution went into effect, establishing the right to a healthy environment as well as the responsibility generated by environmental deterioration and damage. It also establishes a Constitutional right to water access, availability and sanitation, for personal and household use, and in a sufficient, healthy, acceptable and affordable manner.

### **Government Enforcement**

- During the third year since the implementation of the wildlife conservation and sustainable use subsidy, through the UMAs and wildlife management lands and facilities in rural areas, support was provided to 342 projects through 211,524,722.50 pesos in financial assistance. The management and sustainable use of species and groups of species such as palms, orchids, reptiles, quails, songbirds, and ornamental and aquatic birds, among others, provided jobs for a total of 41,600 persons (24,391 men and 17,209 women).
- From 2007 to August of 2012, in collaboration with state and municipal-level governments, the development of 22 ecological ordinance programs was completed in priority regions, national waters and coastal states and municipalities, and 14 of these programs are now under government decree.
- In 2011 authorities conducted 7,360 inspections of transboundary movements of wildlife specimens, products and byproducts regulated by Semarnat. From January to August 2012, a total of 4,785 inspections of this type were conducted. The reviews of verification records during 2011 led to revenues of 3.25 million pesos, and the same type of reviews conducted from January to August 2012 led to revenues of 2.35 million pesos.
- With regard to inspections of transboundary movements for the importation of forestry products and byproducts, 70,227 inspections had been conducted and 66 technical reports issued by the end of 2011, with the detection of pests warranting quarantine in 19 samples. From January to August 2012,



authorities conducted 51,482 inspections and 38 technical reports were issued, with the detection of pests in 17 samples. These inspections led to revenues of 33.41 million pesos in 2011, and 27.84 million pesos up to August 2012.

- From January to June 2012, Profepa received 4,011 environmental complaints, or 2.4% more than those received during the same period in 2011, and 100% of them were classified as legal in nature. Of these complaints, 2,106 (52.51%) were concluded in accordance with provisions in Article 199 of the General Ecological Balance and Environmental Protection Act (*Ley General del Equilibrio Ecológico y la Protección al Ambiente*), above the goal of 45% programmed for the first half of the year.

### **Future Plans in Implementing the Agreement**

The objectives established for the end of 2012 included:

- Assure that Community Oversight Committees (Comités de Vigilancia Comunitaria) are operating in 22% of ANPs protected by federal decree and the surrounding areas (Conanp).
- Expand biological monitoring to include 40 species, through the Biological Monitoring in ANPs Program (Programa de Monitoreo Biológico en ANP) (Promobi 2012) (Conanp).
- Carry out 30 Species Conservation Action Programs (Programas de Acción para la Conservación de Especies Prioritarias—PACE), with the objective of prioritizing the conservation of species and their habitats (Conanp).
- Incorporate an additional million hectares into the system for wildlife conservation management units (UMAs), with 800,000 hectares located in the central and southern regions of the country (Semarnat).
- Assist in the incorporation or reincorporation of 750,000 additional hectares of natural ecosystems into technical forestry management (Conafor):
- Assist 1,029 forestry communities and *ejidos*, preferably indigenous, in the consolidation of community forestry development projects (Conafor).
- Incorporate 460,000 additional hectares of forest ecosystems into for-pay environmental services (Conafor).
- Reforest 369,576 hectares (Conafor).
- Strengthen the capacity of 300 rural and indigenous localities for managing natural resources in accordance with sustainability criteria in biological corridors in southeastern Mexico (Conabio).
- Increase the national percentage of potable water access to 92% (96.3% in urban localities, and 78% in rural localities), and increase the national percentage of access to sewage systems to 90.5% (96.7% in urban localities, and 70.0% in rural localities) (Conagua).
- Develop and publish two additional Proaires from among the following options: 1) Tijuana-Rosarito municipalities, 2) Villahermosa municipality, 3) Querétaro municipality, and Puebla metropolitan area (Semarnat).
- Develop four ecological ordinances in priority regions, national waters and coastal states and municipalities (Semarnat):
- Conclude the development of the Regional Ecological Ordinance Program for the Valle de México Basin (*Programa de Ordenamiento Ecológico Regional de la Cuenca del Valle de México*).
- Conclude the development of the Northern Pacific Regional and Marine Ecological Ordinance Program (*Programa de Ordenamiento Ecológico Marino y Regional Pacífico Norte*).

- Develop two local ecological ordinances.
- Conduct 4,985 industry inspections and verifications of sources under federal jurisdiction with significant potential for air pollution emissions, hazardous wastes, and environmental impact and risk (Profepa).

For more information, please consult the following web links:<sup>1</sup>

- [http://web2.semarnat.gob.mx/programas/seguimiento/Documents/informes/VI\\_INFORME\\_SEMARNAT\\_2012.pdf](http://web2.semarnat.gob.mx/programas/seguimiento/Documents/informes/VI_INFORME_SEMARNAT_2012.pdf)
- [www.profepa.gob.mx/innovaportal/file/5322/1/iap\\_2012\\_260813.pdf](http://www.profepa.gob.mx/innovaportal/file/5322/1/iap_2012_260813.pdf)
- <http://web2.semarnat.gob.mx/programas/seguimiento/Paginas/informes-2006-2012.aspx>
- [http://web2.semarnat.gob.mx/transparencia/Documents/IRC\\_SEMARNAT\\_1%20%202%20WEB.pdf](http://web2.semarnat.gob.mx/transparencia/Documents/IRC_SEMARNAT_1%20%202%20WEB.pdf)

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<sup>1</sup> Any variation between the figures in this document and the information contained in the documents that can be accessed through the web links provided corresponds to updates added when this report was prepared.

United States Progress Report, 2012

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 2012 Annual Report is intended to highlight certain activities and developments related to environmental protection for the calendar year 2012. 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**

- Louisiana Generating, an electric generating company owned by NRG Energy, Inc., agreed to a settlement at its Big Cajun II coal-fired power plant in New Roads, Louisiana, which will result in the elimination of over 27,300 tons of harmful emissions per year. The settlement will require Louisiana Generating to spend approximately \$250 million to reduce air pollution and also requires the company to pay a civil fine of \$3.5 million and spend \$10.5 million on environmental mitigation projects. Louisiana Generating will achieve these emissions reductions through a combination of new pollution controls, natural gas conversion, and annual emission caps at all three units at the Big Cajun II plant. Emissions of sulfur dioxide (SO<sub>2</sub>) will be reduced by approximately 20,000 tons and nitrogen oxides (NO<sub>x</sub>) by about 3,300 tons. Louisiana Generating also has agreed to further air pollution reductions by 2025, which will reduce SO<sub>2</sub> by at least an additional 4,000 tons each year.
- The Migratory Bird Conservation Commission has approved the investment of nearly \$11 million in revenue from the Migratory Bird Conservation Fund to add an estimated 10,640 acres of wetlands to seven units of the National Wildlife Refuge System. The commission also approved \$18.4 million in federal funding to conserve more than 95,000 acres of wetlands and associated habitat in the United States under the North American Wetlands Conservation Act.
- As part of the Obama Administration's "all of the above" approach to American energy, the Department of the Interior approved a 350-megawatt solar energy project on tribal trust land of the Moapa Band of Paiute Indians (Tribe) in Clark County, Nevada. The project marks a milestone as the first utility-scale solar project approved for development on tribal lands, and is one of the many steps the administration has taken to help strengthen tribal communities. The project is also the 31st utility-scale renewable energy project that Interior has approved since 2009 as part of a Department-wide effort to advance smart development of renewable energy on our nation's public lands. Prior to 2009, there were no solar energy projects permitted on public lands; today's approval brings the total to 17 solar projects, 6 wind farms, and 8 geothermal plants. If built by the companies, the renewable energy

projects approved by this administration will provide approximately 7,200 megawatts of power to communities across the West, or enough to power nearly 2.5 million homes.

