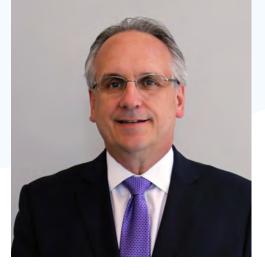
Report of the Executive Director

HARNESSING THE WINDS OF CHANGE IN A COMMON DIRECTION











Richard A. Morgan Executive Director

I am pleased to provide a summary of the CEC's main accomplishments and most notable developments over the past 12 months, as well as my perspective for the future. This September 2021 Executive Director Report covers our year of transition to the new free trade and environmental cooperation agreements. It also focuses on the work carried out to complete the Operational Plan 2019-2020 and to begin implementing the CEC's 2021-2025 Strategic Plan, which was adopted at the 2020 Council Session.

In last year's Executive Director Report,
I described the many building blocks that
were put in place to hit the ground running
and focus on delivering results in the new
decade, in accordance with Council's priorities.
Our numerous successes are in large part
due to a high degree of cooperation and
networking, including a continuous investment
in our foundation for the future. I applaud
the Council for its diligence and commitment
on such investments, which include a United
States transfer of US\$1 million to support
environmental justice and climate resilience
and the unlocking of CEC funds in the short term
for meaningful and large-scale initiatives.

As time passes, the window of opportunity to find solutions to the pressing issues of climate change and other environmental challenges is narrowing. However, the resolve of governments and communities to increase efforts in addressing sustainable development, including climate change, is growing and solidifying. The Secretariat looks forward to furthering substantive discussions with the Council to ensure that the CEC's ambitious agenda reflects the urgent need for action and for effective organizational and community capacity-building.



In 2020, the CEC faced up to the uncertainty posed by the COVID-19 pandemic, which required strict adjustments to our work environment. In 2021, we persevered through the unprecedented challenges of this new reality. Despite these changed circumstances in the workplace and in CEC project work, I am very proud of what was accomplished by the Secretariat staff, who worked diligently and collaboratively with our advisory groups, government officials, collaborators, and partners, to advance our mission and to plan for the upcoming months of activities. As evidenced through the results achieved and described here, the CEC took advantage of its unique functions to create tools, develop and deliver training, raise awareness, exchange information, foster multi-stakeholder engagement, and process submissions on enforcement matters from the public, throughout the North American continent.



Our collective actions in 2020-2021 have had a positive impact on such goals as marine litter reduction and prevention, pollinator conservation, support for marine protected areas, better decisionmaking using new cartographic data, and standardized methodologies for costing floods and improved early warning systems for drought, and modernized data exchange for hazardous waste transfers. We supported the Joint Public Advisory Committee (JPAC) in its public consultations and recommendations on future opportunities. We developed a traditional ecological initiative with the Traditional Ecological Knowledge (TEK) Expert Group, completed a cycle of NAPECA grant program funding in support of local and Indigenous engagement and community activities, and launched our fifth edition of the successful Youth Innovation Challenge, promoting solutions on climate change and environmental justice for resilient communities. We have been working with business organizations on measuring and reducing food loss and waste (FLW) and solidifying the North American 'business case' for implementing FLW measures across food supply chains. On trade and the environment matters, the Secretariat has reinforced its senior management functions to further engage the private sector in our operations. We are also strengthening our organizational and human resource capacity to fully integrate Indigenous perspectives across our projects and initiatives.

While the CEC's efforts in the past year have led to well-targeted activities and products, a clearly defined vision for a clean future will go a long way toward harnessing our full potential and contributing to the economic and environmental health of our continent and our planet. The initial steps taken to begin a new era of regional environmental cooperation and solidify North America as a global environmental leader have started to bear fruit at all levels and serve as a means to increase visibility for the CEC. The indicators that are detailed in this report clearly show that our communications and outreach have resulted in substantially more citizens and stakeholders connecting with the CEC through social media and events than ever before. With sustained and innovative communications, combined with our new visual identity launched this year, we are well placed to expand our reach and presence beyond current levels.

