



OFFICIAL MEETING OF THE NATIONAL AND GOVERNMENTAL ADVISORY COMMITTEES (NAC/GAC)

SUMMARY

December 5, 2024

San Xavier District Community Center 2018 West San Xavier Road Tucson, AZ 85746 and Via Zoom Virtual Platform

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Thursday, December 5, 2024

Call to Order and Introductions

Oscar Carrillo, National Advisory Committee (NAC) and Governmental Advisory Committee (GAC) Designated Federal Officer (DFO), Federal Advisory Committee Management and Oversight Division (FACMOD), Office of Inclusive Excellence (OIE), Office of Mission Support (OMS), U.S. Environmental Protection Agency (EPA)

Mr. Oscar Carrillo, NAC/GAC DFO, FACMOD, OIE, OMS, EPA, welcomed the attendees to the joint meeting of the NAC and GAC. He called the meeting to order and thanked the NAC/GAC Chairs and Vice-Chairs for assisting in planning the meeting. He thanked Ms. Jane T. Nishida, Assistant Administrator, Office of International and Tribal Affairs (OITA), EPA; Mr. Rafael DeLeon, Principal Deputy Assistant Administrator, OITA, EPA; Mr. Mark Kasman, Director, Office of International Affairs (OIA), OITA, EPA; Ms. Monisha Harris, Deputy Director, OIA, OITA, EPA; Dr. Lesley D'Anglada, General Standard Committee Representative, Commission for Environmental Cooperation (CEC) and Senior Advisor, North America Program, OIA, OITA, EPA; and Dr. Veronica Aponte-Morales, International Environmental Program Specialist, OITA, EPA, for their efforts. Mr. Carrillo expressed appreciation to the entire FACMOD team, including Ms. Robbie Young-Mackall, Director, FACMOD, OIE, OMS, EPA. Mr. Carrillo thanked the members of the CEC, including Mr. Jorge Daniel Taillant, Executive Director, CEC, and Dr. Estaban Escamilla Prado, Chair, Joint Public Advisory Committee (JPAC), for their support. He invited the NAC and GAC members to introduce themselves.

Invocation

Austin Nunez, San Javier District Council and Tohono O'odham Nation, Chair of the GAC

The meeting opened with an invocation from Mr. Austin Nunez (San Javier District Council and Tohono O'odham Nation), Chair of the GAC, who offered reflective words to set a tone of unity and purpose. The invocation emphasized the themes of protecting the environment and human health and uplifting those most in need.

Opening Remarks

Robbie Young-Mackall, Director, FACMOD, OIE, OMS, EPA

Ms. Young-Mackall noted that, in addition to supporting the NAC and GAC, FACMOD provides oversight to the other 23 EPA Federal Advisory Committees. She welcomed the NAC and GAC members and expressed appreciation for their intellectual investment in advising the EPA Administrator on issues related to the CEC. Ms. Young-Mackall thanked Mr. Nunez for hosting the meeting on tribal lands in southwestern Arizona. She also expressed appreciation to Mr. Carrillo, FACMOD staff, Ms. Nishida, Mr. Kasman, Dr. D'Anglada and Dr. Aponte-Morales for their efforts in support of the NAC and GAC.

Welcome and Overview of Agenda

Vincent R. Nathan, Ph.D., Center for Houston's Future, Chair of the NAC Austin Nunez, San Javier District Council and Tohono O'odham Nation, Chair of the GAC

Mr. Nunez welcomed the meeting attendees. Dr. Vincent R. Nathan (Center for Houston's Future), Chair of the NAC, reminded the meeting participants that the NAC and GAC advise the U.S. Representative to the CEC (the EPA Administrator) on the Commission's strategic plan for improving the environment and health conditions of Canada, Mexico and the United States. Dr. Nathan reviewed the agenda for the meeting.

Update on U.S. Priorities for Council Session and Guidance

Lesley D'Anglada, Dr.P.H., Senior Advisor, North America Program, OIA, OITA, EPA

On behalf of Mr. Kasman, Dr. D'Anglada thanked the FACMOD team for organizing the meeting, the NAC and GAC members for advising the Agency on CEC matters, and the guest speakers for their participation. She presented updates on U.S. and EPA priorities related to climate change and introduced the advice letter charge. Dr. D'Anglada reviewed the CEC's progress on climate change adaptation and environmental justice (EJ) in 2024, its 30th anniversary year.

EJ has become the cornerstone of EPA and CEC efforts to mitigate climate change. National- and international-level efforts are ongoing to ensure that climate adaptation and resilience strategies are inclusive and equitable while providing communities with the tools and resources needed to thrive. The CEC's EJ4Climate Grant Program funds projects to support underserved, vulnerable and Indigenous communities in preparing for climate-related impacts in Canada, Mexico and the United States. Since its establishment in 2021, the program has supported 43 projects addressing environmental challenges, including renewable energy solutions, biodiversity protection and disaster resilience. During its 31st Council Session in June 2024, the CEC launched the fourth EJ4Climate funding cycle, which focused on community-led education programs to increase knowledge of EJ and climate adaptation. The CEC committed \$1.5 million to the cycle, which received a record 482 proposals. The grantees will be announced in spring 2025. Additionally, 10 new projects were funded through the North American Partnership for Environmental Community Action (NAPECA) grant program (which seeks to improve environmental conditions at the community, Indigenous, local and regional levels.) Since its inception, NAPECA has funded a total of 100 projects.

Under the guidance of U.S. Chair Dr. Octaviana V. Trujillo in 2024, the CEC expanded its efforts with several new initiatives. The CEC contributed C\$500,000 to establish the new North American Environmental Justice Action Center (NAEJAC), a resource platform that will unite community representatives, advocates and public officials across North America to share and leverage best practices and tools for EJ. The NAEJAC platform also aims to identify opportunities to promote equitable and inclusive EJ actions across North America and support the exchange of knowledge and best practices to address inequities in historically marginalized and disadvantaged communities. Other new activities included supporting monarch butterfly science, updating a data exchange system for hazardous waste transfers, promoting food waste reduction through large-scale public events, and sharing best practices for environmentally sound management of used lead acid batteries.