- For the first time, comprehensive greenhouse gas (GHG) data reported directly from large facilities and suppliers across the country are now easily accessible to the public through EPA's GHG Reporting Program. The 2010 GHG data include public information from facilities in nine industry groups that directly emit large quantities of GHGs, as well as suppliers of certain fossil fuels. EPA's online data publication tool allows users to view and sort GHG data for calendar year 2010 from over 6,700 facilities in a variety of ways—including by facility, location, industrial sector, and the type of GHG emitted. This information can be used by communities to identify nearby sources of GHGs, help businesses compare and track emissions, and provide information to state and local governments. GHG data for direct emitters show that in 2010:
  - Power plants were the largest stationary sources of direct emissions with 2,324 million metric tons of carbon dioxide equivalent (mmtCO<sub>2</sub>e), followed by petroleum refineries with emissions of 183 mmtCO<sub>2</sub>e.
  - CO<sub>2</sub> accounted for the largest share of direct GHG emissions with 95 percent, followed by methane with 4 percent, and nitrous oxide and fluorinated gases accounting for the remaining 1 percent.
  - 100 facilities each reported emissions over 7 mmtCO<sub>2</sub>e, including 96 power plants, two iron and steel mills and two refineries.
- BP North America Inc. has agreed to pay an \$8 million penalty and invest more than \$400 million to install state-of-the-art pollution controls and cut emissions from BP's petroleum refinery in Whiting, Ind. When fully implemented, the agreement is expected to reduce harmful air pollution that can cause respiratory problems such as asthma and are significant contributors to acid rain, smog and haze, by more than 4,000 tons per year. The settlement will lead to the installation of innovative pollution controls on the largest sources of emissions at the Whiting refinery, including extensive new controls on the refinery's flaring devices. Flaring devices are used to burn off waste gases. The more waste gases sent to a flare, and the less efficient the flare is when burning those gases, the more pollution that will occur. Under the settlement, BP will install new equipment that will limit the amount of waste gas sent to flaring devices in the first place, as well as implement innovative, cutting-edge controls to ensure proper combustion efficiency for any gases that are burned in a flaring device. These requirements are part of a national effort by the US Environmental Protection Agency (EPA) to reduce emissions from flares at refineries, petrochemical and chemical plants.
- EPA Administrator Lisa P. Jackson and Canada's Minister of the Environment Peter Kent signed the amended Great Lakes Water Quality Agreement at a formal ceremony in Washington, DC. First signed in 1972 and last amended in 1987, the Great Lakes Water Quality Agreement is a model of binational cooperation to protect the world's largest surface freshwater system and the health of the surrounding communities. The revised agreement will facilitate United States and Canadian action on threats to Great Lakes water quality and includes strengthened measures to anticipate and prevent ecological harm. New provisions address aquatic invasive species, habitat degradation and the effects of climate change, and support continued work on existing threats to people's health and the environment in the Great Lakes Basin such as harmful algae, toxic chemicals, and discharges from vessels.
- Four companies have agreed to pay \$25 million for the cleanup of the Rio Tinto Mine, an abandoned copper mine in Elko County, Nevada. The state of Nevada will oversee the cleanup with input from the

US EPA and the Shoshone Paiute Tribes of Duck Valley. The four corporations financing the cleanup, Atlantic Richfield Company, DuPont and Company, The Cleveland-Cliffs Iron Company and Teck American Inc. are corporate successors to companies that operated the mine from 1932 to 1976. A fifth entity, Mountain City Remediation, has been created by the four defendants to conduct the cleanup. Under the terms of the agreement, the defendants agreed to remove mine tailings from Mill Creek, improve the creek to support the redband trout, and improve water quality in Mill Creek and the East Fork Owyhee River. The defendants will also pay for the Shoshone Paiute Tribes to monitor the cleanup. The companies are required to provide robust performance guarantees including payments to a trust account they will use to implement the cleanup.

- The EPA announced nearly \$11 million in grants to eight universities through EPA's Science to Achieve Results (STAR) program. These grants will help the universities develop fast and effective methods to test chemicals' toxicity to people and the environment. These innovative testing methods will be used to predict a chemical's potential to interact with biological processes that could lead to reproductive and developmental problems, and disruption of the endocrine system. The grantees will focus on developing methods and models to predict how exposure to environmental and synthetic (man-made) chemicals and chemical mixtures may harm the public. Some synthetic chemicals are known endocrine disruptors, which interfere with or even mimic natural hormones and cause damage to the development and function of vital organs, particularly in young children and developing fetuses. There are currently thousands of chemicals in use and hundreds more introduced every year.

### State of the Environment

- The Arctic region continued to break records in 2012—among them the loss of summer sea ice, spring snow cover, and melting of the Greenland ice sheet. This was true even though air temperatures in the Arctic were unremarkable relative to the last decade, according to a new report released today.
  - **Snow cover:** A new record low snow extent for the Northern Hemisphere was set in June 2012, and a new record low was reached in May over Eurasia.
  - **Sea ice:** Minimum Arctic sea ice extent in September 2012 set a new all-time record low since 1979, as measured by satellite.
  - **Greenland ice sheet:** There was a rare, nearly ice sheet-wide melt event on the Greenland ice sheet in July, covering about 97 percent of the ice sheet on a single day.
  - **Vegetation:** The tundra is getting greener and there's more above-ground growth. During the period of 2003–2010, the length of the growing season increased through much of the Arctic.
  - **Wildlife & food chain:** In northernmost Europe, the Arctic fox is close to extinction and vulnerable to the encroaching Red fox. Additionally, recent measurements of massive phytoplankton blooms below the summer sea ice suggest that earlier estimates of biological production at the bottom of the marine food chain may have been ten times lower than was occurring.
  - **Ocean:** Sea surface temperatures in summer continue to be warmer than the long-term average at the growing ice-free margins, while upper ocean temperature and salinity show significant inter-annual variability with no clear trends.
  - **Weather:** Most of the notable weather activity in fall and winter occurred in the sub-Arctic due to a strong positive North Atlantic Oscillation, expressed as the atmospheric

pressure difference between weather stations in the Azores and Iceland. There were three extreme weather events including an unusual cold spell in late January to early February 2012 across Eurasia, and two record storms characterized by very low central pressures and strong winds near western Alaska in November 2011 and north of Alaska in August 2012.