Across the Secretariat we are grateful for the support from the Council in our renewal and modernization efforts in terms of organizational development and human resources management. The decision to move forward on a realistic, timely retention and recruitment strategy will help us draw from a larger pool of expertise in all three countries and achieve higher levels in planning and implementing our work program. Stability and flexibility will enable us to be more effective and efficient when implementing our strategic and operational plans, and allow the CEC to continue our reputation for excellence as a prime vehicle for trilateral environmental cooperation.





What Trilateral Cooperation Has Achieved Over the Last Year

On 30 June 2021, the CEC completed the implementation of its Operational Plan 2019-2020, comprising 10 projects and three initiatives and the 2019-2020 NAPECA grant cycle. This section highlights some of the activities accomplished since June 2020.

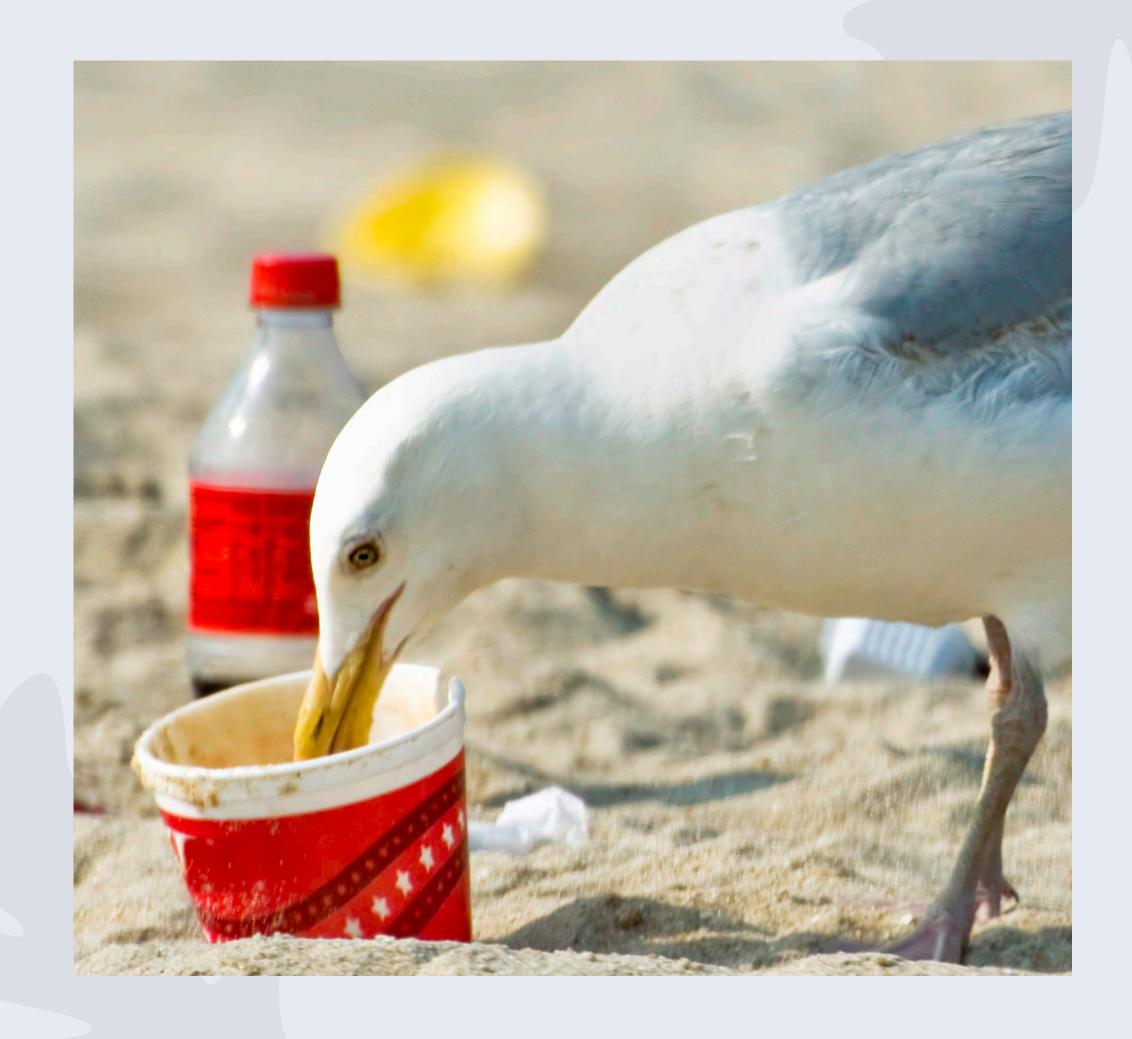






Reducing and Preventing Marine Litter

