



## **Commission for Environmental Cooperation**

### **Public Workshop on Freshwater Issues in North America**

**3 October 2002**

**Albuquerque, New Mexico**

Jon Plaut, Chair of the Joint Public Advisory Committee (JPAC) of the Commission for Environmental Cooperation (CEC) of North America, opened the session. He welcomed everyone to Albuquerque and explained the day's events, including plans by JPAC to develop an Advice to Council (Council comprising environment ministers of North America) on freshwater issues the following day during JPAC's Regular Session 02-03.

Victor Shantora, the Acting Executive Director, joined the JPAC Chair in welcoming the participants on behalf of the CEC to this very important session. He explained that the session was intended to be participatory, with a view to assisting the CEC in developing a set of recommendations to Council aimed at ensuring that work by the CEC on this complex matter be value-added and complementary to the efforts of other organizations. He further noted it was no accident that New Mexico was selected as the location for this meeting, given the urgency of water issues in this region of North America. He recognized the important roles of the International Joint Commission (IJC) and the International Boundary and Water Commission (IBWC) and the importance of their participation in this session. He further noted that the recent World Summit on Sustainable Development (WSSD) had highlighted water as a major international issue. He thanked everyone in advance for their contributions.

#### **Session I: Overview of meeting purpose, agenda and CEC steps-to-date**

Tim Whitehouse, head of the CEC's Law and Policy program area, explained that his team will be managing the development of an options paper and final recommendations to Council in advance of the 2003 June Council Session. He made preliminary observations on the following subjects to frame the day's discussions:

- the disparity between water-rich and water-poor areas and the disconnect with population concentrations;
- the physical disruption of water by, for example, pollution and diversions;
- the fragmentation in jurisdictional responsibilities for water management and allocation decisions; and
- pricing issues.

Taken together, these points indicate that ensuring access to a safe and adequate water supply will require innovative and coordinated problem solving at all levels of government along with the participation of civil society. He went on to explain that the CEC is a new but important player in the development of sustainable solutions. It can provide much-needed policy analysis and assist in scoping issues and providing recommendations to Council on an appropriate role for the CEC. Finally, he explained that the results of this session would be incorporated into another draft that will be sent out for public review in mid-November. A final text with recommendations will be available for Council in mid-February 2003.

## **Session II: Overview of water priorities in Mexico, United States and Canada**

The JPAC Chair then introduced the first set of speakers, to discuss domestic issues and priorities.

Sergio Ramos, Director of *Análisis Económico y Diseño de Instrumentos de Fomento* at Semarnat, reviewed the legal framework for water management in Mexico. He provided details on the agency's focus and emerging strategic directions, including both matters of quantity and access and also water quality. He described the complex jurisdictional arrangements between states and the federal government.

Jennifer Moore, Director General, Ecosystems and Environmental Resources, Environment Canada, presented an overview of Canada's approach and priorities. She explained that the responsibilities for water are shared by the federal and provincial governments and, for certain matters, municipal governments and private landowners, making good governance and cooperation essential. Canada's priorities include "source-to-tap" quality control; improving and disseminating information, including the identification of knowledge gaps; public outreach for conservation, preventive planning and hazards; and climate change as a cross-cutting issue.

Oscar Ramirez, Acting Director, Water Quality Protection Division, US EPA Region 6, Environmental Protection Agency (EPA), summarized priorities and challenges from the US perspective, highlighting the need to marshal resources for a common purposes:

- Water is a limited resource and not evenly distributed.
- As monitoring improves, more and more problems with quality are revealed.
- Point source causes are now more diffused—urban centers, agriculture, forestry, mining, etc.—requiring more effort to solve. A holistic approach is required, with the engagement of local communities.
- Governor Whitman is requesting \$21M for an initiative to develop solutions for watersheds nominated by state and tribal governments, including market-based efforts.
- The increase of invasive species is affecting water quality, with resulting environmental and economic impacts.
- An aging infrastructure presents huge financial challenges. It is estimated that in the US, \$270 billion for upgrading treatment facilities and \$265 billion for drinking water will be required.
- Considerable resources have been invested in assessing the vulnerability of drinking water to acts of terrorism.