- Earth's oceans, forests and other ecosystems continue to soak up about half the carbon dioxide emitted into the atmosphere by human activities, even as those emissions have increased, according to a study by University of Colorado and National Oceanic and Atmospheric Administration scientists that was published in the journal, *Nature*.<sup>2</sup> The scientists analyzed 50 years of global carbon dioxide (CO<sub>2</sub>) measurements and found that the processes by which the planet's oceans and ecosystems absorb the greenhouse gas are not yet at capacity. Carbon dioxide is emitted into the atmosphere mainly by fossil fuel combustion but also by forest fires and some natural processes. The gas can also be pulled out of the atmosphere into the tissues of growing plants or absorbed by the waters of Earth's oceans. A series of recent studies suggested that natural sinks of carbon dioxide might no longer be keeping up with the increasing rate of emissions. If that were to happen, it would cause a faster-than-expected rise in atmospheric carbon dioxide and projected climate change impacts.
- The Environmental Protection Agency launched a new app and website to help people find information on the condition of thousands of lakes, rivers and streams across the United States from their smart phone, tablet or desktop computer. The How's My Waterway app and website uses GPS technology or a user-entered zip code or city name to provide information about the quality of local water bodies.<sup>3</sup> The release of the app and website helps mark the 40th anniversary of the Clean Water Act giving citizens a special role in caring for the nation's water resources.
- Scientists have found a large reduction in the amount of the coldest deep ocean water, called Antarctic Bottom Water, all around the Southern Ocean, using data collected from 1980 to 2011.<sup>4</sup> These findings will likely stimulate new research on the causes of this change. Two oceanographers from National Oceanic and Atmospheric Administration (NOAA) and the University of Washington find that Antarctic Bottom Water has been disappearing at an average rate of about eight million metric tons per second over the past few decades, equivalent to about fifty times the average flow of the Mississippi River or about a quarter of the flow of the Gulf Stream through the Florida Straits. The world's deep ocean currents play a critical role in transporting heat and carbon around the planet, thus regulating our climate.
- The Obama Administration released a [report](#) outlining the historic Federal investments and progress made in Everglades restoration and announced \$80 million in additional funding to support farmers and ranchers who voluntarily conserve wetlands on agricultural land in the Northern Everglades Watershed. This new investment, part of the Department of Agriculture's Wetlands Reserve Program (WRP), will restore an additional 23,000 acres of wetlands vital to water quality and wildlife habitat in the Everglades system. Using the partnerships and community-led approach that is a hallmark of the

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<sup>2</sup> See

<[www.noaanews.noaa.gov/exist.html?http%3A%2F%2Fwww.nature.com%2Fnature%2Fjournal%2Fv488%2Fn7409%2Ffull%2Fnature11299.html](http://www.noaanews.noaa.gov/exist.html?http%3A%2F%2Fwww.nature.com%2Fnature%2Fjournal%2Fv488%2Fn7409%2Ffull%2Fnature11299.html)>.

<sup>3</sup> Available at <[www.epa.gov/mywaterway](http://www.epa.gov/mywaterway)>.

<sup>4</sup> See <[www.noaanews.noaa.gov/exist.html?http%3A%2F%2Fdx.doi.org%2F10.1175%2FJCLI-D-11-00612.1](http://www.noaanews.noaa.gov/exist.html?http%3A%2F%2Fdx.doi.org%2F10.1175%2FJCLI-D-11-00612.1)>.

President's America's Great Outdoors initiative, the Administration has reinvigorated Federal leadership in Everglades restoration, investing \$1.5 billion in Everglades projects and initiatives that will make a measurable impact on the ground, including nearly \$900 million to jump start key construction projects that will restore water flow and essential habitat. These projects already have generated 6,600 Florida jobs and are expected to generate more.

- In California's Los Angeles Basin, levels of some vehicle-related air pollutants have decreased by about 98 percent since the 1960s, even as area residents now burn three times as much gasoline and diesel fuel. Between 2002 and 2010 alone, the concentration of air pollutants called volatile organic compounds (VOCs) dropped by half, according to a new study by NOAA scientists and colleagues, published in the *Journal of Geophysical Research*.<sup>5</sup> VOCs, primarily emitted from the tailpipes of vehicles, are a key ingredient in the formation of ground-level ozone, which, at high levels, can harm people's lungs and damage crops and other plants. The 98 percent drop in VOCs in the last 50 years does not mean that ozone levels have dropped that steeply; the air chemistry that leads from VOCs to ozone is more complex than that. Ozone pollution in the Los Angeles Basin has decreased since the 1960s, but levels still don't meet ozone standards set by the Environmental Protection Agency. Requirements for catalytic converters, use of reformulated fuels less prone to evaporate, and improved engine efficiency of new vehicles have all likely contributed to overall declines in vehicle-related pollution, including VOCs.
- More than 1.3 million cubic yards of sediment contaminated with PCBs have been removed from the Hudson River. Since dredging began on May 9, 2012, more than 650,000 cubic yards of sediment have been dredged from a three-mile section of the river south of the village of Fort Edward, New York, exceeding the season goal of dredging 350,000 cubic yards. With the third season of dredging complete, the Environmental Protection Agency is well on the way toward its goal of removing 2.65 million cubic yards of contaminated sediment from a 40-mile stretch of the upper Hudson River. The dredging project has also created 500 jobs and additional economic benefits for the area.
- Forests, grasslands and shrub lands and other ecosystems in the West sequester nearly 100 million tons (90.9 million metric tons) of carbon each year, according to a Department of the Interior report released today. Carbon that is absorbed or "sequestered" through natural processes reduces the amount of carbon dioxide in the atmosphere. The 100 million tons sequestered in western ecosystems is an amount equivalent to – and counterbalances the emissions of – more than 83 million passenger cars a year in the United States, or nearly 5 percent of Environmental Protection Agency's 2010 estimate of the nation's total greenhouse gas emissions. The report, authored by US Geological Survey scientists, is part of a congressionally mandated national assessment of carbon storage and sequestration capacities by ecosystems.<sup>6</sup> This assessment estimates the ability of different ecosystems in the West to store carbon—information that will be vital for science-based land-use and land-management decisions.
- New analysis of updated data has shown that eight percent of US waters are currently designated as marine protected areas (MPAs), with the vast majority of these areas open to fishing and other

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<sup>5</sup> See

<[www.noaanews.noaa.gov/exit.html?http%3A%2F%2Fwww.agu.org%2Fpubs%2Fcrossref%2Fpip%2F2012JD017899.shtml](http://www.noaanews.noaa.gov/exit.html?http%3A%2F%2Fwww.agu.org%2Fpubs%2Fcrossref%2Fpip%2F2012JD017899.shtml)>.

