

U.S. Governmental Advisory Committee Independent Federal Advisors on the North American Agreement on Environmental Cooperation

April 27, 2020

Committee Members

Sally Ann Gonzales Chair Arizona

> Patty Acomb Minnesota

Cornelius Antone Arizona

> Elisa Arias *California*

Marina M. Brock Massachusetts

Leonard Drago Arizona

Hector F. Gonzalez Texas

Suzanne E. Hanson Minnesota

Debra L. Kring Kansas

Julia S. Moore Vermont

Erich A. Morales Texas

C. Nazaret Sandoval *Michigan*

Kelly C. Wright Shoshone-Bannock Tribes The Honorable Andrew R. Wheeler Administrator U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, D.C. 20460

Dear Administrator Wheeler:

The U.S. Governmental Advisory Committee (GAC) to the U.S. Representative to the North American Commission for Environmental Cooperation (CEC) held its 53rd meeting via virtual video platform on April 10, 2020. This letter represents our advice resulting from that meeting.

The main objective of our meeting was to provide you with advice on the Draft 2021-2025 Strategic Plan of the Commission for Environmental Cooperation. Our meeting included presentations on U.S Priorities on the CEC, from Jane T. Nishida, Principal Deputy Assistant Administrator for EPA's Office of International and Tribal Affairs (OITA) in conjunction with Mark Kasman, Director of the Office of Regional and Bilateral Affairs, EPA, OITA. The committee also received an overview of the Draft CEC Strategic Plan from CEC Executive Director Richard A. Morgan, with support from Nadtya Hong, Acting CEC Coordinator, EPA, OITA. We also received a report on activities of the CEC's Joint Public Advisory Committee, from its Chair, Robert Varney.

The meeting was opened by a welcome from Federal Advisory Committee Management Division (FACMD) Director Monisha Harris, who provided an update on FACMD activities. The GAC deeply appreciates the excellent support provided by the FACMD and thanks Director Harris, NAC/GAC Designated Federal Officer, Oscar Carrillo and all the FACMD staff for their support, before, during and after the meeting. We hope this letter will be useful in your deliberations with your counterparts in the CEC Council.

Chair Sally Ann Gonzales Tel. 602-926-3278 sgonzales@azleg.gov

Designated Federal Officer Oscar Carrillo Tel. 202-564-2294 carrillo.oscar@epa.gov

Sincerely,

A Somala

Sally Ann Gonzales, Chair Governmental Advisory Committee

cc: William Charles "Chad" McIntosh, Assistant Administrator, Office of International and Tribal Affairs (OITA), EPA Jane T. Nishida, Principal Deputy Assistant Administrator, OITA, EPA Monisha Harris, Director, Federal Advisory Committee Management Division FACMD, EPA Oscar Carrillo, Designated Federal Officer, FACMD, EPA Mark Kasman, Director, Office of Regional & Bilateral Affairs, OITA, EPA Nadtya Hong, Acting CEC Coordinator, OITA, EPA Robert Varney, Chair, Joint Public Advisory Committee Richard A. Morgan, Executive Director, CEC Members of the U.S. National and Governmental Advisory Committees

Governmental Advisory Committee (GAC) to the U.S. Representative to the Commission for Environmental Cooperation (CEC)

Advice 2020 – 1: CEC 5-Year Draft Strategic Plan (April 10, 2020 Meeting)

The April 2020 Charge Questions to the Governmental Advisory Committee (GAC) seeks advice on four questions.

- 1. Under each strategic priority of the draft CEC 2021-2025 CEC Strategic Plan,
 - What are the environmental issues and challenges facing North America over the next five years?
 - What are the opportunities for the CEC, considering the organization's mission and mandate, to address these issues/challenges over the next five years?
- 2. How can the CEC amplify its work through partnerships in North America?
- 3. Where in this Strategic Plan do you see opportunities for enhanced roles for stakeholders and citizens?
- 4. General Comments and Recommendations.

Note: In preparation for the GAC discussions, which were held online over a four hour period rather than a two-day meeting, GAC members completed an online survey to select the top three related issues for each of the five strategic priorities of the CEC Strategic Plan. A compilation of results was used to guide the discussion related to the prioritized issues for each strategic priority.

GAC Advice on CEC 5-Year Draft Strategic Plan

Below are the top three priority issues of interest identified by the GAC, for each of the five Strategic Priorities in the draft CEC's Strategic Plan, 2021-2025.

