Advice to Council No: 15-01

Re: JPAC-led Public Consultation on the 2015–2016 Operational Plan

The Joint Public Advisory Committee (JPAC) of the Commission for Environmental Cooperation (CEC) of North America;

IN ACCORDANCE with Article 16(4) of the North American Agreement on Environmental Cooperation (NAAEC), which states that JPAC “may provide advice to Council on any matter within the scope of this agreement (…) and on the implementation and further elaboration of this agreement, and may perform such functions as the Council may direct;”

HAVING met with the Canadian Alternate Representative in January during the JPAC private working meeting, and provided initial comments on eleven of the sixteen draft project descriptions under the 2015–2016 Operational Plan;

HAVING reviewed the draft project descriptions and associated budget for the proposed CEC 2015–2016 Operational Plan;

HAVING subsequently conducted a public consultation on the proposed Plan and reviewed the comments and recommendations from North American stakeholders, which are included in the Appendix to this Advice;

RECALLING the Council’s designation of Climate Change Mitigation and Adaptation, Green Growth, and Sustainable Communities and Ecosystems in the CEC’S Strategic Plan 2015–2020;

SUBMITS the following observations and comments for Council’s consideration:

General Comments

First, we would like to commend the Parties for their efforts in the development of such comprehensive and far-reaching project descriptions. We believe that the cooperative work proposed under the CEC’s 2015–2016 Operational Plan will continue to add value as well as continue to enhance trinational cooperation, by leading the way in areas that are cutting-edge and innovative on the policy and scientific fronts. Moving forward, JPAC strongly believes that in order to advance the implementation of goals and objectives set forth by the Council, strengthening stakeholder engagement and participation will prove highly beneficial. It is through effective communication and outreach amongst these interest groups that the CEC can substantially improve its desired outcomes and build greater community cohesion. During our meeting in January with the Canadian Alternate Representative, we raised concerns on the lack of funding for the Sustainable Communities and Urban Initiatives category and were assured that NAPECA funding would provide necessary resources. However, due to time constraints, we were not able to get into details of the NAPECA funding for the upcoming fiscal year or the Operational Plan years and, as a result, JPAC would like to be provided with further information before any final decisions have been reached. We recommend that the CEC continue its efforts to select NAPECA grants that include environmental education components that will benefit future generations.

In terms of allocating resources, JPAC agrees with public comments on the lack of clarity on whether the CEC’s 2015–2016 Operational Plan analyzes economic factors (opportunities, threats, local and regional market dynamics, dependencies, employment, etc.) in relation to its Strategic Priorities. We recommend that the project descriptions include an analysis of economic factors for the proposed projects, as this will provide an opportunity for a more successful and sustainable outcome.
North American Initiative on Food Waste Reduction and Recovery

We strongly endorse this project; however, we concur with public opinion that in order to reduce food waste, actions by private sector suppliers will be required at every stage of the food chain. We believe that public sector needs to support those interventions, both through public policies to create incentives that reflect the economic costs of the waste reduction/recovery initiatives, and also through public-private initiatives. The public considers, through their feedback, that the CEC’s distinctive role will be to compare and contrast strategies and options among the three member countries and to improve data, learn from successes of alternate policy approaches, and bring together stakeholders to engage in problem solving. Some of the comments we received from the public stated that it would prove most beneficial to gather information on food type and sector of origin (particularly within the industrial, commercial and institutional segments), as this would help to innovate on policy and programs that will influence behavior. We also agree with public sentiment that this project and also project number 4, “North American Initiative on Organic Waste Diversion and Processing,” should be closely coordinated for maximum effectiveness, as interactions and feedback effects across the supply chain are important. Another factor that should be factored into the project is the role that post-harvest losses play in all three countries, as we believe this represents an understudied and not insignificant portion of food waste.