Dr. D'Anglada noted that the CEC's <u>2021–2025</u> Strategic Plan serves as a roadmap to guide high-level priority areas and crosscutting approaches to advance environmental protection and sustainable development in North America. The development of the 2026–2030 Strategic Plan will begin in 2025, and the CEC is requesting input from the NAC and GAC to shape the plan and ensure that it is responsive and forward-looking. Dr. D'Anglada reviewed the charge questions, which included (1) a request for updates to the six key pillars of the 2021–2025 Strategic Plan and (2) a solicitation of input regarding emerging environmental challenges beyond the triple planetary crisis of climate change, pollution and biodiversity loss.

Question and Answer Period

Dr. Aponte-Morales asked for more information about NAPECA-funded projects on climate adaptation. Dr. D'Anglada noted several initiatives on climate adaptation that currently are being developed for debut in 2025. One completed project involved fostering urban biodiversity through urban agriculture in Tucson, Arizona. Further details are available on the <u>NAPECA Projects website</u>.

CEC Update: Strategic Plan Overview

Jorge Daniel Taillant, Executive Director, CEC

Mr. Taillant shared insights into the CEC's current strategic plan and reviewed the process for updating it. He highlighted the importance of input from the NAC and GAC for ensuring that the new strategic plan addresses Canadian, Mexican and U.S. priorities on Indigenous issues, climate change, EJ and biodiversity. Mr. Taillant described the climate, biodiversity and pollution crises associated with the Anthropocene, which are resulting in persistent inequalities and intersectional vulnerabilities, and emphasized the importance of incorporating traditional ecological knowledge (TEK) and ways of relating to nature into plans for dealing with these crises. Mr. Taillant also emphasized the need for continuity in strategic objectives across changing political contexts—for example, the new government in Mexico or the incoming U.S. administration—as well as the importance of new technology and innovative approaches to achieving the visionary change required to address an accelerating triple planetary crisis.

The CEC's 2021–2025 Strategic Plan rested on six pillars: (1) clear air, land and water, (2) preventing and reducing pollution in the marine environment, (3) circular economy and sustainable materials management, (4) shared ecosystems and species, (5) resilient economies and communities, and (6) effective enforcement of environmental laws. The success of the strategic plan depended on the implantation of two crosscutting approaches—innovative and effective solutions and diverse and inclusive stakeholder engagement and public participation.

Mr. Taillant reviewed the timeline for developing the CEC's next strategic plan. Technical input will be solicited from December 2024 to June 2025. The strategic pillar definitions will be finalized beginning in May 2025 and announced at the June 2025 Council Session. An assessment of efforts under the 2021–2025 Strategic Plan will be conducted in October 2025, and the new strategic plan will be drafted in November 2025, before further evaluation at a planning retreat scheduled for January 2026. The first draft of the plan will be shared with the parties, JPAC and the TEK Expert Group (TEKEG) in spring 2026, when an online public consultation on the draft plan will be convened. The goal is to incorporate the feedback and finalize the new strategic plan so that it can be endorsed and announced at the June 2026 Council Session. Themes for North American action on the triple crises that have emerged at recent meetings include information/participation/access to justice, data sovereignty and artificial intelligence (AI), Indigenous rights and reconciliation, alternative relationship economic models, just energy transitions, the role of the private sector, issues of risk and insurance, and Indigenous trade networks.

<u>Reaching Horizon 2030: An Environmental Outlook for North American Cooperation</u> (H-2030) is a first step in the process of developing the strategic plan. The H-2030 project is an initiative to assess significant environmental challenges in the coming years and identify trilateral action through consulting with and convening diverse partners across North America. The goal is to establish a network of key government and non-government environmental actors, develop a comprehensive outlook report, launch three pilot project proposals to test new collaborative areas, and identify engagement activities and channels for the dissemination of outreach resources. H-2030 priority topic areas and work streams to address the triple crisis include earth observation technologies and other geographic information system tools (climate change), sustainable transportation (pollution), and ecosystem services and sustainable use and management of biodiversity (biodiversity loss). Crosscutting themes are TEK, EJ, subnational governance and action, and corporate social responsibility and private sector engagement.

Mr. Taillant reminded the meeting participants of key environmental priorities listed in Chapter 24 of the United States–Mexico–Canada Agreement (USMCA). He noted areas that were addressed in the CEC's 2021–2025 Strategic Plan (e.g., protection of the ozone layer, air quality, sustainable forest management and trade), as well as Chapter 24 gaps (e.g., corporate social responsibility and responsible business

conduct, invasive alien species, fisheries subsidies) that could be addressed in the new strategic plan. Mr. Taillant stated that activities related to the 2026 USMCA review have been initiated. Changes to the treaty might occur, and emerging priorities that might be incorporated into a new or revised USMCA should be considered.

Question and Answer Period

Dr. Nathan expressed appreciation for the CEC's contribution to conserving, protecting and enhancing the environment in North America.

Mr. Zeek Ojeh (Zalmar, Inc.), NAC member, asked about expanding the USMCA to other North American countries. Mr. Taillant described his efforts to publicize CEC activities via such forums as United Nations (UN) Conference of the Parties (COP) meetings on climate change and biodiversity and meetings of the UN Environment Programme's North America Office and UN Economic Commission for Latin America and the Caribbean. He noted interest in engaging with the CEC on issues related to EJ. The CEC also guides smaller countries on its <u>Submissions on Enforcement Matters</u> (SEM) process for enforcing environmental laws. Mr. Taillant remarked that the inclusion of additional countries could be discussed during the upcoming USMCA review.

In response to a question from Mr. Gerald Wagner (Blackfeet Nation), GAC member, about expectations for the incoming administration concerning climate change policy, Mr. Taillant noted budget issues and other challenges during the first Trump administration. Still, he emphasized that USMCA is a product of that same administration that managed to maintain the principles of the North American Free Trade Agreement. Mr. Taillant added that priority areas often are rearranged in response to administration changes. The goal is to find common ground for collaborative efforts.

Regarding transportation being a focus of H-2030's pollution pillar, Dr. Aponte-Morales asked whether transportation is a major contributor to pollution across the three countries. Mr. Taillant affirmed that transportation is a concern across Canada, Mexico and the United States. He noted challenges associated with the transition to renewable energy and electric vehicles, which are not the best solutions for every community. Mr. Taillant added that transportation was included as a focus area because environment ministries in all three countries decided that it was a priority. Dr. Aponte-Morales noted that the H-2030 priorities aligned well with those of *The <u>Global Risks Report 2024</u>* published by the World Economic Forum (WEF).