First, under Strategic Priority #1, Circular Economy and Resource Efficiency, the GAC identified the three top issues of interest, out of a list of eight and ranked them in order of importance as follows:

- 1. Resource efficiency collaboration opportunities to do with materials, especially addressing plastics and micro-plastics, and cooperation associated with the trans boundary movements of plastic waste destined for recovery operations;
- 2. Sustainable production, resource and energy efficiency practices in the private sector; and
- 3. Environmental and social dimensions of agricultural practices (agroecology and other innovative approaches), including alternatives for the chemical control of pests, risk prevention of pesticides and pollinator conservation.

To achieve a sustainable economic growth and global competitiveness in North America we need to bridge the gap from laboratory to market; and to simplify the challenge of improving resource efficiency we need to implement the concept of "Integrated Resources" by grouping manufacturing resources into distinct categories. Most industrial processes use some combination of the following six resources: raw materials, water, chemical agents, equipment,

process byproducts or wastes, and packaging. Efficient use of these resources results in cost savings and reduced pollution.

The CEC could help in bridging the gap from laboratory to market by bringing together manufacturers, non-profit entities, research organizations and institutions of higher education to identify challenges, stimulate innovation, and develop cutting edge materials, processes and information technologies needed for an efficient, and competitive manufacturing sector. Through these partnerships the CEC can act on its shared responsibility for effective environmental stewardship and sustainable development.

The CEC could address the above cited environmental issues in partnership with the Natural Resources Canada, Mexico's Comisión Nacional para el Uso Eficiente de la Energía, and the US Department of Energy by pursuing the model and program approach followed by the Office of Energy Efficiency and Renewable Energy - Advanced Manufacturing Office (AMO). The CEC could establish subprograms approach including research and development(R&D) projects, R& D consortia and early-stage technical partnerships with laboratories, companies (for-profit and not-for profit), state and local governments, and universities through competitive, merit reviewed funding opportunities designed to investigate new manufacturing technologies throughout the three country region.

AMO's implementation of the cited initiatives include projects where manufacturers and water utilities have worked together to improve energy efficiency and competitiveness in the industrial sector, saving money in the process. Also, the involvement of college students in the usage of industrial assessment tools to identify energy-saving ideas as well as identifying streams that can be reused in other operations/process instead of disposing them (i.e. heat losses, saving water by reusing wastewater). Energy users across the country are using combined heat and power (CHP) to generate reliable, on-site electric power and thermal energy to meet their needs.

General Comments:

Due to logistics, inconsistent waste streams, and lack of reliable information, recycling markets are very limited and diminishing resulting in greater extraction and use of virgin materials while increasing improper disposal of used goods including plastic materials and others such as glass and electronic wastes.

Moves toward more fuel efficient and electric vehicles, plus falling prices for oil, gas, and other carbon-based fuels will likely result in producers trying to find other markets for these natural resources outputs.

Inefficient and wasteful use of resources from extraction, to manufacture, transport, and improper disposal at end-of-life cycles diminish each nations' ability to sustain finite resources critical to national needs including manufacturing, infrastructure and national defense as well as creating significant threats to human health and environment due to improper disposal at product end-of-life.

Greater coordination should be implemented among groups with divergent approaches, e.g. groups representing commercial enterprises, and groups representing non-commercial interests such as environmental education groups, to foster win-win solutions and to highlight the benefits of more efficient resource utilization as well as the costs of inefficient resource utilizations.

Regulatory schemes must adopt more of a reward-based rather than punitive-based scheme to

encourage innovative strategies which are good for the environment and good for continued economic growth and employment of a range of people.

There must be a greater emphasis on promoting common understanding of circular economy concepts so that policies and regulations are not seen as unjustified and unnecessary impediments to economic and social wellbeing, but rather seen as vehicles of innovation and linkage for the mutually compatible goals of economic and social advancement at all levels as well as protection of public health and a source of sustainable resources which may be used for the common benefit.

Second, under Strategic Priority #2, Clean Air, Land and Water, the GAC identified the three top issues of interest, out of a list of ten and ranked them in order of importance as follows:

- 1. Scientific, technical and policy issues related to improving air quality, including information exchange and regulatory or policy approaches associated with pollutants of mutual concern such as particulate matter (including black carbon), ground-level ozone and its precursors, and methane;
- 2. Comparability, quality, comprehensiveness, timeliness, and accessibility of pollutant release data and information; and
- 3. Adoption of sustainable water practices in key economic sectors (agriculture, industry, mining), including trans boundary environmental impacts.