North American Initiative on Organic Waste Diversion and Processing

We are very pleased to see that this project has been included. However, as we mentioned during our meeting in January, we feel that a project solely focused on “methane utilization from municipal solid waste” be pursued, perhaps classified under “Clean Energy.” We understand that there is lack of data on renewable sources of natural gas and note that there is a potential to contribute to such sources through municipal waste. Hence, we believe the CEC should advance efforts to gather scientific information and data on how to create more and better uses of renewable energy from methane. Furthermore, JPAC is pleased that all three countries are showing some clear advances in their use of clean energy—especially the initiatives from a number of municipalities throughout the continent that are producing energy from organic waste. However, we believe the CEC should continue to encourage the sharing of best practices and the collaboration between the Parties in order to improve in this area. Finally, the public expressed support for the report proposed in Task 2.1 (which is to identify barriers, opportunities, and potential solutions related to increasing organic waste diversion and processing in North America), as they believe it can make a valuable contribution to future data development.

North American Blue Carbon: Next Steps in Science for Policy

JPAC strongly endorses this project and agrees with the public comments that the development of the conservation methodology will have immense global application and incentivize the widespread conservation of coastal habitats. The conservation methodology is a critical tool for decreasing the rates of coastal wetland losses, including that of mangroves and salt marshes in all three countries. We also concur with public sentiment that the CEC should consider advancing efforts to better understand the policy opportunities for blue carbon to benefit restoration and conservation efforts in the three countries, as this would be a vital step forward in advancing blue carbon initiatives. Additionally, although JPAC recognizes that there has been strong collaboration among CEC projects on forest carbon, land mapping, and blue carbon to enable a more complete understanding of the influences on coastal wetlands, we would encourage a broader focus in this project to include watersheds and upland influences, which amount to 70% of the Earth’s surface. The feedback on this project that we received from the public included the concern that closer attention should be given to seagrasses, as they are the least understood coastal habitats and mapping them will enable a better understanding of the role they play in mitigating climate change and addressing issues of ocean acidification. Moreover, the comments also suggested that particular consideration should be given to characterizing carbon stores and seagrasses. For instance, the southern Mexican coastline stores an enormous amount of carbon in mangroves as well as in seagrass. The mangroves in the Yucatan Peninsula store as much carbon as Mexico has emitted since 2009, which is why we believe it would be beneficial to have collaborative monitoring between Florida and the Yucatan, since that they have very similar ecosystems.

Reducing Emissions from Goods Movement via Maritime Transportation in North America – Phase II

We suggest that this project consider broadening its engagement with private sector stakeholders, particularly the shipbuilding and refining industries. We also suggest including port authorities, as they are the key decision-makers who work to enforce the Emission Control Areas (ECA), and are often the ones who can contribute with insightful
information about their communities. Additionally, JPAC suggests that the CEC consider looking at the collaborative work that has already taken place between the refining industries in Canada and the US, in order to share best practices with Mexico as that country establishes and implements an ECA. Moreover, although we understand that this project represents incremental funding initiated under OP 2013–2014, JPAC strongly feels that, given its objectives, this project would greatly benefit from additional funding.

**Enhancing North American Enforcement of IMO Maritime Fuel Sulfur Limits**

JPAC feels that this project, in particular, is crucial as we move forward and understands that the CEC has played an enormous role over the years to support and enhance great collaboration among enforcement officials in our three countries. Nonetheless, JPAC believes that projects on enforcement matters continue to be an area that Mexico could improve upon by joint collaboration efforts. We strongly believe that it is fundamental that Mexico gain insight on best practices shared by Canadian and US agencies, and feel that CEC efforts should be aimed at achieving more intergovernmental exchange and a broader engagement from the Parties. JPAC suggests that additional funding for this project can be achieved by drawing from regional resources. We believe the CEC should aim its efforts at ensuring ties with the Caribbean nations, given that the United States is also part of the Caribbean region and could use Global Environment Facility and World Bank Funding.

**Accelerating Adoption of ISO 50001 and Superior Energy Performance (SEP) Program Certifications in North America**

JPAC strongly believes that water savings and water efficiency should also be included in this project, and that the CEC could benefit from forging connections with key industry stakeholders, and offer leveraging with our own networks in order to attain this objective.