Marine litter is a global problem that affects economies, ecosystems and community well-being. This year, the CEC published Reducing Marine Litter through Local Action: A Toolkit for Community Engagement to increase the capacity of community organizations and local governments to implement successful multistakeholder engagement. The CEC also helped to build awareness of the links between consumer behavior in inland communities and marine litter by producing the "Last Stop: The Ocean" toolkit, which provides material to use in marine litter prevention campaigns practices to face their common challenges.





Collaborating to Conserve Pollinators





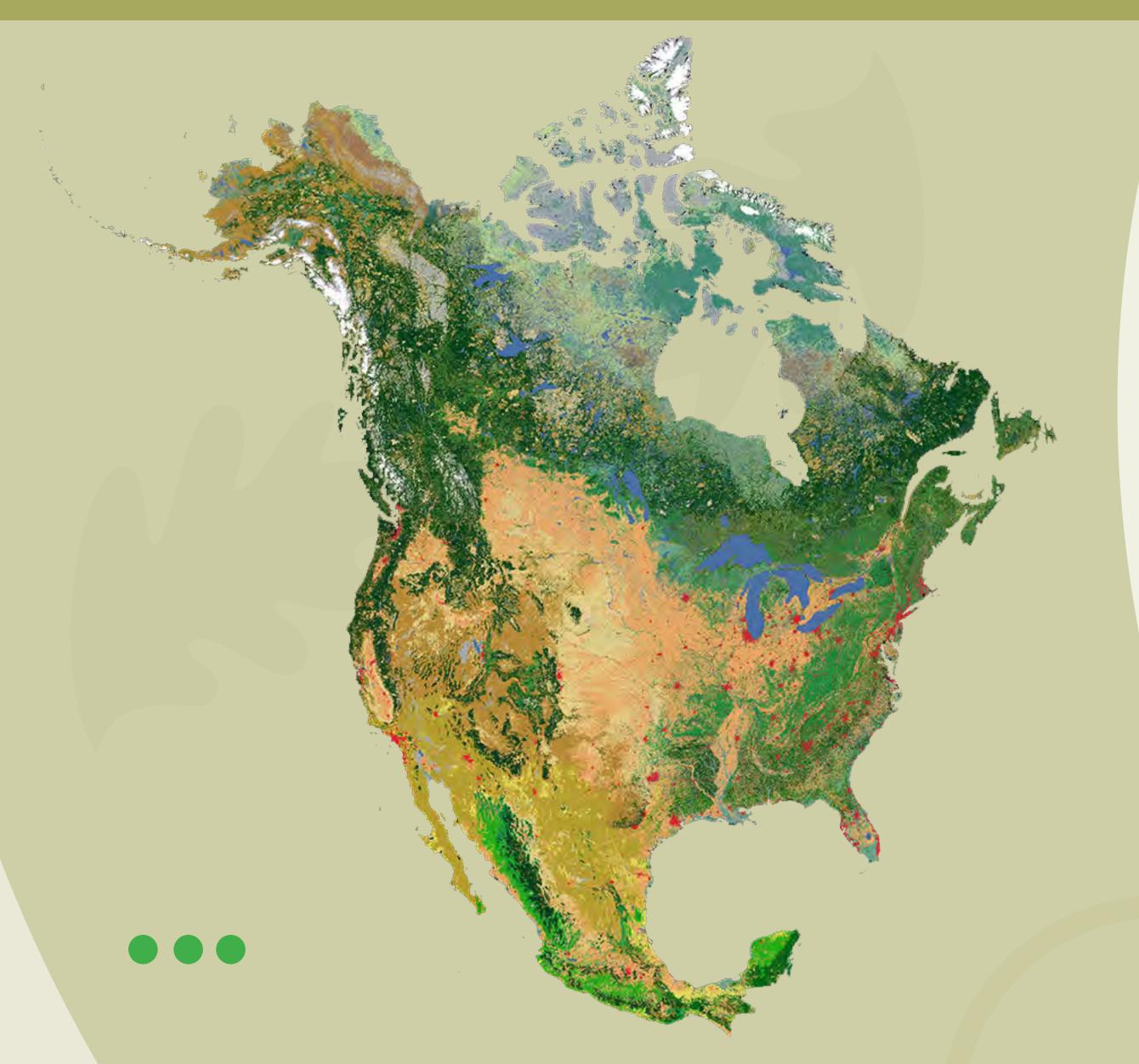
Pollinators support the reproduction of the majority of wild plants and 75 percent of crop species, and are crucial to food security, socio-economic wellbeing, and natural ecosystems. However, the number of pollinators has declined worldwide due to many causes, highlighting the urgent need for evidence-based, multi-stakeholder conservation actions. The CEC gathered baseline information and convened experts from the three countries to develop the first North American Pollinator Conservation Framework and set the stage for future regional collaboration on pollinator conservation.