Mr. Stephen Etsitty (Navajo Nation Environmental Protection Agency), GAC member, asked about CEC efforts related to nuclear energy. He expressed concerns about increased domestic uranium production on Navajo lands, which historically was associated with severe health issues, water contamination and the exacerbation of other inequities in the Navajo community. Mr. Etsitty noted that, although mining technology has evolved since the 20th century, no clear mechanisms exist for the proper disposal of nuclear waste. Mr. Taillant responded that the parties have not discussed the issue of nuclear energy in the 2 years that he has served as Executive Director. However, challenges related to energy choices and their effects on Indigenous communities are a common topic of discussion.

JPAC Report Out

Estaban Escamilla Prado, Ph.D., Chair, JPAC, CEC

Dr. Prado reported on JPAC activities in 2024. In January, the five main projects were announced at the EJ4Climate Selection Committee Meeting. Dr. Prado noted that the process allowed him to witness the climate-change impacts faced by several communities across the three countries. He highlighted the need for continued support so that the communities can respond to these environmental challenges. Subsequently, and in line with the Environmental Cooperation Agreement, JPAC forwarded its 2024

activity plan to the Council. JPAC highlighted its intention to continue strengthening the collaboration between TEKEG and the Alternate Representatives. The plan also focused on three major themes: (1) trade and environment; (2) climate crisis and water; and (3) integration of gender perspectives, equity, diversity and inclusion into all JPAC activities.

In March, Drs. Prado and Trujillo participated in a working meeting on the principles of TEK in North America, organized by TEKEG. The roundtable, held at the CEC headquarters in Montreal, Quebec, brought together a selection of external experts on TEK and Indigenous rights to discuss essential considerations when working with Indigenous peoples. The meeting participants examined the progress made at local, national and international levels in engaging TEK holders and tried to guide the CEC in determining key guidance and knowledge for drafting and establishing the potential North American Principles on TEK.

In April, Dr. Prado participated in the NAPECA Selection Committee Meeting and announced five priority projects. Like the EJ4Climate selection committee, the NAPECA program allows communities in the three countries to tackle climate change challenges and impacts. NAPECA also is important for empowering local and Indigenous communities in applying ancestral or traditional Indigenous knowledges to enhance community resilience in the face of uncertain and changing climate conditions.

JPAC hosted a public forum on "Promoting Environmental Justice in North America," which was held in Wilmington, North Carolina, in June. The session examined how environmental degradation disproportionately affects at-risk, impoverished, marginalized and excluded populations—compromising their health, livelihoods and human and collective rights.

Dr. Prado currently is in Mexico City, Mexico, participating in JPAC's second and final public forum of the year, which is focused on the CEC's H-2030 initiative.

In addition to these activities, JPAC sent three recommendations to the Council. The first was regarding "Forging Partnerships for Responsible Water Management," JPAC's public forum on the conservation of freshwater resources at the community level. The recommendation encouraged continued support for establishing relationships—between Indigenous peoples, community and nonprofit organizations, and other key people and public and private organizations—as a central component of fostering fruitful partnerships between these groups, as well as the integration of Indigenous perspectives and TEK into the work of the CEC. The recommendation emphasized the importance of supporting conservation initiatives led by Indigenous peoples and local communities through a knowledge-sharing process of practices and experiences. The public forum highlighted several initiatives and solutions led by Indigenous peoples and local communities, and establish fruitful collaborations involving governments and the private sector. The recommendation also stressed the need to explore additional avenues for including participants from diverse populations—particularly youth and Indigenous peoples—in CEC activities.

The second recommendation focused on the public consultation for the CEC's new project, <u>Community-led Environmental Education Initiative for Biocultural Heritage Protection</u>, which took place in March and received 69 comments from citizens across the three countries. During the consultation, the public was invited to provide feedback on the project's objectives and activities and suggestions for improvement; possible participation and contributions to the project activities from communities, organizations and institutions; environmental education activities currently taking place in communities and the environmental challenges they face; and any other aspect of the project. The recommendation included key points highlighted by participants. Most of the feedback was complimentary about the design of this initiative.

The third recommendation focused on how to support EJ in North America through (1) identifying and promoting economic development strategies that prioritize environmental protection and biodiversity, aim to minimize harmful effects, and achieve a more equitable distribution of benefits and environmental burdens; (2) adopting an intersectional and multidisciplinary approach across all CEC work; (3) leveraging ongoing and future actions—both regional and national—to increase participation in CEC activities of members of diverse communities facing EJ issues; and (4) aligning future CEC EJ initiatives in North America with JPAC activities.

Dr. Prado also participated in the 2024 meetings of the Alternate Representatives, at which he updated the parties on JPAC activities. Participation in the Alternate Representatives meetings and NAC and GAC meetings allows JPAC to engage in dialogue, exchange views and understand the three administrations' priorities.

Question and Answer Period

In response to a question from Dr. June Weintraub (California Department of Public Health), Vice Chair of the GAC, Dr. Prado explained that the Community-led Environmental Education Initiative for Biocultural Heritage Protection is being developed and has not yet been implemented.

Update on Arizona Project (CEC EJ4Climate Grant)

Jordan Sene, Education Program Manager, Borderlands Restoration Network (BRN)

Ms. Jordan Sene, BRN, presented an update on EJ4Climate-funded projects at <u>BRN</u>, a nonprofit organization based in Patagonia, Arizona. BRN's mission is to grow a restorative economy by rebuilding healthy ecosystems, restoring habitat for plants and wildlife, and reconnecting border communities to the land through shared learning. The goal is to have connected borderlands where rivers flow; plants, wildlife and cultures thrive; and communities develop an inclusive restorative economy where a sense of place inspires a sense of purpose.

BRN operates in Arizona's Madrean Sky Islands, one of the most ecologically diverse and rich landscapes in North America. Because of historic overgrazing, drought and climate change, these lands face stress and degradation. BRN has established several initiatives to protect critical wildlife corridors in the Sky Islands. The <u>Borderland Wildlife Preserve</u> comprises 1,800 acres of permanently protected and managed land that conserves wildlife habitat and maintains a route for migratory species. <u>Borderlands</u> <u>Nursery & Seed</u> is BRN's native plant program, and BRN's <u>Watershed Restoration Program</u> has installed more than 4,000 erosion-control structures across southeastern Arizona to improve hydrologic function and soil conditions, enhancing wildlife habitat and recharging shallow groundwater tables.

