## COMMENTARY RECEIVED AFTER THE DEADLINE (30/11/06):

Dr. Andrzej Zeromski Universidad de Guadalajara, México Programa de trabajo cooperativo 2007: Información para la toma de decisiones:

## Proyecto 4. Cartografía de aspectos ambientales de América del Norte

- El Proyecto núm. 4 es central dentro de la prioridad "Información para la toma de decisiones" de la CCA para el período 2007-2010. Incluso se puede decir que los otros cinco proyectos del grupo están subordinados temáticamente al proyecto del Atlas. De acuerdo con el avance de los trabajos sobre el Atlas se podrá pensar en la colaboración entre los proyectos restantes con el Proyecto núm. 4, con el fin de lograr su enriquecimiento mutuo. Dicha colaboración podría ser aprovechada, para el desarrollo y renovación de la metodología del Atlas.
- Desde el principio sería recomendable también pensar el Atlas en una versión impresa. Las técnicas digitales siempre estarán reservadas a un grupo de usuarios específicos. El Atlas constituirá un excelente medio para la propagación y difusión de la necesidad de la paulatina integración del continente.
- 3. Sobre el Atlas hay que hablar con certezas. No se debería anticipar las posibles dificultades en relación con el proyecto. Debido a ello quitaría del texto las palabras "sin obstáculos" (primer párrafo, que trata sobre la descripción del proyecto, en la pág. 9).
- 4. Creo que el Proyecto núm. 4 es clave para el desempeño de la CCA durante el período 2007-2010, ello en virtud también de que involucra directamente a los servicios cartográficos gubernamentales de los tres países, lo que asegura el buen desempeño y el desarrollo exitoso de este gran proyecto.
- 5. Resulta de suma importancia propiciar la colaboración de los países de América del Norte en torno a la colaboración en la elaboración del Atlas y de su posterior uso. La problemática del Atlas se encontrará vinculada directamente con el desarrollo sustentable de las Partes, es decir, se perfila como una herramienta orientadora para el desarrollo económico social y ambiental a largo plazo.
- 6. De ahí surge su complejidad, que debe verse reflejada en una metodología innovadora. Las metodologías clásicas de los Atlas son bien conocidas; no obstante, el Atlas Ambiental de América del Norte ha de ser diferente. Lo que se pretende es lograr una información actualizada para la toma de decisiones sobre la construcción del presente desde la perspectiva del futuro sustentable del continente. El diseño de una metodología cartográfica para tal fin debe enfrentarse con este reto. El Atlas debe ofrecer las oportunidades del continente en materia de sustentabilidad, a la vez de presentar las debilidades, así como fortalezas y riesgos al respecto.
- Por lo expuesto anteriormente, se sugiere conformar un grupo académico de carácter consultivo, integrado por especialistas en cartografía ambiental y temática del desarrollo sustentable; cuyos miembros podrían ser representantes de algunas universidades de los tres países.

La presencia del grupo académico en los trabajos sobre el Atlas podría -en un momento dadofacilitar igualmente la difusión de una nueva conciencia ambiental ciudadana, al interior de diversos niveles de la educación formal de los países del continente.

2007 Cooperative Work Program: Information for Decision-Making:

## Project 4. Mapping North American Environmental Issues [Translation from the original Spanish]

- Project No. 4 is a key aspect under the CEC's "Information for Decision-Making" priority for the 2007-2010 period. In fact, the other five projects in the group are thematically subordinated to the Atlas project. Following the Atlas work, collaboration on the remaining projects may be geared toward Project No. 4, for mutual enrichment. This collaboration could be used to develop and renew the Atlas methodology.
- 2. From the outset, it would also be advisable to think about a print version of the Atlas. Digital techniques will always be reserved to a specific user group. The Atlas will constitute an excellent way to release and publicize the need for the gradual integration of the continent. When speaking of the Atlas, certainties should be discussed. We should not anticipate the possible difficulties relating to the project. Thus, the word "seamlessly" should be deleted from the text (first paragraph of the project description, at page 8).
- 3. I believe that Project No. 4 is key to CEC performance for the 2007-2010 period, since it also directly involves the governmental mapping services of the three countries, thereby ensuring the proper performance and successful execution of this important project.
- 4. It is especially important to further the North American countries' collaboration on the Atlas and the use thereof. The problems addressed by the Atlas will be directly linked to the Parties' sustainable development, i.e. it may be used to guide their long-term economic, social and environmental development.
- 5. This is where its complexity arises, which should be reflected in an innovative methodology. Classical Atlas methodologies are well known, however the North American Environmental Atlas should be different. It should provide up-to-date information for decision-making, building on the present to attain a sustainable future for the continent. A mapping methodology to this end should be designed to face this challenge. The Atlas should offer sustainability opportunities on the continent, while presenting the respective strengths, weaknesses and risks.
- 6. Based on the above, I suggest that an advisory academic group be formed, composed of specialists in environmental mapping and sustainable development. The members could be representatives from universities in the three countries. The academic group's involvement in work on the Atlas also might facilitate a new public environmental awareness at the different levels of formal education among the continent's countries.

## **Releasing Authority:**

Kenneth H. Maybee, President and CEO Point of Contact: Eddie Oldfield New Brunswick Lung Association

Firstly, let me say that the Operational Plan is clear and follows important tracks of concern to each country. The CEC's programs addressing North American Pollutants Monitoring, Air Quality Management, and Reporting Initiatives are of particular interest to our organization. Furthermore, initiatives proposed on Harnessing Market Forces, Encouraging Green Purchasing, and promoting the North American Renewable Energy Market are an important foundation to creating a sustainable and green economy in North America, while reducing air pollutants (as defined by CEPA) and greenhouse gas emissions.