Strengthening the Adaptive Capacity of Marine Protected Areas



Marine Protected Areas (MPAs) are key to maintaining ocean and coastal resilience, when they are adaptively managed to respond to threats such as ocean warming, species shifts, and disastrous events. Building on years of collaborative work in this area, the CEC developed a **new training module** and trained trainers and regional teams in using the CEC-developed **Climate Adaptation Toolkit for Marine and Coastal Protected Areas**. The CEC also worked with partners to support the North American Marine Protected Areas Network (NAMPAN) in developing an action plan to collaborate on shared priorities, provide training on coastal hazards, and update information on the state of blue carbon science and conservation in North America.

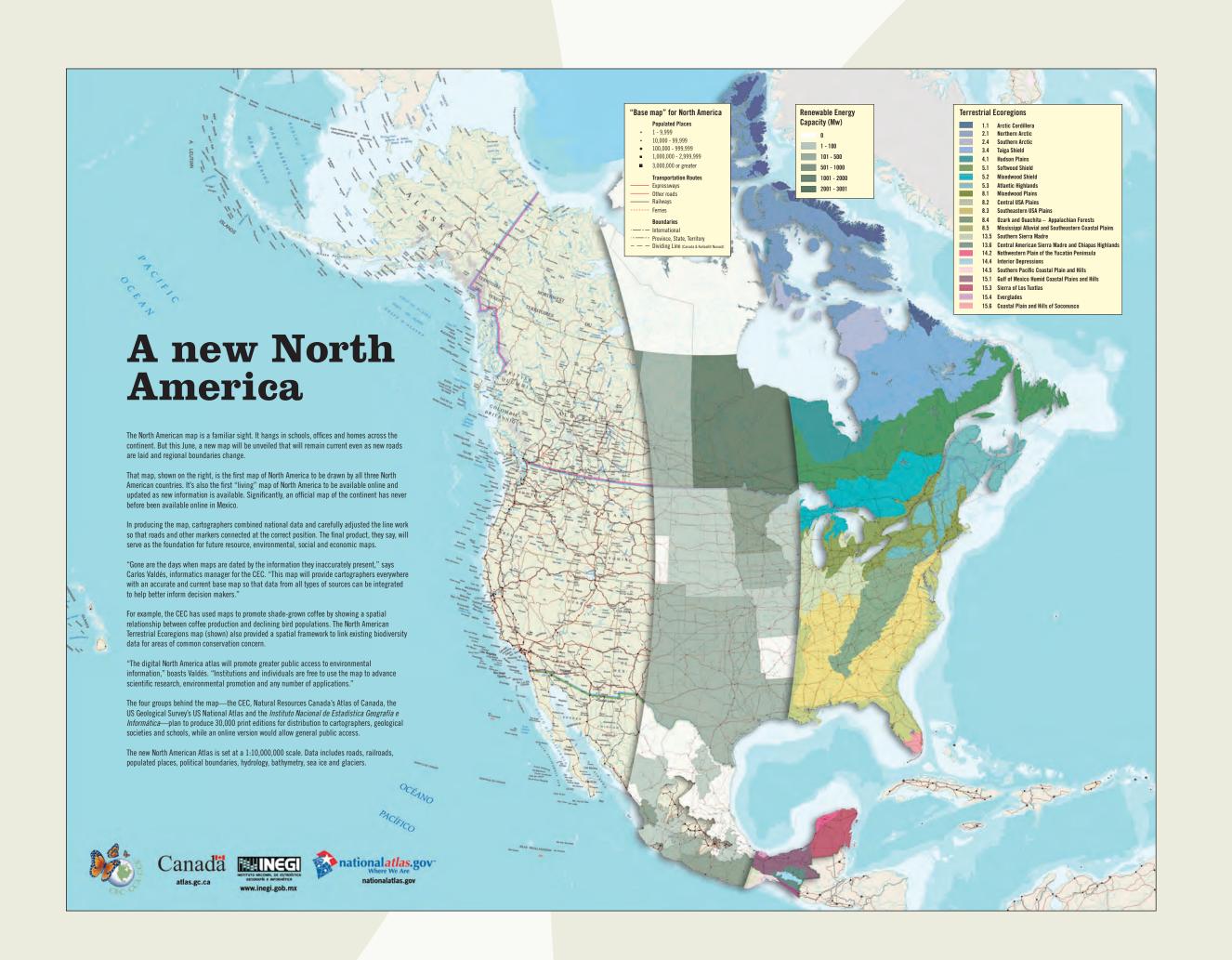
New Maps!