One of BRN's EJ4Climate-funded projects, "Building Multinational Climate Resilience through Cross-Border Shared Learning in Mexico, United States, and Tohono O'odham Nation," is part of the Su:dagī 'O Wud Doakag ("Water is Life" in O'odham) education program based on the Borderlands Earth Care Youth (BECY) model that emphasizes awareness, accessibility, connection to the land and others, and a sense of dutiful stewardship. The program was designed for Tohono O'odham Nation youth to earn valuable skills, training and work experience by working alongside conservation professionals and students from Tohono O'odham Community College to design and install a rainwater-harvesting native plant and heritage food garden on campus.

Building on past experiences, BRN is working with Organ Pipe Cactus National Monument staff and local Hia-Ced O'odham elders to develop a hybrid course that will culminate with an alternative spring break experience for local O'odham youth and young professionals. The program, being piloted in 2025, aims to aid in the restoration of Quitobaquito Springs, an important cultural and ecologically relevant site. The BECY curriculum and paid internship model will be used as a framework, but the community will

adjust the program to its place, target audience and community values as needed; encourage intersectional and critical thinking on colonization, land use, culture, history, language and ways of life; and uplift TEK for ongoing climate resilience initiatives. BRN also is collaborating with Tohono O'odham Community College on a micro-certification course that will build pathways to careers in government or restoration and conservation.

The EJ4Climate-funded <u>Borderlands Field Course</u> is an immersive, multidisciplinary training course designed to empower the next generation of environmental leaders to address the ecological challenges facing the border region and the Sky Islands from a holistic perspective. Ms. Sene shared a video describing the course in further detail. The upcoming course will take place from April 13–22, 2025. Applications are due by February 7, 2025.

Question and Answer Period

Mr. Ojeh asked where BRN operates. Ms. Sene explained that BRN activities focus on the Tohono O'odham Nation, Santa Cruz County and Cochise County. One of BRN's long-term goals is to establish an office in Mexico.

In response to a query from Dr. Weintraub, Ms. Sene noted that BRN does not offer carbon credits. The organization's restoration work involves more accessible technology, and a current goal is improving data and metrics related to the environment.

Dr. Aponte-Morales remarked on potential corporate interest in BRN's training programs and leadership activities.

Hot Topics and Joint Open Discussion on Presentations

Vincent R. Nathan, Ph.D., Center for Houston's Future, Chair of the NAC Austin Nunez, San Javier District Council and Tohono O'odham Nation, Chair of the GAC

Ms. Erica Ocampo (The Metals Company), Vice-Chair of the NAC, requested that NAC and GAC members provide feedback within the next week for inclusion in the letter of recommendation to the EPA Administrator. Dr. Weintraub requested that hot topics relate to the meeting's charge for advice and feedback regarding the development of the CEC's new Strategic Plan.

The NAC and GAC members discussed gaps in the 2021–2025 Strategic Plan. Dr. Weintraub noted that pandemics are an emerging area of international concern affecting human health and agricultural activities. Mr. Ojeh and Ms. Cherrelle J. Duncan, NAC member, agreed that the strategic plan should include a pillar to address the intersection of climate change and public health and the health effects of pollution and extreme heat. Dr. Weintraub added that AI is another emerging area of interest that likely was not considered when the CEC's 2021–2025 Strategic Plan was developed.

Dr. Erika Allen Wolters (Oregon State University), NAC member, recommended focusing on rural communities. She reminded the members of Mr. Etsitty's comments on the effects of lithium mining on Indigenous communities and added that extensive resource extraction occurs in rural communities that already face serious challenges (e.g., population decline, poor infrastructure).

Ms. Sene noted that access to the environment and sustainability education are powerful tools that, unlike AI, do not consume immense resources. She suggested that restoration-based solutions to mitigate the effects of human development be highlighted in the new strategic plan.

The NAC and GAC members discussed including a pillar for crosscutting issues and approaches that can act as an umbrella category for issues that do not fall under other pillars.

Public Comment Period

No comments were offered.

Committees Meet Separately to Discuss Charge Questions

The NAC and GAC met separately to deliberate on the EPA charge questions.

NAC Separate Meeting

Dr. Nathan welcomed everyone and reminded the NAC members to send their written comments to him.

Ms. Ocampo noted the charge and opened the NAC discussion to *Question #1a: Should any pillars be updated or expanded to address evolving or emerging environmental issues in North America?*

Dr. Antonio A. Rene (Texas A&M University), NAC member, commented that the six pillars provided by the CEC were ideal for addressing evolving environmental issues in North America.

Dr. Wolters highlighted the necessity for additional language within the pillars. She provided the example of how the impact of energy transmissions on rural communities and Indigenous tribes should be incorporated into the resilient economies or stakeholder perspective.

Ms. Ocampo discussed the six pillars and recommended that cross-sectional issues be included horizontally across the pillars to address gaps. Ms. Ocampo mentioned that, for several pillars, education related to and inclusion of TEK would be beneficial, whereas overcoming misinformation would be a challenge. She commented that human health is challenged by poverty, climate change–induced migration and a lack of standardized waste management policies to mitigate pollution resulting from cross-national trading. Ms. Ocampo will draft an updated schematic of the pillars that will incorporate horizontal rows to define cross-sectional issues, challenges and novel approaches. She will share the updated schematic with NAC members for their feedback.

Ms. Ocampo opened the NAC discussion to *Question #1b: Do you see a need for additional strategic pillars to address gaps in the current approach?*

Ms. Ocampo emphasized corporate social responsibility and the importance of increasing corporate engagement to solve the challenges of the six pillars.

Dr. Nathan proposed that, from a public health perspective, altering the vector environment will change the underlying causes of human disease. He suggested that vectors may be an underlying cause of challenges within the six pillars.

Mr. Ojeh commented that there are many emerging disease threats, which warrants the addition of a pillar to address the concern. He stated that emerging threats could be addressed with new technologies. An example he provided was the COVID-19 pandemic. The NAC members questioned the prospect of an emerging threat pillar. Ms. Ocampo noted that a risk assessment that quantifies the severity and likelihood should be feasible for all strategic pillars. Dr. Nathan supported this, stating that to develop a new pillar, there must be a clear way to articulate its impact. Dr. Nathan provided two examples to demonstrate that strategic pillars have tangible impacts: (1) Biodiversity loss is an observable decrease in species richness. (2) Antibiotic use has clear purposes, benefits and harmful effects when used in livestock or clinical settings. The limitation of an emerging disease threat pillar would be no clear understanding of the full potential or impact. Ms. Ocampo elaborated that all pillars have a destination (e.g., clean water, clean air, prevention and reduction of pollution) and that emerging threats do not have a known destination. She

agreed that emerging threats should be reviewed and that existing pillars should be updated to encompass this, but the addition of more pillars could hinder management.