The CEC Strategic Plan acknowledges that significant reductions in air pollution have been achieved in the past decades; however, air quality is still a significant concern as smog-forming pollutants and climate pollutants continue to contribute to climate variability, and affect human health, water quality, biodiversity, agriculture, and infrastructure.

On March 31, 2020, the U.S. Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) finalized new standards for corporate average fuel economy (CAFE) and greenhouse gas (GHG) emissions for Model Years 2021 through 2026 passenger cars and light trucks (Safer Affordable Fuel-Efficient (SAFE) Vehicle Rule Part II). The rule takes effect 60 days after publication in the Federal Register, which is anticipated in April 2020. Part I of this rule became effective on November 26, 2019 and rescinded waivers authorizing California to set more stringent greenhouse gas standards and to enforce its Zero Emission Vehicles (ZEV) mandate. The CAFE and GHG emissions standards established by the SAFE Vehicle Rule Part II will increase in stringency by 1.5% per year from Model Year 2020 levels over Model Years 2021-2026. However, these standards are less stringent than the 5% annual increase required by the rule promulgated in 2012. California has set its own more stringent vehicle pollution rules under the waiver for many years. New York, Massachusetts, Vermont, Maine, Pennsylvania, Connecticut, Rhode Island, Washington, Oregon, New Jersey, Maryland, Delaware, and Colorado also have adopted California's greenhouse gas emissions standards. Canada has also pledged to align its gas mileage targets to match the more stringent standards.

Based on 2018 U.S. EPA data, the <u>transportation sector</u> is the top source of greenhouse gas emissions in the U.S. The new fuel economy and emissions standards will have a negative impact on the nation's carbon footprint. In addition, nitrous oxide (NOx), a smog-forming

pollutant and precursor to ozone, can cause an indirect effect on greenhouse gases. The CEC has a relevant role to play in continuing to reduce smog-forming pollutants to achieve clean air standards and in reducing vehicle emissions that contribute toward greenhouse gas emissions.

Next, sewage infrastructure inadequacies have created ongoing sewage pollution problems on both sides of the California-Mexico border. The Tijuana River Watershed is a binational watershed across the California-Mexico border. A large portion of the watershed (approximately 75%) is within Mexico. It drains into the Tijuana River Estuary in the U.S. and ultimately to the Pacific Ocean in the City of Imperial Beach in San Diego County. The United States-Mexico-Canada Agreement Implementation Act (<u>USMCA Implementation Act</u>) includes a provision in Section 821 Border Water Infrastructure Improvement Authority that direct the U.S. EPA, in coordination with eligible public entities, to carry out the planning, design, construction, and operation and maintenance of high priority treatment works in the portion of the Tijuana River watershed located in the United States to treat wastewater (including stormwater), nonpoint sources of pollution, and related matters resulting from international transboundary water flows originating in Mexico.

The CEC has a relevant role to play in supporting and leveraging partnerships with the International Boundary and Water Commission, the Corps of Engineers, the North American Development Bank, the Department of State, state governments, affected local governments, affected tribal governments, and regional water authorities, among other stakeholders and the public.

General Comments

North American freshwater resources will be threatened by climate variability which negatively affects the timing, location, and type of precipitation events. There are no substitutes for safe reliable water supplies. As such, all strategies and policies should recognize water as the paramount natural resource they represent and be afforded the regulatory safeguards one could expect for a resource critical to survival.

Population shifts to more arid areas will exacerbate the demand for water supplies which will become increasingly problematic. Changes in land use will also significantly negatively affect water resources.

Urban demands, including municipal and industrial uses will increase their competition with agricultural demands including critical food production.

Many water markets continue to reflect the costs of water production rather than the value of water. Policies must be adopted which encourage the more intensive use of already available resources to gain greater output with less input. For example, the promotion of indoor vertical farming which results in greater agricultural production with significantly more efficient use of water, land, and energy resources.

Regulatory processes should be used to encourage both innovative and traditional-knowledge based mechanisms to enhance water quality and preserve both surface and ground water resources. For example, encouraging the use of more natural pollution control methods such as artificial and natural wetlands while also discouraging use of impervious surfaces where possible. This one change could reduce thermal warming, create more wildlife habitats, reduce use of chemicals needed to treat wastewater, and avoid use of more consumptive products such as asphalt and concrete needed for the industrial wastewater treatment processes.

