







Message from the **Executive Director**

I am pleased to present this brief report on some of the activities and achievements of the CEC Secretariat for the period from July 2017 to June 2018. It illustrates progress made in implementing the Operational Plan 2017–2018 approved in June 2017 in Charlottetown, Canada. This report reflects the commitment and dedication of the Secretariat staff, as well as the engagement of civil society, in contributing to advance the environmental priorities of Canada, Mexico and the United States.

As one of the three constituent bodies of the CEC, the Secretariat is mandated to provide technical, administrative and operational support to the Council, the Joint Public Advisory Committee (JPAC), and the CEC steering committees and working groups. Since 1994 the Secretariat has successfully fulfilled its role in supporting the cooperative efforts of the three countries, as reflected in the strategic and operational plans, as well as in helping address other emerging environmental topics that the three countries agreed to work on at the continental level.

As the current Executive Director, I was tasked with strengthening key elements of the crucial role we have to play in the region. During the period covered in this report we have also conducted some activities related to the transition of the CEC as an institution in line with new priorities.

Like everyone at the Secretariat, I am confident that cooperation between the three countries will contribute to the continuous improvement of the environment and to the transition towards sustainable development in North America.

*César Rafael Chávez*Executive Director

Highlights of Trilateral Cooperation

June 2017 marked the completion of the Operational Plan 2015–2016 and the initiation of ten new projects under the Operational Plan 2017–2018. Below are a few highlights of what we accomplished during the past twelve months under the cooperative projects and initiatives.

Providing practical guidance to **measure** and mitigate food loss and waste



Resulting from extensive research conducted from 2015 through 2017, a comprehensive report and companion white paper were completed in December 2017 and released in March 2018 on the state

of food loss and waste in Canada, Mexico and the United States. A similarly comprehensive report and white paper were released at the same time on the state of organic waste in North America. The Characterization and Management of Food Loss and Waste in North America reports document adverse socio-economic and environmental impacts of food loss and waste, and actions that the industrial, commercial, institutional, government and nongovernmental sectors can implement to mitigate these impacts. The report estimates that 168 million tonnes of food are wasted in North America each year and that overall, the largest share of this waste, 67 million tonnes/year, occurs at the consumer level, while 52 million tonnes are wasted in the industrial, commercial, and institutional sectors, and 49 million tonnes at the pre-harvest level.

Building on this work, the CEC is focusing now on effectively measuring food loss and waste in the North American food chain, calculating its environmental and socioeconomic impacts, and providing tools to prevent and reduce loss and its impacts on food security, the economy, and the environment. At the halfway mark, the project has established a group of experts of North America—including international practitioners from across the food supply chain. This group of experts has provided key input, particularly at the first in-person meeting in Mexico, on 15–17 May 2018, for the development of two documents—a technical report and a practical guide—on how to better measure food loss and waste and calculate its environmental and socio-economic impacts, in a manner consistent with global standards.

Working with supplier facilities in the industry to **improve energy efficiency through ISO 50001**

The CEC is partnering with industry to improve energy management and efficiency, reduce energy costs, and promote greater energy competitiveness in select North American industrial sectors through adoption of the international energy management ISO 50001 standard in supply chains. The 2016–2017 North American Energy Management Pilot Program was completed in June 2017. A total of 18 industrial facilities from 9 companies across North America received an 18-month training program on the ISO 50001 energy management standard and the Superior Energy Performance® program.

Improving supply chain energy efficiency and reducing costs improves competitiveness and produces significant environmental benefits through decreased pollutant emissions

Inspired by this success, the CEC is now piloting an ISO 50001 supply chain deployment model in supplier facilities (such as auto and steel) across North America. Improving supply chain energy efficiency and reducing costs improves competitiveness and produces significant environmental benefits through decreased pollutant emissions. A training program adapted to supply chains was developed and shared to recruit participants. Eight auto-sector associations and manufacturers, and several companies from other sectors have been contacted. The CEC is currently finalizing the partnership agreement with one automotive manufacturer and its supply chain and the training will begin in summer 2018. Program materials have been developed, including 50001 Ready Navigator and 25 resource documents. Information regarding the CEC project and additional resources were shared through each country's national program networks, associations and other partners.

Advancing the science and actions to conserve the **monarch butterfly and other pollinators**

Butterfly populations and those of other pollinators have declined significantly in recent years, triggering unprecedented efforts in the three North American countries to conserve them. Mindful that pollinators are vital to the production of our food crops, and that the congregation of monarch butterflies in wintering sites in Mexico brings the economic benefits of ecotourism to the local communities, the CEC is building on past and ongoing initiatives to strengthen trinational cooperation and advance knowledge for the effective conservation of these species.