Dr. Wolters supported the current pillars being sufficient; crosscutting themes, such as emerging threats, should be added instead.

Ms. Ocampo opened the NAC discussion to *Question #1c: Are there any emerging technologies or partnerships that should be integrated into the crosscutting approaches?*

Dr. Nathan defined a vector and highlighted that microorganisms and vectors mutate to survive with climate change, exacerbating the issue of vector movement and transmission. He used the example of how many times SARS-CoV-2 underwent mutations for survival. Ms. Ocampo proposed that vector tracing is an emerging technology that could address this issue.

Dr. Wolters stated that machine learning, a subset of AI, would be useful as a crosscutting approach to address water, air and pollution issues. Furthermore, this emerging technology could provide predictive monitoring. She provided an example of an interdisciplinary team of researchers from North Carolina State University that has developed <u>a machine-learning framework to predict highest risk groundwater sites to help improve water-quality monitoring</u>.

Dr. Rene discussed partnerships between AI companies (such as Google and Microsoft), universities and environmental communities to develop monitoring tools, especially for vector monitoring. Ms. Ocampo expanded on this suggestion stating that overall, higher commitment from corporations and information technology–driven companies is needed to address these environmental challenges and would allow for easier data sharing across nations.

Dr. Nathan commented that the advantage of AI is speed, but inaccuracy may be a disadvantage, so measures need to be implemented to ensure accuracy. Although this is a concern, he appreciates the potential use of machine learning in predictive monitoring for such issues as microplastics in the food chain that could use aggregated data from the National Oceanic and Atmospheric Administration.

Ms. Ocampo introduced Charge Question #2: As the CEC develops its new strategic plan, we are prioritizing the triple planetary crisis (climate change, pollution and biodiversity loss) as the central focus of our efforts. However, we recognize the importance of staying responsive to other emerging environmental issues and innovative solutions. She opened the NAC discussion to Question 2a: Beyond this focus, what other emerging environmental challenges should the CEC address (e.g., the increase in vector-borne diseases linked to climate change)?

Dr. Nathan stated an emerging environmental challenge is forest fires, which occur because of climate change or irresponsible human activities. The loss of habitat and altered landscape has resulted in animals moving to new habitats with new mating patterns and species being observed. Mr. Ojeh expanded on this topic, stating that a direct result of this environmental challenge is the extinction of species.

Ms. Ocampo opened the NAC discussion to *Question 2b: What opportunities exist to enhance collaboration and engagement with Indigenous communities, particularly in leveraging TEK to address the triple planetary crisis and emerging environmental threats*?

Ms. Ocampo mentioned that standalone TEK databases exist but questioned whether a centralized database of TEK is accessible and would be useful to develop, if not currently available.

Dr. Wolters stated the CEC should be conscious of Indigenous knowledges and limit overtaxing these communities to contribute information. These communities may be overtaxed already to provide

resources and protect habitats. A different relationship that focuses on co-creation of knowledge with Indigenous communities is needed. Also, she described the term "other ways of knowing," which utilizes the rich knowledge derived from multigenerational farmers and rural communities where people have been established for an extended period time.

From a question asked by Ms. Ocampo pertaining to what a collaborative approach would look like, Dr. Wolters responded that foundational relationships with these communities need to be developed with an emphasis on co-creating knowledge together and allowing Indigenous leadership to direct the course of inquiry.

Both Dr. Nathan and Dr. Rene agreed with Dr. Wolter's statements and believe there is much to learn from Indigenous communities. Dr. Nathan stated that a current issue is the overuse of groundwater, which has resulted in erosion and soil sinking. Dr. Rene emphasized overlapping interests must be found to work together successfully and that members of the Indigenous community should be involved and incorporated into the research team. Ms. Ocampo suggested that one benefit of knowledge co-created with these communities is that the information could be leveraged across regions with similar challenges.

Ms. Ocampo opened the NAC discussion to *Question 2c: Are there specific emerging technologies, tools or approaches (such as AI or earth observation technologies) that the CEC should consider integrating into its efforts?*

NAC members agreed that this question was answered in the first charge question and that the answers would be similar. Ms. Ocampo stated that a visual tool would be helpful and that a company called <u>Rosa.io</u> is creating a database to improve sustainability. Dr. Nathan questioned whether existing technologies were being used appropriately, because development of infrastructure, such as highways, led to issues with flooding. He reiterated that the CEC could learn from TEK to prevent these issues from continuing to occur.

Ms. Ocampo reviewed the CEC Executive Director's presentation with the NAC members, who provided ideas for crosscutting themes not included in the H-2030 priority topics that the CEC should consider. Dr. Nathan reiterated that antibiotic use is a crosscutting theme and could have a negative impact on human health because of overuse and development of antibiotic resistance. In response, Ms. Ocampo stated that food chain impacts on human health could be an additional priority topic. Additional crosscutting themes discussed included waste management in trade, disinformation or misinformation with AI use, and vector mutation as a critical change to air systems. Ms. Ocampo cautioned that human and animal migration could increase as alterations to ecosystems and societal and economic pressures occur. These new crosscutting themes were supported by WEF's *The Global Risks Report 2024*, which NAC members reviewed during the NAC separate meeting.

NAC members provided suggestions for individual slides of the CEC presentation slide deck. When reviewing the slide "Priority Topic: Earth Observation Technologies and Other GIS Tools," it was noted that the recommendation to incorporate hospital data and reoccurring incidence of environmentally related diseases should be added to the slide.

When reviewing the slide "Priority Topic: Sustainable Transportation," it was noted that additional conservation corridors are needed and that some recycled materials that are used, such as tire rubber in playgrounds, leach contaminants into the environment.

For the slide, "Priority Topic: Ecosystem Services and Sustainable Use and Management of Biodiversity," Ms. Ocampo recommended that it should say "strategies to protect and restore" instead of "strategies to increase." Several NAC members were not familiar with the term "biodiversity management." They recommended that this term be altered because the scale needs to be defined, and researchers have inadequate knowledge of the extent of biodiversity because of the limitation of relying on indicator species. The NAC separate meeting was adjourned.