The CEC's North American Environmental Atlas and North American Land Cover Change Monitoring System initiatives create accurate cartographic data, including maps, documentation, and interactive map layers, to provide a continental perspective on cross-border environmental issues and support research and decision-making. These regional maps have been referenced in more than 63 publications, including journal articles, book chapters, conference presentations, doctoral dissertations, and governmental reports.

New Mapping Tools



In May 2020, we launched the new Atlas Viewer that resulted in a two-fold increase in visits to the Atlas website, compared to 2019. In December 2020, the CEC published the North American 2010-2015 Land Cover Change map at a 30-meter resolution and an ArcGIS Online StoryMap that demonstrates key stories of Our Changing Continent. These map products were featured in the May/June 2021 issue of the Canadian Geographic Magazine and selected for inclusion in the ArcGIS Living Atlas of the World. Finally, in May 2021, the CEC published an updated North American blue carbon map layer, and just last month published an updated North American Terrestrial Ecoregions map layer. These are available through the CEC's North American Environmental Atlas.



The Cost of Floods

Understanding the economic costs of floods and other extreme weather and climate events is central to addressing impacts, allocating adequate resources for monitoring and preparedness, and building resilient communities. At present, methods for estimating the costs of flood damage vary significantly across North America. In response to this issue, the CEC developed a standardized methodology for costing of floods, published in November 2020 in the International Journal of Disaster Risk Reduction (IJDRR). A second peerreviewed publication presenting case studies that apply the methodology to extreme flood events across North America will appear in the IJDRR later this year. The CEC also published a **policy brief**, containing recommended investigative approaches for addressing economic impacts of cascading hazards and including Indigenous perspectives and measures of flood impacts.





Improving Early Warning Systems for Droughts





The economic, environmental, and social impacts of drought and its hazards—including wildfires, floods, and landslides—are significant. While regionally integrated drought monitoring and early warning systems can help decision-makers mitigate negative impacts, there is uncertainty among local planners, emergency managers and others about which early warning indicators and planning tools are most appropriate to support drought management. To address these issues, the CEC developed locally-relevant indicators for North American climate regions (the Guide to Drought Indices and Indicators Used in North America, published In May 2021) and recommendations for improving access to and use of drought management tools.