The current status of monarch-related monitoring in the three countries has been summarized and cohesive trinational coordination of monarch science is underway through the Trinational Monarch Conservation Science Partnership, established with CEC support. The Monarch Butterfly Research and Monitoring Workshop, held in Montreal on 6-8 February 2018, resulted in a trinational work plan approved by the government officials involved in this project. As part of a continental monitoring strategy, trinationally-agreed biological monitoring protocols are being used in two studies, each addressing knowledge gaps in a different priority area (natal origins of overwintering monarchs and nectar resources for monarchs and pollinators). A webinar on the Trinational Monarch Knowledge Network was held on 7 June 2018, to discuss a proposal to create a platform where monarch and milkweed monitoring organizations could add data in an open-access, standardized database, to support strengthened monarch conservation efforts.

Building local capacity to prevent, minimize, and manage waste before it becomes **marine litter**



Marine litter is a global problem that affects the world's economy, as well as human health and the productivity of the marine environment. North America is a significant contributor of land-based marine litter. Most marine litter comes from common trash, migrating from coastal land into waterways, and eventually, our oceans. Through a transboundary community-based approach, the CEC is building local capacity in a US-Canadian and a US-Mexican watershed to prevent, minimize and manage land-based waste before it finds its way to waterways and oceans, becoming marine litter.

In early 2018, the CEC engaged 98 citizens (including 55 youth) in data collection events related to local marine litter at the two selected pilot sites: the Tijuana River watershed and the Salish Sea watershed. Reports describing the status of land-based debris in each watershed, identifying main sources, composition and areas of accumulation of debris, were presented to local stakeholder communities in May 2018. A list of low-tech, low-cost solutions was developed by these stakeholders for each pilot site, with implementation of selected actions to begin in summer 2018.



Helping communities that depend economically on marine protected areas to adapt to changes in the coastal environment

Effective management of marine ecosystems requires cross-border collaboration to address issues at the relevant scale and better respond to changes to the marine environment, such as ocean acidification and shifts in the range of species. Maintaining healthy marine protected areas (MPAs) is critical to local communities and indigenous nations, whose well-being is tied to the services and resources that MPAs provide. Building upon our work to identify vulnerabilities of coastal ecosystems, the CEC is working to provide practical guidance to MPA practitioners so that healthy marine protected areas are maintained and continue to bring economic benefits to coastal communities.

Maintaining healthy marine protected areas is critical to local communities and indigenous nations

We are developing a coastal impact mitigation and adaptation toolkit that will be available online to MPA practitioners and local communities. Stronger collaboration across MPAs is being fostered: two sister-site workshops are scheduled for fall 2018, where collaborative work plans for Pacific Coast MPA management will be developed (one for Canada-United States sister sites and one for United States-Mexico sister sites). The North American Marine Protected Area Network (NAMPAN) experts group will also meet to plan a path forward to foster this trinational network of marine places, institutions and their communities.

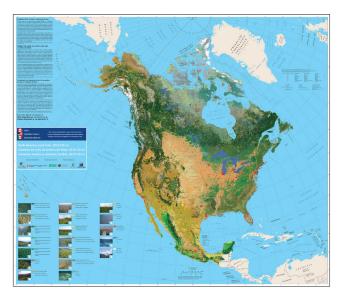
Promoting wildlife conservation through **sustainable trade**

The CEC is bringing together experts from Canada, Mexico and the United States to promote the sustainable trade of four groups of North American CITES Appendix II species: sharks, tarantulas, turtles and tortoises, and timber, in an effort to demonstrate how the legal, sustainable and traceable trade of these species can have a positive impact both on species conservation and also on the livelihoods of local communities that depend on them. It also invites the public to become better informed about species they might be interested in buying or selling. Partners in this innovative conservation project include state, provincial and local authorities as well as the private sector and indigenous communities.

During a workshop held on 26–28 September in Montreal, Canada, priority actions were selected for implementation from the action plans developed during the 2015–2016 project for sharks, tarantulas, timber and turtles/tortoises. At this time, three actions have been implemented on the tarantula species group (IUCN assessment and workshop, trinational trade and enforcement workshop, and tarantula identification guide) and two are underway (compendium of shark-specific data, and training workshop on shark fin identification, planned for 10–12 July 2018).

The CEC launched a website to share information on project goals, activities, events and opportunities for partnership and community engagement (www.cec.org/trinational_cites). The website will be updated throughout the life of the project with additional information and project publications. Outreach material was also developed to convey the importance of supporting legal trade of CITES species and to disseminate the project's main objectives, website and publications.

Mapping North American land cover to understand continental-scale patterns



A new map produced under the trinational North American Land Change Monitoring System (NAL-CMS), a partnership of mapping agencies in the three countries, supported by the CEC, was released in November 2017. Created from images assembled from satellite observations at 30-meter resolution, this land cover product was developed through a collaborative

effort to help users to better understand the dynamics and continental-scale patterns of North America's land cover at a new spatial resolution that enables both regional and local analysis. It will also serve as a baseline to observe changes in land cover in the future. Since its launch, there were a total of 2,211 unique downloads of this map.