**Strengthening Conservation and Sustainable Production of Selected CITES’ Appendix II Species in North America**

JPAC believes that laws alone cannot stem the tide of “bioinvaders,” particularly given the globalization of the world’s economy and the resulting ease with which species move. For this reason, we strongly believe that this project’s future success depends largely on the participation of specialized agencies and NGOs that are qualified in protection, conservation and management of wild fauna and flora, and the contribution of farmers, as their regions are the original sources of many species of flora and fauna. We also believe that the CEC should aim its efforts at involving and training young students in related programs, as this would help raise awareness and enhance cooperative efforts to monitor and control legal wildlife trade and to stem illegal trade.

**Greening of Chemicals Management in North America**

At our meeting in January with the Canadian Alternate Representative, we came to the understanding that the “Safer Chemical Alternatives” project had been removed due to concerns of duplicating prior by CEC projects. Notwithstanding, JPAC feels that it could benefit from learning more about the project proposal, and would equally be pleased to learn what remedial actions have been suggested as a replacement. JPAC believes that although Mexico has shown substantial advances in chemical management in recent years, there is a strong need to collaborate jointly in further development. Mexican efforts to safely monitor and manage environmental health risks have led the initiatives in recent years to complete a chemicals inventory, a great tool that has enabled the public to access important safety information. This work was achieved through much collaborative work between Canadian and American agencies to share best practices and the CEC’s constant efforts to provide Mexico with the necessary stability to move forward. However, public feedback points to the continuing challenges Mexico faces, particularly as hazardous waste still enters landfills. We agree with public comments which stated that in order to advance on the correct implementation of chemical management, the CEC should continue to enhance collaboration between agencies. Moreover, JPAC acknowledges public feedback and suggests the Parties consider broadening the scope of this project to include other chemical substances besides mercury, such as benzene and hexavalent chromium, both known to be human carcinogens and in current use. As discussed at our meeting in January, we feel that JPAC should be included in the further review process for this project, as it would enhance our understanding of what is to be expected in the final project proposal, including budget amounts and stakeholder involvement.
Arctic Migratory Birds Initiative—Americas Flyway Action Plan

JPAC is in strong agreement with the public comments that suggested devoting special attention to the preservation of moist ecosystems in Mexico. It is widely believed that their destruction and contamination subsequently leads to a despoiled environment not suitable to sustain the migratory birds that visit during the winter. For this reason, the CEC should extend its action plan to include regions that merit preservation for Arctic Migratory Birds.

Engaging Farmers and Other Landowners to Support Monarch Butterfly and Pollinator Conservation

Northern Mexico is known as an important region for the migrating monarch butterfly to fuel on nectar as they fly north and south during their spring and fall migrations. However, we agree with public opinion that further study should be aimed at discovering possible ties between Mexico’s implementation of insecticide use for the mosquitoes carrying dengue, and the negative effects that this might have on the monarch butterfly migration. The CEC should aim its efforts at scientific research to discover the reasonable balances between insect control and management with conservation efforts.

Monarch Butterfly Flyway: Communication, Participatory Conservation, and Education Programs Throughout the Migratory Route

We strongly endorse this project, as we feel that this subject matter has already reached continental approval at the North American Leaders Summit. A trilateral group and an Action Plan have been set in motion, and the CEC should continue efforts to conserve the monarch butterfly.

Local Environmental Observer Network

JPAC suggests involving other agents, such as NaturaLista, which is linked to a global observation network and could provide essential information. We also highly recommend that young students partake in this initiative, understanding that they are the future generation and play a vital role in addressing areas of concern.

Marine Protected Areas: Strengthening Management Effectiveness and Supporting Coastal Community Resilience

JPAC and the public comments strongly endorse this project, as we believe it complements previous and ongoing CEC work to address sustainable marine ecosystems and the emerging science on blue carbon. We believe that including carbon measurement and monitoring may allow for increased sustainable funding opportunities, which is a challenge for long-term management of marine protected areas.