The New Brunswick Lung Association is a health charity based in New Brunswick, Canada, that works collaboratively with partners in the US and Canada, including industry, 3 orders of government, NGOs and academia - to address respiratory health issues and environmental determinants of health.

Our organization, and sister organizations across Canada and the US, work actively to addressAsthma, Chronic Obstructive Pulmonary Diseases, and Lung Cancer and other respiratory diseases - underlying chronic conditions that may be exacerbated by air pollution and a changing climate. We have already developed a web-based mapping (GIS) application capable of accessing environmental and health information in geospatial format, available in the Canadian Geospatial Data Infrastructure (www.gishealthportal.ca/nbla/). We host an International Center for Air Quality and Health to conduct research, education, and advocacy to decision-makers for policies that can best address environmental determinants of health (e.g. transboundary air pollution).

Furthermore, our President and CEO, Kenneth Maybee, was a delegate in the negotiations of the Canada-US Air Quality Agreement - Ozone Annex and spoke at the CEC's 10-year review of the North American Agreement on Environmental Cooperation on the importance of public education on environmentalhealth issues that span the three countries. At that conference, we made a recommendation to the CEC to work with NGOs in North America to hold a workshop/summit focussed on public education, behavior change, policymaking, and information sharing regarding environmental issues that are part of your core mandate.

The workshop/summit could include discussion by participants from the three countries on public education strategies to stimulate market forces in favor of renewable energy, chemical-free produce, and other goods and services. Recommendations / Suggestions:

a) After reviewing the Operational Plan, we noticed that the goal of reducing greenhouse gas emissions to mitigate climate change was not overtly mentioned - even though many of your

programs will have this impact. We believe it is important for the CEC to insert as a goal or objective of the 2007-2009 Operational Plan the reduction of greenhouse gas emissions and the monitoring of GHGs in North America, as part of helping the three countries to deal with climate change. For starters, this could be included as a co-benefit in delivering the CEC programs on renewable energy and green purchasing.

b) We are particularly fond of the proposed EcoKit, and would like to help in the dissemination and transfer of information to industry, government, and NGO stakeholders. We recommend that the CEC hold a two-day multi-stakeholder summit, perhaps combined with a JPAC meeting, to develop / adopt an international strategy for public education. We envisage a strategy that involves:

- 1. The EcoKit that serves as the focus for the public education strategy
- 2. A guide for holdingregional workshops to engage multiple NGO, academic, industry, and government stakeholders
- 3. Clear measurement and evaluation criteria (e.g. public perceptions of barriers / opportunities, level of engagement, economic indicators)
- 4. A reporting process (combining results into an official publication)
- 5. Sufficient funds to cover costs of holding 8-9 Regional Workshops. These workshops could be aimed toward increasing public awareness and engagement OR be a training workshop around the EcoKit. This would increase public education and awareness of goods and services that meet specific environmental criteria, and help to increase purchasing parity and trade of these goods and services between Mexico, the US, and Canada.

c) We are fully supportive of the CEC's proposed initiative to build and use the North American Environmental Atlas. This could be one of the most significant developments in the CEC framework for addressing air quality and other environmental issues. The technology used in this program would improve evidence-based decision-making, information-sharing, and public education. It is however important to provide adequate training and education to environmental/health professionals, policy makers, industry, and government authorities, in order for the Atlas to be most effective. To support the CEC's Atlas initiative, we would be willing to provide advanced web-based GIS expertise and services, through a meeting or teleconference with CEC staff.

For example, in developing MetaData and the Atlas (map layers) the CEC should consider developing an online 'catalogue' for end-users to search for and access geospatial data sets / resources. Secondly, the CEC should consider developing web-sensor networks and web-processing services to amalgamate and process environmental data / indicators collected through air quality monitoring stations, satellite observation, etc. Thirdly, the CEC should consider utilizing web-map services including ours, to add value (and new map layers) to the Atlas. The Lung Association can demonstrate methods for integrating geospatial data, including air pollution, climate / meteorology, sea level rise, population census data, health information, community infrastructure, and more, into web-based maps. We could demonstrate the ability

of web-based GIS (using interoperable standards defined by the Open Geospatial Consortium) to assist with decision-making.

For example, in March 2007 we are supporting a Pandemic Preparedness Exercise involving partners in the State of Maine and the Province of New Brunswick. The Exercise is coordinated by the Department of Public Safety - and they have an agreement with us to use our mapping capabilities for any environmental or health hazard that would require emergency management. If you have an

interest in sending a representative as an observer for the exercise you would be most welcome. The Lung Association continues to work on web-based GIS improvements. This would fit in the CEC'sprogram area of developing Thematic Applications on Priority Areas, and using geospatial information within the Atlas (repository of environmental and ecosystem data).

Congratulations on an excellent plan. We can not overemphasize the importance of the CEC developing a 2-day summit focussed on public education and behavior change, as part of strengthening market forces in favor of renewable energy, green purchasing, and zero or lowemissions goods and services. We further recommend that a special committee be formed to scope out the summit details, and subsequent regional workshops.

A catalogue of existing public education programs/services should also be developed. In short, improving air quality and reducing greenhouse gas emissions is the responsibility of every citizen, small, medium and large industry, three orders of government etc. Each country represented under NAFTA know only too well the spiraling costs to the health care system through increased mortality, morbidity, and damage to ecosystems from air pollution and climate change. We look forward to its implementation and continuing efforts to reduce air pollution and greenhouse gases.