GAC Separate Meeting

Mr. Nunez invited Mr. Etsitty to share his comments. Mr. Etsitty described the Navajo Nation's efforts to address the dire consequences of uranium mining during the 20th century. The Navajo Nation has identified more than 500 abandoned uranium mines across its reservation in Arizona, New Mexico and Utah and has just begun cleanup of the first few mines. Driven by strong demand and geopolitical tensions, uranium prices have increased significantly in recent years, leading to a resurgence in uranium mining. Several tribes currently experience issues related to an active uranium mine near the Grand Canyon, which is fully authorized by the federal and state governments. The mine's approved hauling route traverses approximately 300 miles through Navajo Nation communities. Mr. Etsitty noted that nuclear power is perceived as a way to combat climate change because it does not produce greenhouse gases. He expressed concern about the new efforts to mine uranium without accounting for proper waste management and addressing the cleanup of the 15,000 abandoned uranium mines located across the United States. Mr. Etsitty emphasized that Canada and Mexico likely will expand uranium mining efforts and that similar issues will affect communities across North America.

Mr. Nunez noted that Mr. Etsitty's remarks touched on the first, fifth and sixth pillars of the CEC's current strategic plan. Dr. Weintraub noted—and Mr. Etsitty agreed—that issues related to uranium mining might also relate to the third pillar of circular economy and sustainable materials management.

Mr. Etsitty noted that his office has been working with a private company and the U.S. Nuclear Regulatory Commission on technology to minimize radioactive material waste. The goal is to employ the technology during mine cleanups, as well as to portray abandoned uranium mine waste as uneconomical because emerging technologies enable the extraction of resources from abandoned waste piles. Mr. Etsitty noted the potential ability to remediate abandoned uranium mine sites using technology to extract rare earth elements, possibly minimizing the need for additional mines.

Dr. Weintraub noted that the second charge question referred to emerging technologies that should be incorporated into the CEC's approach, which could include innovative methods for disposing of hazardous materials. Mr. Carrillo and Mr. Robert "Bobby" Janecka (Texas Commission on Environmental Quality), GAC member, discussed a collaboration between EPA and the U.S. Department of Energy on regulating uranium mines.

Mr. Janecka commented on the issue of water supply as a critical factor for water quality, which has not been addressed adequately by the three parties and could be included in the new strategic plan. He also noted that the concept of interdependence should be added to the fifth pillar of resilient economies and communities. As an example, Mr. Janecka described water scarcity in and along the Rio Grande Valley, where Mexico and the United States have entered into a treaty to share water. EPA has described water quality as a focus area in this region but does not appear to have tools to expand this focus to include water supply.

Mr. Erich A. Morales (El Paso County Attorney's Office), GAC member, agreed that water supply is an important issue. He shared that *colonias*—disadvantaged communities found along the border—near El Paso, Texas, have had issues with water supply from El Paso. The communities have tried digging their own wells, but the resulting water often is non-potable. Texas has spent approximately \$1 billion to improve water infrastructure in these areas, but many homes still lack access to potable water.

Dr. Weintraub mentioned her activities related to transboundary wastewater flows in the Tijuana River Valley. The U.S. Section of the International Boundary and Water Commission (USIBWC) is a federal

government agency and serves as the U.S. component of IBWC, which applies the boundary and water treaties of the United States and Mexico. USIBWC and EPA are collaborating on infrastructure projects to address transborder sewage issues.

Mr. Leonard Drago (Arizona Department of Environmental Quality [ADEQ]), GAC member, highlighted the need for transparency of results with tribal and other local communities and for including tribal nations in decision-making processes regarding projects located near their communities. He noted that ADEQ is establishing regular meetings to exchange information with tribal partners.

Mr. Nunez described methods for acquiring water that do not involve harvesting water from an aquifer (e.g., rainwater harvesting). He wondered whether efforts to promote sustainable mining and resource extraction would be beneficial. Mr. Janecka noted that extracting water from karst aquifers in North Texas is similar to mining because the water recharge rate is less than 2 percent of the withdrawal rate. He highlighted the difficulty of making water supply affordable and sustainable.

Dr. Weintraub referred to the second charge question and stated that the increase in vector-borne diseases linked to planetary climate change is a crisis that should be included as an emerging environmental challenge. She also suggested that the CEC should develop a report on its activities related to TEK and collaboration and engagement with Indigenous communities so that the Advisory Councils can provide feedback. Mr. Nunez agreed and expressed particular interest in CEC engagement with Indigenous communities in Canada and Mexico.

Mr. Etsitty noted increased engagement with tribes at the local, state and federal levels. He shared that, after years of experience with the government consultations, Indigenous communities have recognized the need to develop their own protocols and recommendations for the consultation process. Many governmental activities (e.g., regional planning boards, intergovernmental councils) would benefit from input from Native communities. For example, the Salt River Pima–Maricopa Indian Community and Gila River Indian Community are quite active on the Maricopa Association of Governments and have input on issues affecting the entire country and the metropolitan area of Phoenix, Arizona, in particular. The inclusion of TEK will benefit decision-making at all levels of government.

Dr. Weintraub noted the need for sustainable industrial and agricultural techniques. Dr. Aponte-Morales emphasized that the private sector must be a part of the solution to the planetary crisis.

Mr. Nunez commented that food sovereignty is needed to ensure that crops are healthy, and TEK would benefit this area. Dr. Weintraub pointed out that monoculture negatively affects human health and ties into biodiversity issues.

The GAC members discussed invasive species and their negative effects on ecosystems. Ms. Sene referred to the BRN's native plant program. Dr. Weintraub applauded BRN's educational efforts. She noted that the CEC's Strategic Plan should incorporate education and literacy efforts that, for example, relate to cultural exchange, storytelling and how information is disseminated.

Ms. Gail E. Good (Wisconsin Department of Natural Resources), GAC member, highlighted the increase in wildfires and wildfire smoke and its negative effects as an important environmental challenge. With respect to new technologies, she noted that new satellites are being developed to monitor air-quality information. For example, the <u>Tropospheric Emissions: Monitoring of Pollution (or TEMPO) instrument</u> is a spectrometry-based instrument that monitors air pollutants hourly across North America during the daytime.