JPAC is confident that the recommendations contained herein are highly relevant in terms of the CEC Council’s strategic priorities and is unanimous in supporting this Advice to Council.

Approved by the JPAC members
1 May 2015
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<th><strong>Commentary from the JPAC-led public consultation</strong></th>
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| 1 | **Blanca Estela Gutiérrez-Barba**  
Instituto Politécnico Nacional  
Academia  
México, D.F.  
México  
bgutierrezb@ipn.mx  

The issue of food waste is a priority issue from a social, economic and environmental standpoint. In my opinion, the study’s scope should be broadened to include households, where most urban solid waste is produced, and schools, whose educational effect could also reach into homes. The OECD estimates that waste generation will be the main environmental impact due to household consumption. |
| 2 | **Alma Figueroa**  
Consultante  
Universidad Autónoma de Ciudad Juárez  
Ciudad Juárez, Chihuahua  
México  
alfigueroa@miners.utep.edu  

I agree with the CEC strategic priorities I think we need projects about environmental education as well |
| 3 | **Fernando Leija Torres**  
ONG  
Matamoros Tamaulipas México  
fernando_leija@yahoo.com.mx  

Project 3, North American Initiative on Food Waste Reduction and Recovery  
Observations:  
In the case of Mexico, this waste is considered in the General Waste Prevention and Comprehensive Management Act, in Art. 1, section VII.  
VII. Foster waste valorization and the development of byproduct markets under criteria of environmental, technological and economic efficiency and adequate financing schemes;  
Art 2 section VIII. The disposal of waste, limited solely to that whose valorization or treatment is not economically viable, technologically feasible and environmentally sound;  
Art 27 sections I, II, III, IV and V  
Article 27.- Management plans shall be established for the following purposes and objectives:  
I. The promote the prevention of the generation and the valorization of waste, as well as its comprehensive management, through measures to reduce the costs of its management, facilitate and make more environmentally, technologically, economically and socially effective the procedures for its management;  

Project 4, North American Initiative on Organic Waste Diversion and Processing  
Observations:  
In the case of Mexico, there are few landfills that operate as indicated by the rules, with other particular situations being faced in each municipality. In most cases, organic waste is not... |
separated; both organic and inorganic are deposited together. The diversion and processing of organic waste implies a new operating structure with additional costs that I believe are not considered in the project. Municipalities are responsible for the management and disposal of this kind of waste, and are generally uninterested in supporting sustainable procedures—given the increased costs, plus the need for a new culture of separation that is known but not put into practice.

As for the generation of municipal organic waste, from my experience I believe that this fluctuates between 60 and 65 percent, and 2 or 3 percent is recycled, namely cardboard and paper.

Summary:
1.- Convince the authorities
2.- Present them with a SWOT analysis on organic waste management
3.- Create an additional operating structure for the management of organic waste
4.- Produce an awareness program in the media on the program’s benefits
5.- Offer resources and technical support to municipalities
6.- Create a procedure so that the project is not thrown out when new authorities take office and the authorities that approved the project leave
7.- Report the benefits of the results.

Project 9
There are NGOs in Mexico that dominate the issue and are enthusiastic participants, which I believe are not taken into account. In the case of our country, peasant farmers should be involved since some of their regions are the original sources of flora or fauna species. Consider involvement and training of young students in related programs, [and] NGOs, in border cities such as Matamoros [that] form part of an illegal trade in species route.

Project 10
In the case of our country, due to negligence at the three levels of government, waste deemed hazardous under our laws, and waste from major generators, small generators, microgenerators and households enters landfills or controlled dumps. This should be considered but there is no appropriate structure to do so.

Project 11
The lack of support in the preservation of moist ecosystems leads to their destruction and contamination; these spaces for migratory birds that visit us in winter, such as along the Tamaulipas coastline, are “red marks” in our eroded environment.