<sup>6</sup> The first report, on the Great Plains, was released in December 2011; reports on the eastern United States, Alaska, and Hawaii will follow. See <<http://pubs.usgs.gov/pp/1787/>>.

activities, according to National Oceanic and Atmospheric Administration.<sup>7</sup> US sites are cataloged in the recently updated MPA Inventory, available online.<sup>8</sup> The eight percent figure does not include MPAs specifically established to sustain fisheries production, which often have specific restrictions on fishing gear over large ocean areas. Other inventory analyses including these fishery MPAs, however, show that 92 percent of the area within US MPAs allows some type of activity, and 85 percent is open to fishing. The analysis also showed that more than two-thirds of all US MPAs were created, at least in part, to conserve natural heritage values, such as biodiversity, ecosystems, or protected species. About a quarter of sites focus on sustainable production, such as those established to recover overfished stocks, protect species readily taken as by-catch, or preserve essential fish habitats, while the remaining approximately ten percent were established to conserve our nation's cultural heritage.

### **Changes in Level of Protection**

- The Bureau of Safety and Environmental Enforcement (BSEE) and NOAA have partnered to enhance the Environmental Response Management Application (ERMA<sup>®</sup>) for the Arctic region by summer 2012. ERMA<sup>®</sup> is the interactive online mapping tool used by federal responders during the Deepwater Horizon oil spill but it has been populated with region-specific data for use in different off-shore areas: the Gulf Coast, deep water Gulf of Mexico, the Pacific Northwest, the Atlantic, the Great Lakes, and the Arctic. This effort will be of special help in addressing numerous challenges in the Arctic where increasing ship traffic and proposed energy development are increasing the risk of oil spills and chemical releases.
- The US EPA and the Department of Agriculture's Food Safety and Inspection Service (FSIS) announced the first-ever Microbial Risk Assessment (MRA) Guideline. This new MRA Guideline lays out an overarching approach to conducting meaningful assessments of the risks to Americans posed by pathogens in food and water. Pathogens ingested in food and water can result in acute gastrointestinal-related illnesses; some gastrointestinal-related illnesses can result in long-term and permanent health effects as well as premature death. The new guideline will improve the quality of the data collected by public health scientists charged with protecting Americans from pathogen-related risks in food and water.
- The Migratory Bird Conservation Commission has approved more than \$1.3 million from the Migratory Bird Conservation Fund to protect an estimated 1,368 acres of waterfowl habitat on three units of the National Wildlife Refuge System. The commission also approved more than \$25 million in federal grants through the North American Wetlands Conservation Act to support public-private partnership activities that will conserve more than 144,000 acres of wetlands and associated habitats in the United States and Canada.
- Secretary of the Interior Ken Salazar joined US and Mexico delegations in San Diego, California in signing the Minute 319 to the 1944 Treaty with Mexico—an historic binational agreement to guide future management of the Colorado River through 2017. The agreement was developed and facilitated by the US and Mexico Sections of the International Boundary and Water Commission. The five-year agreement approved by both governments provides for a series of joint cooperative actions between the United States and Mexico. Elements of the agreement include:

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<sup>7</sup> See <[www.mpa.gov/pdf/helpful-resources/mpa\\_analysis\\_2012\\_0320.pdf](http://www.mpa.gov/pdf/helpful-resources/mpa_analysis_2012_0320.pdf)>.

<sup>8</sup> See <[www.mpa.gov/dataanalysis/mpainventory/](http://www.mpa.gov/dataanalysis/mpainventory/)>.



- Implementing efforts to enhance water infrastructure and promote sharing, storing, and conserving water as needed during both shortages and surpluses;
- Establishing proactive basin operations by applying water delivery reductions when Lake Mead reservoir conditions are low in order to deter more severe reductions in the future;
- Extending humanitarian measures from a 2010 agreement, [Minute 318](#), to allow Mexico to defer delivery of a portion of its Colorado River allotment while it continues to make repairs to earthquake-damaged infrastructure;
- Establishing a program of Intentionally Created Mexican Allocation whereby Mexico could temporarily reduce its order of Colorado River water, allowing that water to be delivered to Mexico in the future; and
- Promoting the ecological health of the Colorado River Delta.

### **Government Enforcement**

- The United States has entered into two settlements worth more than \$50 million to clean up contamination from the B.F. Goodrich Superfund Site in San Bernardino County (CA). There are a dozen settling parties including Emhart Industries (Emhart), and Pyro Spectaculars, Inc. (PSI), as well as the Cities of Rialto and Colton and County of San Bernardino. The Superfund site has been used to store, test and manufacture fireworks, munitions, rocket motors, and pyrotechnics and was added to the Environmental Protection Agency's National Priorities List in September 2009. The area's groundwater is contaminated with trichloroethylene (TCE) and perchlorate, which have resulted in the closure of public drinking water supply wells in the communities of Rialto and Colton.
- Dover Chemical Corporation has agreed to pay \$1.4 million in civil penalties for the unauthorized manufacture of chemical substances at facilities in Dover, Ohio and Hammond, Ind. The settlement resolves violations of the Toxic Substances Control Act premanufacture notice obligations for its production of various chlorinated paraffins. Dover Chemical produces the vast majority of the chlorinated products sold in the United States. As part of the settlement, Dover Chemical has ceased manufacturing short-chain chlorinated paraffins, which have persistent, bioaccumulative and toxic (PBT) characteristics. PBTs pose a number of health risks, particularly for children, including genetic impacts, effects on the nervous system, and cancer. Dover Chemical will also submit premanufacture notices to EPA for various medium-chain and long-chain chlorinated paraffin products.
- Keoje Marine was sentenced to pay a \$1.15 million criminal penalty, \$250,000 of which will go to the National Fish and Wildlife Foundation as a community service payment for projects aimed at protecting and restoring marine resources in the District of Hawaii. Keoje Marine pleaded guilty to three felonies: violating the Clean Water Act for the dumping of oily bilge waste into waters off Hawaii that may have affected the natural resources of the United States; violating the Act to Prevent Pollution from ships for covering up the dumping of the oily waste by falsifying the vessel's oil record book; and obstruction of justice during a US Coast Guard inspection of the M/T Keoje Tiger in October 2011.
- Farms Inc. was sentenced in federal court to five years probation and ordered to pay \$1.5 million in fines, restitution and community service payments for violating the Clean Water Act when they discharged hog waste into a stream that leads to the Waccamaw River. William B. Freedman, president of Freedman Farms, was sentenced to six months in prison to be followed by six months of home confinement. Freedman Farms was sentenced to pay a \$500,000 criminal fine and \$925,000 in restitution.