Mr. Drago remarked on the importance of regular communication and collaboration among agencies. The GAC separate meeting was adjourned.

Summary and Next Steps

Dr. Vincent R. Nathan, Center for Houston's Future, Chair of the NAC Austin Nunez, San Javier District Council and Tohono O'odham Nation, Chair of the GAC Erica Ocampo, The Metals Company, Vice-Chair of the NAC June Weintraub, Ph.D., California Department of Public Health, Vice-Chair of the GAC

Ms. Ocampo shared a summary of the NAC discussion. NAC members noted the need for standardized language on action within the six pillars. The group discussed cross-border challenges related to the health impacts of changes in the food supply, waste management and vector-borne diseases, as well as challenges to all six pillars presented by misinformation and disinformation linked to AI. Other topics included corporate social responsibility, especially in the field of big data, and the co-creation of knowledge and information with Indigenous communities.

Dr. Weintraub summarized the GAC discussion, which focused on a new pillar of transparency and communication. The group expressed interest in seeing a report on TEKEG activities before the members provide feedback. The GAC members discussed the legacy of uranium mining in the United States, the roles of agriculture and monoculture in the different pillars, how creative storytelling can be used for education and outreach, the effects of increasing wildfires, emerging air-quality monitoring technology, and how the topic of water should be expanded beyond pollution to such issues as water supply and mining water from aquifers.

The Chairs, with assistance from the Vice-Chairs, will draft the advice letters and then incorporate feedback from the Committee members via email. Final drafts of the advice letters for EPA Administrator Michael S. Regan are due by January 17, 2025. Mr. Carrillo noted that NAC and GAC members may submit individual letters with additional advice.

Adjournment

Mr. Carrillo thanked the members for attending and supporting EPA. The meeting was adjourned at 2:42 p.m. MST.

Action Items

- NAC members will forward their written comments on the charge questions to Dr. Nathan by December 12, 2024.
- Dr. Nathan will share his draft advice letter on the CEC's new strategic plan with NAC members for their comments.
- GAC members will forward their written comments on the charge questions to Mr. Nunez.
- Mr. Nunez will incorporate comments from the GAC members into the draft advice letter on the CEC's new strategic plan, which will be shared with the GAC members for their comments.

Summary Certification

I, Austin Nunez, Chair of the Governmental Advisory Committee, and I, Vincent R. Nathan, Chair of the National Advisory Committee, certify that the meeting minutes for the date of December 5, 2024, as hereby detailed, contain a record of the persons present and give an accurate description of matters discussed and conclusions reached and copies of all reports received, issued or approved by the advisory committees. My signature date complies with the 90-day due date after each meeting required by the GSA Final Rule.

Austin Nunez

IR-

Austin Nunez Chair, GAC Vincent R. Nathan Chair, NAC

2/04/2025

2/04/2025

Date

Date

Appendix A: Meeting Participants

NAC Members

Vincent R. Nathan, Ph.D., M.P.H., Chair Environmental Health Consultant Center for Houston's Future

Erica Ocampo, Vice-Chair Chief Sustainability Officer The Metals Company

Cherrelle J. Duncan, M.P.S.A. Director of Community Engagement LINK Houston

Angela Maria Fasnacht, Ph.D. Visiting Fellow Department of Engineering Andlinger Center for Energy and the Environment Princeton University

James Marston Principal Marston Sustainability Consulting

Stephen A. Martin Jr., Ph.D. Executive Director and CEO Creating Pathways and Access for Student Success Foundation

GAC Members

Austin Nunez, Chair Chairman San Javier District Council Tohono O'odham Nation

June Weintraub, Ph.D., Vice-Chair Deputy Director for Environmental Health and State Environmental Health Director California Department of Public Health

Kendra Abkowitz, Ph.D., M.B.A. Senior Director of Sustainability and Resilience Office of Mayor Freddie O'Connell City of Nashville & Davidson County

Brad Cole Executive Director Illinois Municipal League Zeek Ojeh President Zalmar, Inc.

Javier Ortiz Policy Fellow Oak Ridge Institute for Science and Education

Marla del Pilar Perez-Lugo, Ph.D. Professor of Sociology The University of Texas Rio Grande Valley

Antonio A. Rene, Ph.D. Professor Emeritus Texas A&M University School of Public Health

Erika Allen Wolters, Ph.D. Associate Director Oregon State University

Geri Yang-Johnson Senior Program Officer Waverly Street Foundation

Leonard Drago Ombudsman/Tribal Liaison Arizona Department of Environmental Quality

Stephen Etsitty Executive Director Navajo Nation Environmental Protection Agency

Sonja B. Favors, M.B.A., P.E. Branch Chief Industrial Hazardous Waste Alabama Department of Environmental Management

Gail E. Good Director of Air Management Environmental Management Division Wisconsin Department of Natural Resources

Robert "Bobby" Janecka Commissioner Texas Commission on Environmental Quality

Debra L. Kring Council Member City of Mission (Kansas)

Julie S. Moore, M.S., P.E.

Designated Federal Officer

Oscar Carrillo

Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support U.S. Environmental Protection Agency

EPA Participants

P. David Alvaranga

Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support U.S. Environmental Protection Agency

Veronica Aponte-Morales

General Standing Committee Representative International Environmental Program Specialist Office of International and Tribal Affairs U.S. Environmental Protection Agency

Lesley D'Anglada, Dr.P.H.

Office of International Affairs Office of International and Tribal Affairs U.S. Environmental Protection Agency

Mark Kasman

Director Office of International Affairs Office of International and Tribal Affairs U.S. Environmental Protection Agency

Gina Moore

Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support Secretary Vermont Agency of Natural Resources

Erich A. Morales Division Chief El Paso County Attorney's Office

Gerald Wagner Director Blackfeet Environmental Program Blackfeet Nation

U.S. Environmental Protection Agency

Nolan Pinkney

Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support U.S. Environmental Protection Agency

Sahil Virani

Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support U.S. Environmental Protection Agency

Larissa Williams

Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support U.S. Environmental Protection Agency

Robbie Young-Mackall

Director Federal Advisory Committee Management and Oversight Division Office of Inclusive Excellence Office of Mission Support U.S. Environmental Protection Agency

Other Participants

Liesette Brunson, Ph.D. Professor of Community Psychology Université du Québec à Montréal