Modernizing the Data Exchange System for Hazardous Waste Transfers





Pursuant to relevant regulations, Canada, Mexico and the United States control the import and export of hazardous wastes by exchanging notice and consent prior to shipping these wastes across their borders. This past year the CEC supported the countries in updating and improving their Notice and Consent Electronic Data Exchange (NCEDE) system, to facilitate the seamless exchange of notifications relating to cross-border movements of hazardous waste and respond to updates in regulations. Improving this exchange of information directly improves environmental protection and reduces related health risks through the more efficient monitoring and control of hazardous waste.

Preventing and Reducing Food Loss and Waste

About 168 million tons of food are lost or wasted every year in North America—enough to feed 260 million people year-round. As a key player in North America on this issue since 2015, this past year the CEC has been supporting an in-depth dialogue with business organizations across the North American food value chain to pilot test the CEC's Practical Guide on Why and How to Measure Food Loss and Waste and help the organizations measure their food loss and waste and identify opportunities to reduce it. This effort resulted in an improved version of the practical guide and additional resources to support stakeholders. Additionally, in September 2020, the CEC raised awareness with youth across North America on the impact of food loss and waste, and the many actions that can be taken at home to address it, through its highly successful multimedia campaign called "Let's Shrink Food Waste Mountain," which featured the CEC's Food Matters Action Kit with educational videos, compelling graphic images, and more. The campaign was launched in the pilot cities of Mérida, Montreal, and Seattle (Olympic Peninsula).





Engaging Indigenous Communities and Applying Traditional Ecological Knowledge



Members of the CEC's Traditional Ecological Knowledge Expert Group (Michael Vegh, Amelia Reyna Monteros Guijón, Kathy Hodgson-Smith, María del Pilar García Hernández and Cessia Esther Chuc Uc).

In September 2020, the CEC published four reports on the engagement of Indigenous communities and experts associated with Traditional Ecological Knowledge (TEK) in Canada, Mexico and the United States. These reports include summaries of relevant frameworks and mechanisms related to the engagement of Indigenous and local communities in the three countries, examples of successful integration of TEK by various institutions, and a review of CEC engagement of Indigenous Peoples and communities over the last 25+ years.

The CEC's Traditional Ecological Knowledge Expert Group (TEKEG) met regularly throughout the year via videoconference, to discuss the development of a Council-supported TEK initiative that will be initiated in fall 2021. They also held a joint meeting with the members of the Joint Public Advisory Committee (JPAC), and both committees agreed to collaborate more closely to advance the integration of TEK and Indigenous perspectives across CEC operations.





NAPECA

The North American Partnership for Environmental Community Action (NAPECA) is a community grant program that engages local and Indigenous communities in developing local environmental projects on priority topics identified by the Council. In the 2019–2020 NAPECA cycle, 11 community-based environmental initiatives across North America implemented CEC-funded projects aimed at helping communities adapt to extreme events and climate change. While some projects faced delays in implementation due to the COVID-19 pandemic, all 11 of the grantees have completed their projects.

Key highlights include:

- Resilient Power Puerto Rico brought solar power to the community of Llanos, Sector El Juicio, through *Armonia en la Montaña*, which ensures that the community will be able to guarantee continued access to food and reliably refrigerate medical supplies for the population.
- Flor de Maiz worked with communities in Mexico's Sierra Sur de Oaxaca region in developing an educational program to aid teachers and managers, including materials for schools in the region where training workshops were held, in raising awareness about the integral management of risk and vulnerability to disasters.
- The Confederacy of Mainland Mi'kmaq, employing FireSmart practices and traditional knowledge, implemented wildfire mitigation efforts within participating mainland Mi'kmaq communities In Nova Scotia.

Strengthening Youth Leadership

Created by the CEC in 2019, the EcoInnovation Network has been promoting the creation of innovation centers at academic institutions in North America, expanding linkages among them and providing direct opportunities and resources relevant to green growth entrepreneurship, innovation and sustainable design, to youth across North America, through educational exchanges and activities. Notable achievements this past year include the creation of the Youth Ambassador group comprising 10 members from the Network's universities, the exchange of Network resources to youth through online and in-person events (including the highly attended Green Entrepreneurship Workshop series), and the successful completion of a pilot project by a start-up to promote sustainable consumption habits within the student ecosystem through educational, technological and artistic initiatives.