Project 12
Add peasant farmers for our country, groups of farm producers with little land who are
overlooked, such as in Tamaulipas. Matamoros is an entry point; there is little cultivated
farmland in the north so no insecticide is applied there, the only thing that can be presented,
but I also think there is minimal or no application of the insecticide for the mosquitoes carrying
dengue [see comment to Project 13]. The first 10 days of April have been monitored, there is
little likelihood in the city, and in the sorghum fields the plants do not grow very high, and the
presence of pests is not a concern.
More awareness is needed. It was up to me to notify the press of the presence of butterflies
passing through the city but I received no support for creating awareness. I informed other
people in our capital of the time, frequency, and mean, minimum and maximum flying altitude,
but I don’t know if my information was of any use. [We should] involve youth and children, hold
events, contests, etc.
Project 13
More local support is required, since there is little or no awareness and promotion.
The above comment failed to name the insecticide applied to control the dengue carrying
mosquito, applied in the city, and which I believe may affect monarch butterfly migration. It is
TEMEPHOS or AVATE.

Project 14
In our country, consider our peasant farmers and NGOs, as there are many local needs and little
importance is paid by the authorities, [results in the] lack of budget and the application of
superficial, disjointed programs, and nothing gets done.
There is a lot of pollution from waste entering the so-called sanitary landfill in Matamoros,
Mexico: water pollution, destruction of native flora, trash burning; these are common issues
that society sees as everyday occurrences.

I think this network is interesting, but I think that young people or NGOs are not being taken
into account; this would be an important value for the project goals. In my view there is damage
that gets little attention from the authorities, in the case of climate change, [or] insect pests
[that] have seen population increases and life cycles such as the webworm that attacks the ash
and blackberry tree before the start of spring. Matamoros is a border city with agriculture, a
protected natural area, a maquiladora industry, a migratory bird corridor, and moist
ecosystems, which could serve as a representative for this network.

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<th>Stephen Emmett-Mattox</th>
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<td>NGO</td>
<td>Restore America's Estuaries</td>
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<td>Arlington, VA</td>
<td>USA</td>
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I am writing to express our very strong support for the draft cooperative work program for
2015, especially Project #5 for Blue Carbon. Coastal habitat losses continue to be a critical issue
for all three N. American countries. When these habitats are lost, the tremendously important
ecosystem and economic benefits they provide are very difficult to replace. Also, degradation of
these ecosystems can cause significant carbon dioxide emissions. Blue Carbon shows great
promise as an ecosystem service value that can help reverse habitat losses and lead to
increased efforts to restore coastal mangroves, salt marshes, and seagrass beds. The Blue Carbon project as described complements existing efforts among the three countries and NGOs and will lead to important advances in blue carbon science, policy and application. Restore America’s Estuaries strongly supports Options A, B and C to increase the degree of habitat mapping and incorporate carbon measurements, and to fund the validation of the greenhouse gas offset conservation methodology. Mapping blue carbon habitats, especially seagrasses, provides relevant information for coastal managers. An increased understanding of the carbon values of seagrass habitat supports increased restoration and conservation activities. The conservation methodology is a critical tool for decreasing the rates of coastal wetland losses, including mangroves, salt marshes in all three countries. Writing the methodology, which is included in the core project workplan, is a good step forward. Providing additional funding to validation the methodology - a required step that is time and labor intensive - is an even stronger step forward. The NGO community stands ready to make this progress in partnership with CEC and the blue carbon project.

5  **Dorothee Herr**  
IUCN  
IGO  
Berlin  
Germany  
dorothee.herr@iucn.org

The Blue Carbon, Project #5, is right on target for filling knowledge gaps on seagrass meadows, as well as provide capacity building efforts. The US and partners have been at the forefront of this work, and other countries and organizations are building their work from these types of projects. The leadership is indispensable to keep the international Blue Carbon community growing, to share best practices and to learn from applied science relevant for policy making.