- Coffeyville Resources Refining & Marketing (CRRM) has agreed to pay a civil penalty of more than \$970,000 and invest more than \$4.25 million in new pollution controls and \$6.5 million in operating costs to resolve alleged violations of air, Superfund and community right-to-know laws at its Coffeyville, Kansas refinery. The settlement will benefit the environment and human health by requiring new and upgraded pollution controls, more stringent emission limits and more aggressive leak-detection and repair practices to reduce emissions from refinery equipment and process units. Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>), two pollutants emitted from refineries, can cause health problems and are significant contributors to acid rain, smog and haze.
- Pharmacia Corporation and Bayer CropScience Inc. have agreed to pay \$4.25 million to federal and state natural resource trustees to resolve claims for natural resource damages connected with the Industri-plex Superfund site, located in Woburn, Massachusetts. Operations at the Industri-plex Superfund site from the 1850s to the 1960s contaminated the Aberjona River, as well as associated wetlands and the Mystic Lakes, with arsenic, chromium and other hazardous substances. Under the Comprehensive Environmental Response, Compensation, and Liability Act, parties that have disposed of hazardous substances at a site are liable for damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction or loss.
- The Department of Justice and the US EPA reached agreement with dozens of companies and government agencies that will result in a \$56.4 million cleanup of the “Malone Services Company” Superfund Site in Texas City, Texas, a former waste-disposal site near the shore of Galveston Bay. The settlement requires a group of 27 companies to clean up the site, pay EPA \$900,000 towards past and future costs, and reimburse the state of Texas for \$796,726 in past costs. Among the companies doing the clean-up work are BP Products North America Inc., Pharmacia (formerly Monsanto), Marathon Oil Company, Exxon Mobil Corporation and BASF Corporation.
- Two subsidiaries of Sinclair Oil Corporation resolved alleged violations of air pollution limits established in a 2008 consent decree at refineries in Casper and Sinclair, Wyoming. Sinclair Casper Refining Co. and Sinclair Wyoming Refining Co. will pay stipulated penalties totaling \$3,844,000 and spend approximately \$10.5 million on additional pollution control equipment and other projects to resolve the allegations. The settlement will require the Sinclair companies to reduce emissions of nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>) and particulate matter by approximately 24, 385, and 59 tons per year, respectively.
- Sterling Suffolk Racecourse LLC will pay a civil penalty of \$1.25 million to resolve violations of the Clean Water Act (CWA) at its Suffolk Downs racetrack facility in Revere and East Boston, Massachusetts. The company is also spending more than \$3 million to prevent polluted water from entering nearby waterways and will perform three environmental projects worth approximately \$742,000 that will provide water quality monitoring and protection efforts for more than 123 square miles of watershed.
- The Scotts Miracle-Gro Company, a producer of pesticides for commercial and consumer lawn and garden uses, was sentenced in federal district court in Columbus, Ohio, to pay a \$4 million fine and perform community service for eleven criminal violations of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which governs the manufacture, distribution, and sale of pesticides. Scotts pleaded guilty in February 2012 to illegally applying insecticides to its wild bird food products that are toxic to birds, falsifying pesticide registration documents, distributing pesticides with misleading and unapproved labels, and distributing unregistered pesticides. This is the largest criminal penalty under

FIFRA to date. In a separate civil agreement with the Environmental Protection Agency, Scotts agreed to pay more than \$6 million in penalties and spend \$2 million on environmental projects to resolve additional civil pesticide violations. The violations include distributing or selling unregistered, canceled, or misbranded pesticides, including products with inadequate warnings or cautions.

- QEP Field Services Co. (QEPFS), formerly Questar Gas Management Co., settled to resolve alleged violations of the Clean Air Act at five natural gas compressor stations on the Uintah and Ouray Reservation in Northeastern Utah. Four members of the Ute Indian Tribe intervened as co-plaintiffs. Under the proposed settlement, QEPFS will pay a \$3.65 million civil penalty and pay \$350,000 into a Clean Air Trust Fund to be established by the tribal member interveners. The settlement also requires QEPFS to reduce its emissions by removing certain equipment, installing additional pollution controls, and replacing the natural gas powered instrument control systems with compressed air control systems. The actions required in the settlement will eliminate approximately 210 tons of nitrogen oxide (NO<sub>x</sub>), 219 tons of carbon monoxide, 17 tons of HAPs, and more than 166 tons of volatile organic compounds (VOCs) per year. It will also conserve 3.5 million cubic feet of gas each year, which could heat approximately 50 US households. The reduction in methane emissions (a greenhouse gas that is a component of natural gas) is equivalent to planting more than 300 acres of trees.
- Roquette America, Inc., has agreed to pay a \$4.1 million civil penalty to settle alleged violations of the Clean Water Act and its National Pollutant Discharge Elimination System (NPDES) permit at its grain processing facility in Keokuk, Iowa. As early as 2008, Roquette was aware that its waste water treatment plant was marginally adequate and that it could not handle spills or surges in loading. Instead of constructing additional containment structures for waste water surges, or routing spills to the waste water treatment plant, Roquette allowed the industrial waste to be discharged directly into the Mississippi River and Soap Creek.
- Hess Corporation has agreed to pay an \$850,000 civil penalty and spend more than \$45 million in new pollution controls to resolve Clean Air Act violations at its Port Reading, N.J., refinery. Once fully implemented, the controls required by the settlement are estimated to reduce emissions of nitrogen oxide (NO<sub>x</sub>) by 181 tons per year and result in additional reductions of volatile organic compounds (VOCs). High concentrations of NO<sub>x</sub> and VOCs, key pollutants emitted from refineries, can have adverse impacts on human health, including contributing to childhood asthma, and are significant contributors to smog. In addition to the upgraded pollution controls, the agreement will require more stringent emission limits, and aggressive monitoring, leak-detection and repair practices to reduce emissions from refinery equipment and processing units.
- Ohio-based Owens-Brockway Glass Container Inc., the nation's largest glass container manufacturer, has agreed to install pollution control equipment to reduce harmful emissions of nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>) and particulate matter (PM) by nearly 2,500 tons per year and pay a \$1.45 million penalty to resolve alleged Clean Air Act violations at five of the company's manufacturing plants.

#### **Future Plans in Implementing the Agreement**

- The Department of the Interior, in partnership with the Department of Energy, will publish the Final Programmatic Environmental Impact Statement (PEIS) for solar energy development in six southwestern states—Arizona, California, Colorado, Nevada, New Mexico, and Utah. The final Solar PEIS represents a major step forward in the permitting of utility-scale solar energy on public lands

throughout the west. The announcement builds on the historic progress made in fostering renewable energy development on public lands. When President Obama took office, there were no solar projects permitted on public lands; since 2009, Interior has approved 17 utility-scale solar energy projects that, when built, will produce nearly 5,900 megawatts of energy—enough to power approximately 1.8 million American homes. Thanks to steps already taken by this administration, renewable energy from sources like wind and solar have doubled since the President took office.