CEC Youth Innovation Challenge



The fourth edition of the CEC Youth Innovation Challenge (2020) focused on social entrepreneurship for environmental sustainability. The CEC received close to 200 solutions and for the first time all three winning submitters were women. The winning solutions included: a food repurposing enterprise created to combat food waste, that has now built an online presence and launched an e-commerce store; a 100% biodegradable and compostable bioplastic, which has now advanced in its project stages thanks to CEC seed funding; and a plantbased synthetic haircare brand that replaces harmful hair products with compostable options. This product was recently launched commercially to help communities have access to healthy and sustainable hair extensions.





CEC Youth Innovation Challenge



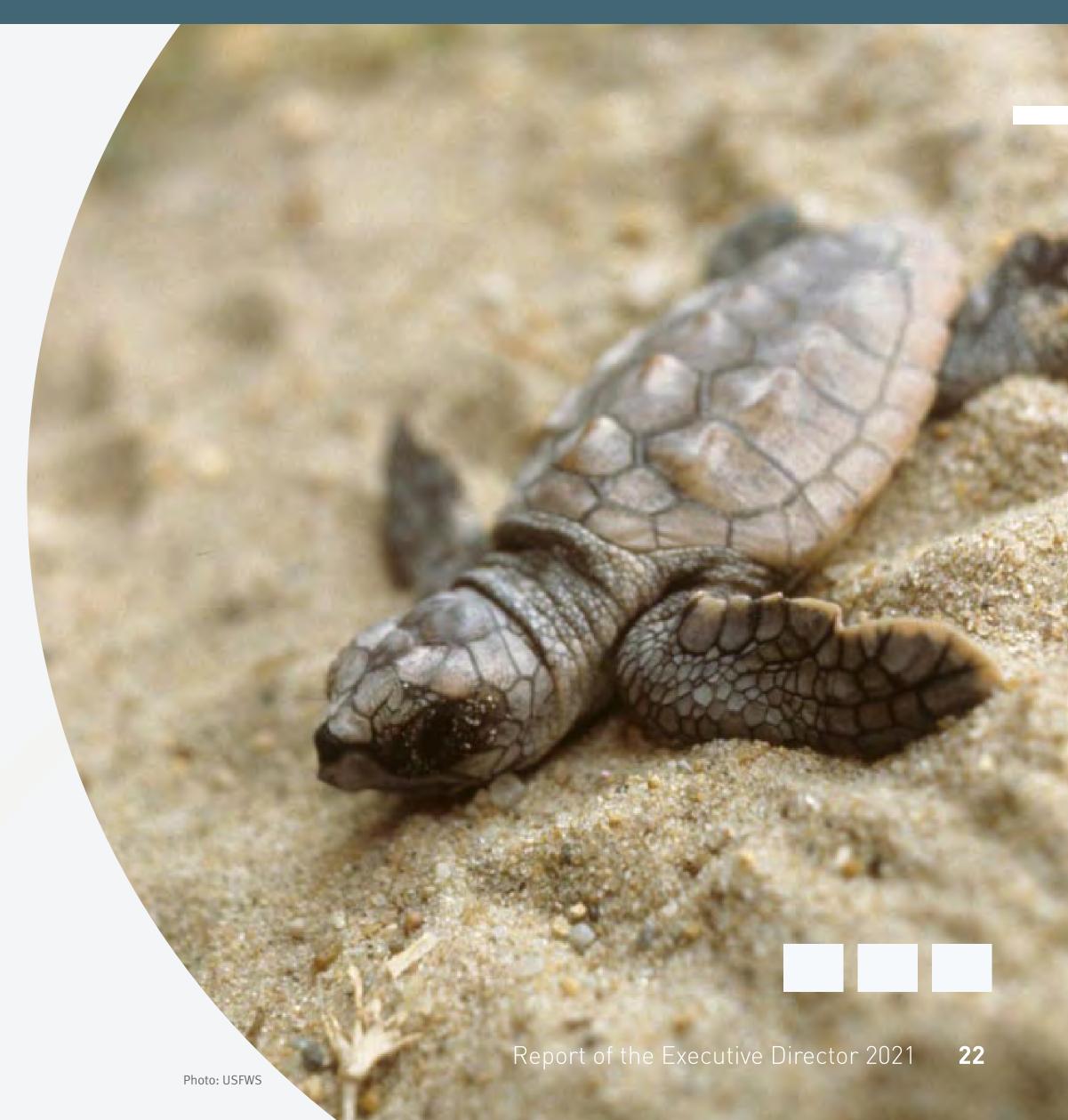
In June 2021, on World Environment Day, the CEC launched the fifth edition of the Youth Innovation Challenge. This year, youth were challenged to submit climate change and environmental justice innovations for resilient communities. For the first time ever, the CEC chose four winners for the Youth Innovation Challenge, and the award amount was increased to up to \$15,000 CAD, with Parties able to select more than one winner. The winning solutions included: an organic plastic waste disposal solution that uses microbes to degrade plastics in just weeks; a device that supports honey-producing bees, prevents ant infestations and provides water during drought and dry seasons, supporting marginalized communities that have seen declines in honeyproducing bees; a pilot continuous training program supporting producer families with tools and education to empower communities and local leaders to adopt sustainable community forestry production; and a solution for transforming 'fugitive' CO₂ emissions from power plants into sustainable solar commodities, particularly helping marginalized communities located near coal-fired plants. The winners have the opportunity to present their solutions during the Council public session.