Capitalizing on this resource, the US Environmental Protection Agency's (EPA) Office of Research and Development is exploring how to integrate land cover change to improve EPA's life-cycle assessment modeling capabilities and build a terminology library that uses the NAL-CMS nineteen land cover classes. Also, as a result of the NALCMS partnership, the Canada Centre for Mapping and Earth Observation team received a merit award for producing the land cover map for Canada and for participating in the NALCMS initiative.

NALCMS is part of the North American Environmental Atlas, a CEC tool that brings together maps, data, and interactive map layers to facilitate the visualization of environmental information at the continental scale. The Atlas website gets about 2,000 visits a year.

North American Partnership for Environmental Community Action

In August 2017, Council approved the fourth grant cycle of the North American Partnership for Environmental Community Action (NAPECA) and issued a Call for Proposals (CFP). On this occasion, the CFP invited proposals for community initiatives focusing on innovation and partnerships for green growth that advance environmentally-responsible economic development while decreasing pressure on natural resources and promoting more sustainable patterns of production and consumption.

Following the review and selection process in November 2017, nine projects were awarded funding for a total of C\$600,000. Grantee organizations were able to commence work in early December.

While all of the selected projects bear an innovative component, two expressly integrate and seek to preserve traditional ecological knowledge. Five others are working closely with indigenous groups in the three countries to build their capacity to respond to local environmental challenges. It is expected that these grants will have a positive impact and deliver measurable results at the community level within the timeframe of NAPECA support. Projects will conclude in early December 2018.

The financial support provided by the CEC Council to nonprofit and nongovernmental organizations (NGOs), environmental groups, academic institutions, and indigenous groups and communities throughout North America, has contributed directly to building the next generation of environmental stewards. According to the NAPECA assessment, grantee organizations were able to leverage funds from other sources, contributing to a total investment on environmental community projects almost three times that furnished by the CEC.

Submissions on Enforcement Matters

Since the 2017 Council session, the Secretariat has received three new submissions (Alberta Tailings Ponds II, Transboundary Agricultural Burning, and Mexico City Metrobús). Alberta Tailings Ponds (ATP-II) is the first Canadian submission in five years and again raises the issue of oil sands tailings ponds enforcement to the CEC; the Transboundary submission is the second Mexican submission to raise the issue of air pollution from agricultural burning.

In ATP-II, after Canada's response, the Secretariat recommended to the Council that a factual record be prepared; that vote should occur by mid-July 2018. In the Transboundary submission, the Secretariat is currently considering whether to recommend a factual record to the Council. In the other Mexican submission on agricultural burning (SEM 16-001), the Secretariat is finalizing the factual record, after receiving Party comments, for submission to the Council in July 2018.

The SEM process remains an important and vital tool for the public to bring issues to the attention of the Parties

The recent filing of submissions shows that the SEM process remains an important and vital tool for the public to bring issues to the attention of the Parties; serving as a unique transparency mechanism in North America, and providing an objective method to raise awareness on the effective enforcement of environmental laws.

The Secretariat has continued to implement the Council's prior direction regarding SEM outreach and, since last year's Council meeting, has worked to increase youth engagement. The SEM Unit currently has two summer interns (one law student, one undergraduate) and, in 2017, had three legal interns, all from Quebec universities (the University of Quebec at Montreal, the University of Montreal, and the University of Sherbrooke). The Secretariat also collaborated with the University of British Columbia and McGill University Law Schools on a one-day conference on the SEM process and public engagement and hosted a webinar with Humboldt State University in California.



Communications, Outreach and Publications

Public and stakeholder engagement is at the heart of the Commission for Environmental Cooperation's origins and is central to its ongoing work. In 2017, the CEC launched an ambitious new communications strategy intended to provide a foundation for CEC communications activities until 2020. The 2017–2020 CEC Communications Strategy is designed to raise awareness of the CEC as an important agent in protecting the North American environment and supporting sustainable development, and to position the CEC as the go-to organization for information on the North American environment.

Via its online virtual library, the CEC continues to provide access to hundreds of publications containing scientific and policy research on key North American environmental issues. Over the past year, the CEC has published 18 new titles, and users have downloaded over 7,000 copies of our publications. The CEC's Organic Waste, and Food Loss and Waste reports resulted in highlevel global media coverage, securing more than 350 thought-provoking news and opinion pieces.

As part of a drive to bring CEC communications to new and younger audiences, the Commission launched the second edition of its Youth Innovation Challenge, a crowdsourcing competition which attracted more than 200 participants. The CEC's proactive approach to communications and outreach is also reflected in a significant upswing in key social media engagement measures, including a 24% organic increase in Facebook followers—resulting in a total of 16,559 followers and a total of 228,708 video views on Facebook (a 103% increase).