Standards may be adopted so producers and consumers are aware of the relative consumptive use of water needed to produce various agricultural products including fowl, livestock, and plant-based foods.

Third, under Strategic Priority #3, Shared Ecosystems and Species, the GAC identified the three top issues of interest, out of a list of four and ranked them in order of importance as follows:

- 1. Conservation and cooperative management of connected and priority habitats, such as grasslands and wetlands, among others;
- 2. Conservation, restoration, and sustainable management of coastal and marine ecosystems, including sustainable fisheries management, nature-based solutions to address climate impacts to fisheries, tourism, and other economic sectors promoting connectivity and useful monitoring; and
- 3. Effective management of protected areas (terrestrial and marine); conservation and sustainable management of forests, recognizing their role as nature-based solutions to climate variability, the environment and economic benefits derived from trade in sustainably-harvested wood products.

Fourth, under Strategic Priority #4, Shared Ecosystems and Species, Resilient Communities, the GAC identified the three top issues of interest, out of a list of five and ranked them in order of importance as follows:

- 1. Best practices and lessons learned for green infrastructure and nature-based solutions for sustainable cities;
- 2. Co-benefits of nature-based climate solutions for public health and ecosystems in selected sectors (e.g., urban planning); and
- 3. Environmental and public safety impacts of climatic events, such as economic, infrastructure and agricultural damage due to rising water levels, to improve emergency planning.

One of the environmental issues that had become a challenge for the Great Lakes region are the impacts of climate change on Great Lakes water levels. The records high water levels on the Great Lakes which have been observed in 2019 and continue to be seen in early 2020, are destroying coastlines, swallowing beaches and houses, swamping sewer systems, flooding roads and public buildings, turning farm fields into lakes; as well as creating public health and safety concerns. This has been a devastated situation for the region and the economic impact has been severely understated.

Often overlooked is the role that nature and nature-based solutions to improve emergency planning. Along our coasts, natural features like sand dunes and marshes or coral reefs and oyster reefs reduce wave heights, absorb storm surges and help stop erosion. The CEC could support a more resilient coastal ecosystem by training coastal marine protected areas (MAP) managers and providing best-practice guides on integrating disaster risk reduction and nature-based solutions for flood and erosion control into coastal ecosystem planning and management.

One of the options to address the cited concerns is for the CEC to continue with the efforts to consolidate the collaborative plan involving the North America Protected Areas Network (NAMPAM) which connects resource agencies, MAP managers and other experts from the United States, Canada and Mexico. CEC should continue offering training in using the CEC's climate adaptation toolkit to help coastal protected managers to evaluate the vulnerability of their sites to climate variability, identify appropriate adaptation strategies and learn about those strategies through case studies, reports and other resources. The Great Lakes situation described above could be discussed and evaluated as a case study to find answers to the questions regarding the costs and benefits of actions and strategies to avoid damages to assets from lake levels rise and/or coastal flooding.

Fifth, under Strategic Priority #5, Effective Enforcement of Environmental Laws, the GAC identified the three top issues of interest, out of a list of five and ranked them in order of importance as follows:

- 1. Regional coordination and tracking of trans boundary movements of hazardous wastes, including hazardous recyclables for environmentally sound management in support of bilateral and multilateral agreements related to waste;
- 2. Priority regional actions to prevent and curb wildlife trafficking, strengthen value chains, improve traceability of CITES Appendix II species, enhance capacity of enforcement officials to better identify CITES species in trade; and
- 3. Exchange of information on ways to ensure meaningful public participation, including by supporting environmental defenders.

General Comments:

The coronavirus pandemic has brought a new perspective to the need for intergovernmental cooperation in any efforts to address the strategic priorities identified in this letter. This provides us with challenges and opportunities probably un-matched in our recent lifetimes. Given the vast and deep economic devastation inflicted upon all aspects of local, regional, national, and international economies, it would be irresponsible not to treat matters relating to climate variability and the environment with the same sense of urgency as they present a not-too-dissimilar threat to public health and wellbeing.

Any and all solutions must integrate an effective regulatory framework which protects and enhances natural resources and public health. In addition, the CEC should provide ample and accessible opportunities for people of all walks of life i.e. TEK and underserved communities, to engage meaningfully in the solutions in order to realize significant direct benefit in both the long and short term. Each of the proposed strategic priorities while separate and distinct is also a critical component of the other. Ultimately, it is critical that all the strategies be designed not just for long term results but also contain opportunities for immediate positive results outweighing short term costs.