6  **Jorge Alfredo Herrera Silveira**  
Academia  
CINVESTAV-IPN, Unidad Mérida  
Merida, México  
jherrera@mda.cinvestav.mx

I state my support for the Blue Carbon project. Mexico has a huge gap in characterizing carbon stores and their respective seagrass maps. The Yucatan Peninsula is regarded as Mexico’s region with the greatest potential seagrass cover due its depth, transparency and coastal dynamics. CINVESTAV-IPN, Mérida Unit, has the technical and human infrastructure to carry out studies culminating with the production of maps and a methodology to be used for other areas of the country.

7  **Stefanie Simpson**  
Restore America’s Estuaries  
NGO  
Arlington, United States  
ssimpson@estuaries.org

I would like to express my support for the CEC’s 2015-16 cooperative work program, specifically for project #5: North American Blue Carbon: Next Steps in Science for Policy. Seagrass are the least understood of coastal habitats and mapping will enable us to better understand their extent in North America and the role they have in mitigating climate change and addressing issues of ocean acidification. Development of the conservation methodology will have immense global application, in North America and beyond, to incentivize conservation of coastal habitats, providing much needed funding to conservation efforts. Finally, efforts to better understand the policy opportunities for blue carbon to benefit restoration and conservation efforts in N. American countries is a vital next step in advancing blue carbon initiatives. I fully support the CEC’s efforts to advance blue carbon benefits and opportunities to increase restoration and conservation of our most vital coastal ecosystems, and look forward to strengthen the
| 8 | **Allison Alexander**  
National Marine Sanctuary Foundation  
NGO  
Silver Spring, United States  
allison@nmsfocean.org | The National Marine Sanctuary Foundation fully supports the project "Marine Protected Areas: Strengthening Management Effectiveness and Supporting Coastal Community Resilience." Marine Protected Areas are an important area for the CEC to focus its efforts. MPAs support a healthy ocean, biodiversity, resilience, and human livelihoods in North America. The National Marine Sanctuary Foundation (NMSF) is the private, charitable partner for NOAA’s National Marine Sanctuary System, which includes NOAA’s MPA Center. As part of NMSF’s mission to enhance the work of national marine sanctuaries in their goal to protect essential U.S. waters and to ensure a healthy ocean, NMSF is pleased to partner with NOAA’s MPA Center in achievement of the goals of this project. |
|---|---|
| 9 | **Dan Laffoley**  
IUCN WCPA-Marine Vice Chair  
IGO  
Peterborough, UK  
danlaffoley@btinternet.com | It is great to see MPA work proposed for funding. As Marine Vice Chair of WCPA I strongly support and encourage this application. The MPA project builds on and complements previous and ongoing CEC work to address sustainable marine ecosystems and the emerging science on blue carbon. The project will also support coherent and cohesive efforts across three countries - enabling them to join forces at a seascape level to develop and apply climate-smart initiatives. I believe that CEC is uniquely positioned to support the Parties in achieving their goal of maintaining resilient seascapes, ecosystems, and communities across North America, hence my strong support for their engagement in this area. |
| 10 | **Edwin Bisinger**  
AkzoNobel  
Private Sector  
Chicago, USA  
edwin.bisinger@akzonobel.com | I am very interested to provide comments on Project 10: Greening of Chemicals Management in North America. I would like to see the scope of the project broadened to include other chemical substances besides mercury. Mercury already is a highly regulated substance, and companies like AkzoNobel have for a long time worked on either lowering our use of eliminating it all together. On the other hand, many other substances are used in high volume and could be studied, such as benzene or hexavalent chromium, both known to be human carcinogens and in current use. I would be very interested to assist the CEC in further developing Project 10 to include other substances. I would also be happy to share chemical management strategies and tactics that we have developed. Regards, Edwin Bisinger, PhD, DABT. |
| 11 | **Jennifer Howard**  
Conservation International  
NGO  
Arlington, United States  
jhoward@conservation.org | We support Project 5 "North American Blue Carbon project: Next Steps in Science for Policy", as well as the additional funding options (A, B and C) to increase the reach and effectiveness of the project. Conservation International and the International Blue Carbon Initiative (http://thebluecarboninitiative.org/) have developed a list of priories including: • Promote and support needed global mapping exercises to determine extent and rate of loss of relevant coastal ecosystems, with the largest information gap related to seagrass ecosystems. • Create generally applicable standards and methodologies for quantifying and monitoring carbon storage, sequestration, and emissions in coastal ecosystems on regional and local scales. • Develop conservation, planning, and management guidelines for coastal carbon. • Facilitate the |
implementation of coastal carbon standards globally by supporting policy processes and supporting demonstration projects. • Support collaboration and communication between experts, policymakers, local stakeholders and practitioners on blue carbon science globally. • Build capacity via well-coordinated regional blue carbon leaders who will develop case studies and provide guidance on regional implementation. • Continue efforts to integrate blue carbon into discussions of climate mitigation as well as the important role of these ecosystems for climate adaptation at national and sub-national levels. This project will advance all of these goals. Particularity the development of the VCS Conservation Strategy. Restore America’s Estuaries is a well-respected organization and global leaders in VCS methodology development for coastal ecosystems. This methodology is a critical step for pushing blue carbon projects forward at a global scale. Project 16 "Marine Protected Areas: Strengthening Management Effectiveness and Supporting Coastal Community Resilience” is also supported by the Blue Carbon Initiative and Conservation International. We firmly believe that by MPA management will be strengthened by the inclusion of carbon in their design and included in the benefits to the local and global community. By including carbon measurement and monitoring it may allow for increased sustainable funding opportunities, which is a challenge for long term management of MPAs. While all of the projects in the Operational Plan are of high quality and deserving of implementation, as the Marine Climate Change Manager at Conservation International and lead coordinator of the Blue Carbon Initiative I see direct applicability of these two projects not only within the tri-national cooperation of the CEC but more broadly within all of the countries where we work.