- EPA Region 9 announced \$5 million in funding that will pay for cleaner locomotives throughout the San Joaquin Valley, including a state-of-the-art locomotive operating between the Port of Stockton and Lodi. EPA and its partners in the valley, the California Air Resources Board and the San Joaquin Valley Air Pollution Control District, made the announcement at the Central California Traction Rail Company in Stockton, CA. In addition, approximately \$16 million in grants was announced to slash diesel emissions, advance air quality and improve public health throughout the state of California. The San Joaquin Valley, one of the most productive agricultural areas in the country, also has some of the nation's worst air quality and highest rates of asthma. Federal, local and state partners are working to alleviate these problems by channeling significant funds into new clear air technologies.
- Top leaders from NOAA and the European Commission's Joint Research Centre (JRC) signed a landmark [agreement](#) that will further strengthen cooperative science activities in the areas of climate, weather, oceans and coasts. The signing also marked the launch of the first four environmental monitoring projects under the agreement. Meeting in Brussels, Belgium, Jane Lubchenco, Ph.D., Under Secretary of commerce for oceans and atmosphere and NOAA administrator, and Dominique Ristori, director general of the JRC, signed the agreement, which calls for exchanges of personnel, shared use of scientific infrastructure, support for joint research, access to laboratory facilities, scientific training and timely exchange of information.
- ZHome – the ultra-sustainable, 10-unit townhome development in Issaquah, WA that is redefining the future of housing – is also the first community in the Nation in which every home has earned the WaterSense label for new homes. The WaterSense program at US Environmental Protection Agency is modeled after its highly successful Energy Star program. The goal of WaterSense is to significantly reduce water use nationwide to save water resources for future generations. A home that is certified to earn the WaterSense label will use at least 20 percent less water than a standard, newly-constructed home and the high-efficiency WaterSense labeled fixtures perform as well or better than their traditional counterparts. The benefits of the certification include:
  - Lower utility bills for future residents
  - Reduced strain on water and wastewater systems
  - More water left in streams and aquifers for salmon, recreation and other uses
  - Fewer greenhouse gas emissions due to reduced energy demands from water treatment
- US EPA is providing \$950,000 to help 17 communities expand green infrastructure use to improve water quality and protect people's health and benefit communities. Green infrastructure uses vegetation and soil to manage rainwater where it falls, keeping polluted stormwater from entering sewer systems and waterways in local communities. The EPA funding is intended to increase incorporation of green infrastructure into stormwater management programs, protect water quality, and provide community benefits including job creation and neighborhood revitalization.
- In response to a court order, the US EPA proposed updates to its national air quality standards for harmful fine particulate matter (PM) pollution, including soot (known as PM<sub>2.5</sub>). These microscopic

particles can penetrate deep into the lungs and have been linked to a wide range of serious health effects, including premature death, heart attacks, and strokes, as well as acute bronchitis and aggravated asthma among children. A federal court ruling required EPA to update the standard based on best available science. The proposal, which meets that requirement, builds on smart steps already taken by the EPA to slash dangerous pollution in communities across the country. Thanks to these steps, 99 percent of US counties are projected to meet the proposed standard without any additional action. EPA's proposal would strengthen the annual health standard for harmful fine particle pollution (PM<sub>2.5</sub>) to a level within a range of 13 micrograms per cubic meter to 12 micrograms per cubic meter. The current annual standard is 15 micrograms per cubic meter. The proposed changes, which are consistent with the advice from the agency's independent science advisors, are based on an extensive body of scientific evidence that includes thousands of studies—including many large studies that show negative health impacts at lower levels than previously understood. By proposing a range, the agency will collect input from the public as well as a number of stakeholders, including industry and public health groups, to help determine the most appropriate final standard to protect public health. It is important to note that the proposal has zero effect on the existing daily standard for fine particles or the existing daily standard for coarse particles (PM<sub>10</sub>), both of which would remain unchanged.

- In the near future, NOAA scientists will begin using data from an advanced instrument to monitor the health of Earth's stratospheric ozone, a layer in the atmosphere that shields the world's population from harmful levels of the Sun's ultraviolet radiation. The Ozone Mapper Profiler Suite, or OMPS, is one of five new instruments flying aboard NASA's Suomi National Polar-orbiting Partnership satellite (Suomi NPP), which was launched on 28 October 2011. OMPS measures stratospheric ozone, which has eroded over the years as a result of chlorine and bromine from human-produced substances such as chlorofluorocarbons (CFCs) and halons.
- The EPA awarded five grants totaling almost \$2 million to academic institutions for research on innovative processes to further improve air quality in the US and help track the effectiveness of pollution control measures. Pollutants such as ozone and fine particles are linked to a variety of serious health effects, including aggravation of asthma and other lung diseases, heart attacks, increased hospital admissions and medication use, and premature death. The grants announced today are focused on generating better data and tools to enable regulatory authorities to more effectively ensure that the air we breathe is healthy. The information gathered through this new research will help inform policy decisions that affect air quality, including the way states and cities address short-term air quality challenges.
- The Department of Energy announced the start of an ambitious initiative to capture the potential of wind energy off American coasts. As part of a planned six-year \$180 million initiative, an initial \$20 million were available in late 2012 as the first step in supporting up to four innovative offshore wind energy installations across the United States. These offshore wind projects will accelerate the deployment of breakthrough wind power technologies that will help diversify our nation's energy portfolio, promote economic development and launch a new industry here in America.
- The EPA launched its Sustainable Materials Management (SMM) Electronics Challenge, an initiative to make protective electronics refurbishing and recycling practices the industry standard. EPA Deputy Assistant Administrator for Solid Waste and Emergency Response Lisa Feldt, joined by leaders from Best Buy, LG Electronics, Panasonic, Samsung, Sharp, Sprint, and Staples, made the announcement at Vintage Tech Recyclers, a certified electronics recycling facility in Romeoville, Ill. By participating in

the SMM Electronics Challenge, leaders in the electronics industry are committing to send 100 percent of the used electronics that they collect to third-party certified refurbishers and recyclers and to increase the amount of used electronics they collect. Through this challenge, EPA is providing a transparent and measurable way for electronic companies to commit to safe and environmentally protective practices for the refurbishment and recycling of used electronics, and publically show progress toward recycling goals.