Update on the Submissions on Enforcement Matters Process (SEM)

The Secretariat received two new submissions filed under Chapter 24 of the USMCA/CUSMA. In December 2020, the CEC received the first submission under the new trilateral trade agreement, regarding enforcement of protections for the loggerhead turtle (Caretta caretta) in Mexico. The submitters, two non-governmental organizations, assert that Mexico is failing to effectively enforce measures aimed at the protection and conservation of the loggerhead turtle under domestic environmental laws. The Secretariat issued a recommendation to develop a factual record with respect to the Loggerhead Turtle submission. A second submission was received with respect to allegations of noise, vibration, and air quality impacts in connection with the Fairview Container Terminal in Prince Rupert, British Columbia, Canada.

The SEM Unit is presently developing the *Metrobus Reforma* factual record, following Council instructions of December 2020.



Communications and Outreach



During the 2019-2020 Operation Plan cycle, CEC communications reached more people across North America than ever before. Our efforts to increase the visibility of the Commission and to raise awareness of key environmental challenges identified by the Council have helped drive action and engagement of a broad range of stakeholders. In particular, the CEC's social media presence has grown substantially as our events and engagement have become fully virtual. Notably, the CEC's Twitter presence has shown significant growth, reaching 104% more people across all languages than last cycle, and our total followers on Twitter have grown by 30%. Our total growth in social media followers has well exceeded our targets, with 18% growth in followers across the CEC's Twitter, Facebook, Instagram and LinkedIn platforms. Following a successful revamp of our media release and newsletter distribution strategy, open rates have nearly doubled over our baseline, rising to 38%. With the unique challenges posed by the COVID-19 pandemic, the CEC has been able to adapt successfully and leverage the opportunities that have also come with an increased digital presence.

Communications and Outreach

Over the last year, the CEC expanded its reach by actively promoting a more diverse and inclusive engagement of stakeholders and collaborators. The CEC strengthened its recognition as a model of collaboration and success by leading, co-organizing and being invited to 12 events with local, regional, and international organizations, reaching out to more than 2000 people and resulting in a significant increase in social media followers and partner organizations actively promoting the CEC's work on social media. The implementation of the first CEC stakeholder management platform allowed for the development of productive outreach strategies and facilitated direct communication targeted to underrepresented stakeholder sectors.



Communications and Outreach

During this year, the number of interested stakeholders increased 43% compared to the 2019 baseline. These CEC stakeholders represent various sectors of society—academia, government, international organizations, NGOs, and the private sector, as well as individuals representing youth and Indigenous communities. The CEC partnered with more than 21 national, regional, and international organizations in a wide variety of online events where the CEC was recognized for its role as convener, developer of tools, and facilitator of knowledge exchange. In a year of uncertainty and constant adaptation, the CEC successfully strengthened in its mission to raise public awareness of environmental priorities in North America.