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<th>12</th>
<th>Patrick Megonigal</th>
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<td>Smithsonian Environmental Research Center</td>
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<td>I fully support JPAC’s decision to adopt Blue Carbon as an area of emphasis. These ecosystems are enormously important to people, wildlife, and ecosystem services. There is great potential to advance the protection and management of these ecosystems through a blue carbon framework, but progress is difficult without new research. The mapping activities this program will fund are a wise investment because ecosystem carbon pool research can be scaled up to site, jurisdiction or national levels if maps are available.</td>
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<th>13</th>
<th>Jordan Ciprian</th>
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<td>Local Government (USA) - Watershed Protection</td>
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<td>It's unclear if the Plan analyzes economic factors (opportunities, threats, local and regional markets dynamics, dependencies, employment, etc.) in relation to its strategic priorities. Analysis of economic factors for the proposed projects and its consideration when developing subsequent policy increases the opportunity for a successful and sustainable outcome. In addition to an economic analysis of its projects, the CEC may want to consider participation in the development of policy from the private sector and civic leaders whose interests and communities depend on the industries and activities outlined in the Plan. Their expertise in the industry and knowledge of social and economic demographics can provide valuable insight for creating comprehensive environmental policies that create sustainable programs and strengthen communities by leveraging market forces.</td>
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The work plan should include concrete action on Climate Change via a strong emphasis on Research and Development of methods of "Carbon Draw-Down"; i.e. technologies that can bring CO2 levels down from 400ppm+ to safer levels, approaching 350ppm and can be deployed both in North America and globally (i.e. technologies for export). Emphasis should be placed in Energy, Food, Water security and Reforestation/Afforestation and well as permanent sequestration of carbon using distributed technologies that are applicable within a variety of landscapes and contexts.


The development of a CEC program on food waste reduction, recovery, and use is quite timely. Myriad benefits will accrue from addressing the high rate of food waste, including improved food security, environmental sustainability, and economic development. Public awareness of the issue is fairly high, since several organizations both in the public and private domains, at the international and local levels, have released reports on the topic in the last five years, and are promoting new initiatives in the area. Reducing food waste will require action to by private-sector suppliers at every stage of the food chain. It will also require that the public sector support those supply chain interventions, both through public policies to create incentives reflecting the economic costs of different actions, and through public-private initiatives. Current data estimates of the sources and extent of food waste are preliminary, based on a very resourceful use of available data and a few studies that provide rates of loss at different stages of the food chain for various foodstuffs.