- Building on President Obama's call in the 2012 State of the Union, Houston, Texas is joining the Better Buildings Challenge. The Challenge is a public-private partnership that seeks to improve energy efficiency 20 percent by 2020 in commercial, government, and school buildings across the country. The City of Houston is committing to improve energy efficiency across 30 million square feet of public and private buildings throughout the city. Through its participation in the Better Buildings Challenge, the City of Houston works with local partners to implement initiatives that reduce emissions, protect air quality and save taxpayers money. In January, [President Obama announced](#) nearly \$4 billion in combined federal and private sector funding for building energy upgrades over the next two years. More than 60 companies, cities, universities, hospitals, and other partners throughout the US have committed to upgrading more than 1.6 billion square feet of building space nationwide.
- The EPA is awarding \$30 million for clean diesel projects as part of its ongoing campaign to reduce harmful diesel exhaust that can lead to asthma attacks and premature deaths. The Diesel Emission Reduction Program, also known as DERA, is designed to replace, retrofit or repower older diesel-powered engines like marine vessels, locomotives, trucks and buses. Diesel engines are durable, fuel-efficient workhorses in the American economy. However, older diesel engines that predate newer, cleaner standards emit large amounts of air pollutants, such as nitrogen oxides (NOx) and particulate matter (PM). These pollutants are linked to health problems, including asthma, lung and heart disease and premature death. The clean diesel projects funded through these grants will work to address the more than 11 million older diesel engines that continue to emit higher levels of pollution.
- The National Oceanic and Atmospheric Administration announced the results of its recent competitions for education grants to enhance science education activities in classrooms, aquariums, museums and other institutions across America. A total of \$4.5 million in grants from the NOAA Office of Education's Environmental Literacy Grants Program will be awarded to support six unique, multi-year projects.<sup>9</sup> Projects are designed to increase stewardship and inform decision-making within a diverse pool of educators, students and the public to help promote environmental literacy. The selected projects will partner with NOAA's research laboratories, national marine sanctuaries, Climate Program Office, National Marine Fisheries Service, National Weather Service, Pacific Services Center, Coral Reef Conservation Program and Sea Grant.
- As part of the Obama Administration's commitment to strengthening partnerships with Tribal Nations and supporting tribal energy development, US Department of Energy announced that 19 clean energy projects will receive more than \$6.5 million. These competitively selected projects will allow Native American Tribes to advance clean energy within their communities by assessing local energy resources, developing renewable energy projects and deploying clean energy technologies. These projects will help Tribal communities across the country save money and create new job and business opportunities.
- The Department of Interior announced \$20.5 million in grants to support 24 projects in 13 states to conserve and restore coastal wetlands and their fish and wildlife habitat. The grants, awarded under the

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<sup>9</sup> See <[www.oesd.noaa.gov/](http://www.oesd.noaa.gov/)>.

2012 National Coastal Wetlands Conservation Grant Program, will be matched by nearly \$21 million in partner contributions from state and local governments, private landowners and conservation groups.

- Through its Advanced Research Projects Agency—Energy (ARPA-E), the Department of Energy (DOE) will make \$30 million available for a new research competition in the coming months that will engage our country’s brightest scientists, engineers and entrepreneurs to find ways to harness our abundant supplies of domestic natural gas for vehicles. DOE will also make \$14 million available to support research and development into biofuels from algae. These programs will spur American innovation and encourage scientific breakthroughs that will help diversify the nation’s energy portfolio, grow American companies, and develop alternative vehicle technologies that do not rely on oil.
- Busy shipping lanes off the California coast, including routes that cross three national marine sanctuaries, will be adjusted to protect endangered whales from ship strikes. The International Maritime Organization (IMO), which governs shipping worldwide, announced it adopted three proposals deemed necessary to improve navigational safety and to reduce ship strikes on the approach to San Francisco Bay, the Santa Barbara Channel and the Ports of Los Angeles and Long Beach. Vessels in these areas also travel through the Cordell Bank, Gulf of the Farallones and Channel Islands NOAA National Marine Sanctuaries, where blue, humpback and fin whales feed and congregate. Slow-moving whales are highly vulnerable to ship strikes, since many of their feeding and migration areas overlap with shipping lanes. In 2007, four whales (all blue whales) were killed by confirmed or likely ship strikes in and around the Santa Barbara Channel. In 2010, five whales (two blue, one humpback, and two fin whales) were killed by confirmed or likely ship strikes in the San Francisco area and elsewhere along the north-central California coast.
- In partnership with the Department of Energy (DOE), the Volvo Group is helping to lead the industry to advance innovative clean energy vehicle technologies and energy-efficient manufacturing. Through DOE’s SuperTruck program, the Volvo Group was awarded \$19 million—which the company is matching dollar for dollar—to improve the efficiency of heavy-duty vehicles like the Mack and Volvo Trucks. Volvo Group has also embraced manufacturing efficiency as part of the DOE’s Better Buildings, Better Plants Program, pledging to reduce the energy intensity of its manufacturing plants with assistance and guidance from DOE. These steps to become more energy-efficient will reduce operating costs at the facility, improving the competitiveness of the company’s products and manufacturing plants.
- NOAA’s Office of Education<sup>10</sup> announced the winners of its recent competition for education grants that will allow thousands of K-12 students around the country to get outside and participate in hands-on environmental education opportunities. A total of 59 projects will benefit from \$5.5 million in grants from NOAA’s Bay-Watershed Education and Training (B-WET) Program that will support activities ranging from data driven field investigations in the Pacific Northwest to studies of storm water management and invasive species in the Great Lakes.<sup>11</sup> All recipients of B-WET grants emphasize meaningful watershed educational experiences—sustained, hands-on activities that are aligned with academic learning standards and responsive to regional education and environmental priorities. Some 2012 student activities include learning about currents and marine debris on the coast of Hawaii with

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<sup>10</sup> <[www.oesd.noaa.gov/](http://www.oesd.noaa.gov/)>.

<sup>11</sup> See <[www.oesd.noaa.gov/grants/bwet.html](http://www.oesd.noaa.gov/grants/bwet.html)>.

the Malama Kai Foundation, participating in field investigations in the Gulf of Mexico with the University of Texas, and developing urban schoolyard habitats with the Living Classrooms Foundation in Chesapeake Bay.