Estaban Escamilla Prado, Ph.D. Chair Joint Public Advisory Committee Commission for Environmental Cooperation

Contractor Staff

Tamara Korolnek, Ph.D. The Scientific Consulting Group, Inc. Jordan Sene Education Program Manager Borderlands Restoration Network

Jorge Daniel Taillant

Executive Director Commission for Environmental Cooperation Secretariat

Lily Neff, Ph.D. The Scientific Consulting Group, Inc. **Appendix B: Meeting Agenda**





Official Meeting of the National and Governmental Advisory Committees to the U.S. Representative to the Commission for Environmental Cooperation AGENDA

Thursday, December 5, 2024

8:00 a.m. – 3:00 p.m. MST (10:00 a.m. EST, 9:00 a.m. CST, 7:00 a.m. PST) San Xavier District Community Center 2018 West San Xavier Road Tucson, AZ 85746 and Via Zoom Virtual Platform

8:30 a.m.	Call to Order and Introductions Oscar Carrillo, Designated Federal Officer, EPA
8:40 a.m.	Invocation Austin Nunez, San Javier District Council and Tohono O'odham Nation, Chair of the GAC
8:45 a.m.	Opening Remarks Robbie Young-Mackall, Director, Federal Advisory Committee Management and Oversight Division, EPA
8:50 a.m.	Welcome and Overview of Agenda Dr. Vincent R. Nathan, Chair, Center for Houston's Future, NAC Austin Nunez, Chair, San Javier District Council and Tohono O'odham Nation, GAC
9:00 a.m.	Update on U.S. Priorities for Council Session and Guidance Mark Kasman, Director, Office of International Affairs, Office of International and Tribal Affairs, EPA
9:10 a.m.	Question & Answer Period
9:20 a.m.	CEC Updates Jorge Daniel Taillant, Executive Director, CEC
9:40 a.m.	Question & Answer Period
9:50 a.m.	JPAC Report Out Estaban Escamilla Prado, Ph.D., Chair, JPAC
10:05 a.m.	Question & Answer Period
10:15 a.m.	Update on Arizona Project (CEC EJ4Climate Grant) Jordan Sene, Borderlands Restoration Network
10:30 a.m.	Question & Answer Period

10:45 a.m.	Break
11:00 a.m.	Hot Topics and Joint Open Discussion on Presentations
	Dr. Vincent R. Nathan, Chair, NAC
	Austin Nunez, Chair, GAC
11:30 a.m.	Question & Answer Period

- 11:35 a.m. Public Comment Period
- 11:40 a.m. Lunch
- 12:45 p.m. Committees Meet Separately to Discuss Charge Questions Dr. Vincent R. Nathan, Chair, NAC Austin Nunez, Chair, GAC

Question 1: As the CEC looks to strengthen its impact and adapt to emerging environmental challenges, we are seeking your advice on the following:

- a) Should any pillars be updated or expanded to address evolving or emerging environmental issues in North America?
- b) Do you see a need for additional strategic pillars to address gaps in the current approach?
- c) Are there any emerging technologies or partnerships that should be integrated into the crosscutting approaches?

Question 2: As the CEC develops its new Strategic Plan, we are prioritizing the triple planetary crisis (climate change, pollution, and biodiversity loss):

- a) Beyond this focus, what other emerging environmental challenges should the CEC address (e.g., the increase in vector-borne diseases linked to climate change)?
- b) What opportunities exist to enhance collaboration and engagement with Indigenous communities, particularly in leveraging Traditional Ecological Knowledge to address the triple planetary crisis and emerging environmental threats?
- c) Are there specific emerging technologies, tools, or approaches (e.g., artificial intelligence or earth observation technologies) that the CEC should consider integrating into its efforts?

2:45 p.m. Summary and Next Steps Dr. Vincent R. Nathan, Chair, NAC Austin Nunez, Chair, GAC

3:00 p.m. Adjourn

Appendix C: Charge Questions for the NAC/GAC December 5, 2024, Meeting

11/15/2024

Dear NAC/GAC Members,

Below are the charge questions for your meeting on December 5, 2024, related to the Commission for Environmental Cooperation new five-year Strategic Plan. The CEC's Strategic Plan serves as a roadmap to guide environmental cooperation between the United States, Canada, and Mexico. It outlines high-level priority areas and crosscutting approaches to develop Operational Plans, including specific projects/initiatives to advance environmental protection and sustainable development in North America. The update for the Strategic Plan (2026-2030) begins in 2025, and we seek NAC/GAC input to shape it. Your insights will ensure the next Strategic Plan is responsive and forward-looking.

I. CHARGE QUESTIONS

The United States seeks advice from the NAC/GAC on the following two broad categories:

 The CEC's <u>2021-2025 Strategic Plan</u> is currently structured around six key pillars: clean air, land, and water; preventing and reducing pollution in the marine environment; circular economy and sustainable materials management; shared ecosystems and species; resilient economies and communities; and effective enforcement of environmental laws. The success of the pillars depends on innovative and effective solutions, the positive impact on sustainable economic growth, and engaging stakeholders (named crosscutting approaches).

As CEC looks to strengthen its impact and adapt to emerging environmental challenges, we are seeking your advice on the following:

- a. Should any pillars be updated or expanded to address evolving/emerging environmental issues in North America?
- b. Do you see a need for new/additional strategic pillars to address gaps in the current approach?
- c. Are there any emerging technologies or partnerships that should be integrated into the crosscutting approaches¹?
- As the CEC develops its new Strategic Plan, we are prioritizing the *triple planetary crisis* (climate change, pollution, and biodiversity loss) as the central focus of our efforts. However, we recognize the importance of staying responsive to other emerging environmental issues and innovative solutions.

¹ CEC's crosscutting approaches consist of two elements: <u>innovative and effective solutions</u> that are nature-based, sustainable and clean; and (2) <u>diverse and inclusive stakeholder engagement and public participation</u> driven by targeted outreach strategies.

- a. Beyond this focus, what other emerging environmental challenges should the CEC address? [ex., the increase in vector-borne diseases linked to climate change]
- b. What opportunities exist to enhance collaboration and engagement with Indigenous communities, particularly in leveraging Traditional Ecological Knowledge (TEK) to address the triple planetary crisis and emerging environmental threats?
- c. Are there specific emerging technologies, tools, or approaches (such as artificial intelligence or earth observation technologies) that the CEC should consider integrating into its efforts?