All three CEC countries have initiated food waste programs, with both the public and private sectors driving the activities. The growing numbers of local and state/provincial governments, private sector firms, and industry groups interested in reducing food waste represent an audience eager to learn the lessons accruing from the pioneers in the area.

The distinctive contribution of a CEC program in the area is to compare and contrast strategies and options across the three member countries for:

- developing approaches to improve data;
- learning from successes of alternative policy approaches; and
- bringing together stakeholders to learn and be inspired by other programs, and to engage in problem-solving.

We offer three specific comments.

1. Projects 3 and 4 should be closely coordinated for maximum effectiveness.
Project 3 focuses on front-end source reduction and diversion to feed people and animals, while Project 4 focuses on waste diversion and processing. While these steps may appear to represent a linear process, interactions and feedback effects across the supply chain are important. Decisions at the pre-waste stages of the supply chain, covered by Project 3, may affect the economics of alternative methods of waste processing (Project 4); and the waste processing options available may influence decision-making at the reduction stage.

One specific element to consider is how to ensure that some cross-fertilization occurs between (1) stakeholders in the food waste generator and food donation and recovery sectors, and (2) stakeholders in the food waste processing sectors, both through interviews and also through the workshops providing feedback on the reports.

2. The focus on waste reduction, recovery, and recycling in the industrial, commercial, and institutional sectors neglects the role that post-harvest losses play in food waste in Mexico.

The project description applies the food waste hierarchy popularized by the US EPA, which reflects an industrialized country profile. Though the data sources are weak, estimates of food waste loss in the FAO (2011) report indicate that post-harvest losses are more substantial in Mexico (and other countries in Latin America) than in the U.S., Canada, and Oceania.

Indeed, food waste discussions in Mexico include the post-harvest component of such losses (e.g., see PLAN DE TRABAJO DE LA COMISIÓN INTERSECRETARIAL 2013, SEDESOL). Including an examination of post-harvest losses would provide a valuable opportunity to compare and contrast approaches across countries.

In both industrialized and developed countries, agricultural losses also represent an understudied and not insignificant portion of food waste.

3. Improved data on food waste generation by type of food and originating sector (particularly within the industrial, commercial, and institutional segments) would be extremely helpful for developing policies and programs to influence behavior.

The statement of work makes clear that given the limited budget, reports would be based
primarily on existing studies (the SOW does indicate in Project 4, Task 1.1 that deeper data gathering and analysis may be needed for Mexico). This represents a lost opportunity to allocate resources, however limited, for any original data collection needed for Task 1.1 for Projects 3 and 4. At the same time, the report specified in Project 4, Task 2.1 (identifying approaches to measure, track, and report food waste reduction and recovery) can make a valuable contribution to future data development.

It would also be helpful if the online clearinghouse resources identified in both Projects 3 and 4 could be updated over time.

| 16 | **Brian Needelman**  
University of Maryland  
Academia  
College Park, USA  
brianneedelman@gmail.com | I support efforts related to the North American Blue Carbon: Next Steps in Science for Policy project. |
|---|---|
| 17 | **Frederick Short**  
University of New Hampshire  
Academia  
Durham, USA  
fred.short@unh.edu | Overall, a good project plan with a balance of science and policy activity. In the science area, "Improve mapping and geospatial data for seagrass ecosystems" is much needed and the appropriate next step. My only concern is the statement "holding a small workshop with all the seagrass experts in each country" which, for the US, would be a very large group. It would be better to qualify the statement to "seagrass mapping experts. I completely support the CEC's efforts in this blue carbon project. |
| 18 | **Blanca Azucena Guerra Amparo**  
Tepic, Nayarit, México  
bonita2522@hotmail.com | In particular, I want to mention the need to include projects aimed at children, adolescents and youth, or as applicable develop more educational materials that strengthen environmental education with a sustainable approach for new generations. |