- A new network of water sensors in Monterey Bay is now aiding the abalone industry by monitoring water quality for harmful algal blooms and other potential hazards, helping to keep the valuable shellfish safe to eat while increasing knowledge of the bay's environment. The sensors monitor dissolved oxygen, ocean acidification levels, and oceanographic conditions that can lead to harmful algal blooms, among other hazards. The measurements will also create long, continuous records of the oceanographic environment in Monterey, feeding into the larger US Integrated Ocean Observing System (IOOS®).<sup>12</sup> This will also benefit other fisheries in the area and informs human health decisions. The Central and Northern California Ocean Observing System (CeNCOOS),<sup>13</sup> a regional member of the NOAA-led US IOOS program, is partnering with Moss Landing Marine Laboratories and the Monterey Abalone Company to install, operate, and maintain the water quality sensors in Monterey Bay. The system became operational in mid-June.
- As part of President Obama's all-of-the-above approach to energy, Secretary of the Interior Ken Salazar "flipped the switch" on the Enbridge Silver State North solar project in Clark County, Nevada, the first large-scale solar energy facility on US public lands to deliver power to American consumers. This milestone is in line with the administration's broad commitment to expanding production of all sources of American made energy, including from renewable sources, such as wind and solar, which has doubled in the President's first term, as well as domestic production of oil and gas resources, which have increased each year the President has been in office.
- On Wednesday, the Environmental Protection Agency will enter into agreement to promote environmental sustainability by developing a cooperative working relationship between four institutions of higher education: South Carolina State University (SCSU), Claflin University, Orangeburg-Calhoun Technical College (OC Tech), and Aiken Technical College (ATC). As part of the agreement, the four institutions will form an Environmental Sustainability Working Group with the intention to develop sustainable campuses and communities in the Midlands, Lowcountry and Sea Islands (Gullah/Geechee Cultural Heritage Corridor) areas of South Carolina.
- Illinois was welcomed into the coastal management system, making the state eligible for approximately \$2 million in annual grants to help manage its Great Lakes resources. The creation of the Illinois Coastal Management Program comes at the 40th anniversary of the passage of the Coastal Zone Management Act by Congress in 1972. Illinois was the only remaining eligible state without an approved coastal zone management program in the act's history. The Illinois Coastal Management Program joins the National Coastal Management Program (CMP), a voluntary partnership between the National Oceanic and Atmospheric Administration and 34 coastal states and territories that provide frontline management of coastal resources for sustainable development and protection of natural resources. NOAA's CMP works with these coastal and Great Lakes states and territories to

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<sup>12</sup> <[www.ioos.gov](http://www.ioos.gov)>.

<sup>13</sup> See <[www.noaanews.noaa.gov/exit.html?http%3A%2F%2Fwww.cencoos.org%2F](http://www.noaanews.noaa.gov/exit.html?http%3A%2F%2Fwww.cencoos.org%2F)>.



address today's most pressing national coastal issues including climate change, ocean planning, and planning for energy facilities and development.<sup>14</sup>

- NOAA and the University of New Hampshire announced more than \$4.9 million to fund nine collaborative research projects aimed at making coastal communities and environments more resilient to rising sea levels, changing weather patterns, extreme storms, and ocean warming and acidification. The grants, made by NOAA's National Estuarine Research Reserve System (NERRS) Science Collaborative through its partnership with the university, will fund projects in South Carolina, Maryland, Massachusetts, New Hampshire, Maine, Rhode Island, Alabama, Oregon and California. Over the next two years, NERRS-led project teams will bring community stakeholders together with scientists, using the best science to make important resource management and public safety decisions. Projects will address community adaptation to sea level rise, implementation of low-impact development land use practices, oyster and wetland restoration, and river and watershed management.
- In support of President Obama's all-of-the-above energy strategy, and the Obama administration's goal of continuing to expand responsible oil and gas production, the Department of the Interior announced the release of a proposed rule to require companies to publicly disclose the chemicals used in hydraulic fracturing operations on public and Indian lands, with appropriate protections for proprietary information. Currently, there is no specific requirement for operators to disclose these chemicals on federal and Indian lands, where approximately 90 percent of the wells drilled use hydraulic fracturing to greatly increase the volume of oil and gas available for production. The proposed rule would require public disclosure of chemicals used during hydraulic fracturing after fracturing operations have been completed. This common-sense measure, which builds on the preliminary input received from the public, industry, tribal representatives, and other stakeholders, supports the continued development of America's abundant oil and gas resources on federal and Indian lands by taking steps to ensure public confidence in well stimulation techniques and technologies, including hydraulic fracturing. It is also in line with steps that some states have already taken, requiring operators to disclose the chemicals they use in activities on state lands.

## **Conclusion**

Calendar year 2012 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. 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.

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<sup>14</sup> See <<http://coastalmanagement.noaa.gov/climate.html>>, <[http://coastalmanagement.noaa.gov/ocean\\_re.html](http://coastalmanagement.noaa.gov/ocean_re.html)>, and <[http://coastalmanagement.noaa.gov/ene\\_gov.html](http://coastalmanagement.noaa.gov/ene_gov.html)>, respectively.

# 2012 Financial Report

**Commission for Environmental Cooperation**

**Financial report**

**As of 31 December 2012**

**(thousands of Canadian dollars)**

DESCRIPTION	2012 budget	Total expenses and commitments	Variance	%
<b>REVENUES</b>				
Parties' Contributions (\$ 9,000 US at par)	9,000.0	9,000.0	0.0	0.00%
Interest	0.0	11.1	11.1	100.00%
Previous year surpluses	3,545.6	3,545.6	0.0	0.00%
Resolution 12-02 Extension of Deadline for Use of 2011 funds	624.0	624.0	0.0	0.00%
2011 NAPECA funds (Resolution 12-01)	600.0	600.0	0.0	0.00%
Gain (loss) on foreign exchange	0.0	(61.5)	(61.5)	100.00%
Other Income	0.0	4.0	4.0	100.00%
<b>Total revenues</b>	<b>13,769.6</b>	<b>13,723.3</b>	<b>(46.3)</b>	<b>-0.34%</b>
<b>EXPENSES</b>				
Cooperative work program				
Projects (includes Work Program salaries)	5,721.8	4,582.8	1,139.0	19.91%
Resolution 12-02 Extension of Deadline for Use of 2011 funds	624.4	508.2	116.2	18.61%
Project Communications	242.0	206.0	36.0	14.90%
Grants:				
Council Directed Grants	150.0	66.2	83.8	55.87%
North American Partnership for Environmental Community Plan (NAPECA) (including 2011 budget)	1,400.0	1,371.3	28.7	2.05%
Mexico Liaison Office	345.4	177.1	168.3	48.73%
Managing CEC Environmental Information	146.0	78.1	67.9	46.54%
Monitoring, Evaluation and Reporting	90.0	14.3	75.7	84.12%
	<b>8,719.6</b>	<b>7,003.9</b>	<b>1,715.7</b>	<b>19.68%</b>
Secretariat report (Article 13)	300.0	165.5	134.5	44.83%
Submissions on Enforcement Matters (Articles 14 & 15)	766.5	648.4	118.1	15.41%
Council Support	510.4	449.7	60.7	11.90%
JPAC Support	480.2	468.7	11.5	2.40%
Communications	667.3	666.8	0.4	0.06%
Administration & Management				
Executive Director's Office	122.2	45.8	76.4	62.52%
External Administrative Support (Insurance, audit , fiscal expertise, banking , legal)	228.0	222.3	5.7	2.48%
Relocation/orientation, Recruitment	150.0	94.3	55.7	37.11%
Operating Expenses (Telecommunications, Rent, Operating equipment, Office supplies)	766.1	763.6	2.5	0.33%
Administration & Management Salaries	1,009.3	999.0	10.4	1.03%
	2,275.6	2,125.1	150.6	6.62%
Reserve for Unforeseen Needs	50.0	0.0	50.0	100.00%
<b>TOTAL EXPENSES</b>	<b>13,769.6</b>	<b>11,528.0</b>	<b>2,241.6</b>	<b>16.28%</b>