The Chair then opened the floor to questions and comments. He also encouraged the participants to take note of a CEC report entitled *North American Boundary and Transboundary Inland Water Management Report*, available at the back of the room.

- It was noted that in Canada, where 95% of timber removal is done by clear cutting, forest management plans do not reflect the true value of forests in watershed management. Indeed, all three countries should review their domestic forestry policies from this perspective. It was further noted that in the US resources are available—it is matter of priorities. At this time, the US is focusing on possible war with Iraq and the war on terrorism.
- Priority should be placed on sewage capacity and treatment from a human health perspective. For example, in this region (New Mexico), the existing systems were devised when water was considered plentiful and a way to flush waste. New technologies are required for waste treatments that are less water-intensive. Also, rainwater harvesting for community use should be further explored. Mexico is hosting a rainwater harvesting conference in 2003, providing a good connection for the CEC.
- Resources for public education in water conservation are badly needed to shift public attitudes and behavior. Basic information is lacking.
- Government representatives were asked to explain their country's policies on water diversions and exports. In Canada, all provinces and the federal government have legislation prohibiting water exports. Regarding diversions, the IJC has been given a reference to provide advice. In the US, diversions are permitted at the state level. At the federal level, the Burrow Act provides some latitude in the context of rehabilitating vanishing wetlands in partnership with state governments.
- During the recent WSSD, a proposal was discussed to establish a world water trust fund. It was not successful; however, it might prove useful in the North American context as a way to attract private sector investment.
- A project in New Brunswick, Canada, was described wherein ecological information is being collected in collaboration with community members. The results indicate that collecting information is a very good way to educate people. It also provides opportunities for community-based information and perspectives to sensitize and educate governments.

### **Session III: Border water issues**

Dennis Schornack, Chair, US Section, International Joint Commission (IJC), provided a comprehensive overview of the IJC's mandate and recent activities, concluding that the IJC "is the 911 for border water issues."

Bobby Ybarra, from the International Boundary and Water Commission (IBWC), reviewed in detail the history of the Mexican and US border water treaties, legal relationships and cooperative arrangements. He concluded with a projection that over the next 20 years the border population would double to 24 million, adding a real sense of urgency to already very serious water issues along the border and in relation to inter-jurisdictional management of major rivers such as the Colorado and Rio Grande/Rio Bravo.

Polioptro Martínez, *Coordinador de Asuntos Fronterizos, Comision Nacional del Agua*, noted how difficult it was to summarize the complexities of border water issues. He offered that

population growth will be the main driving force. Aquifers on the borders are already overexploited. There are many organizations involved in water issues along the US/Mexican border. A common vision with common objectives will be required.

The Chair then opened the floor to questions and comments:

- Remember the “big picture”—we have already surpassed the planet’s capacity to supply water to a growing population. Policies and treaties must look at capacity, otherwise disparities will grow. Efforts must be on working with communities to reduce use. Innovative solutions will be required, and work should begin now, for example, on desalination for agricultural and industrial uses.
- Federalization of water resources could lead to approval of mega-schemes.
- The CEC, as a trilateral organization, could be very useful in providing research and information as a complement to what other organizations are doing. It would be very useful for the CEC to take information coming from each country or border organizations and then develop a methodology for verification and quality control for use at a bi- or trilateral level.
- The CEC can play an important role as a vehicle for collecting and synthesizing information, identifying data gaps and working towards a compatible information base for North American watersheds.
- Water management terminology must include water conservation for ecosystems.
- Ecosystems are in distress. Many native species have become or are on the verge of becoming extinct (the silvery minnow was given as an example). The Rio Grande is basically a ditch for irrigation water. In this context, how can these concerns be addressed at the same time as when large populations, such as those of El Paso/Juárez, are facing drinking water crises?
- It was noted that indigenous peoples have varying levels of rights and special interests in each country and the question was asked how the IJC and IBWC are dealing with these matters and if the commissions had advice to give the CEC on how to integrate indigenous issues into the discussions on freshwater. The IBWC representative replied that each country deals with indigenous issues within its jurisdiction and no international issues regarding property rights have yet arisen. The IJC representative replied that the commission does not directly engage indigenous nations; however, there is indigenous representation on study boards. He explained a recent example in relation to work on the St-Lawrence/Lake Ontario study where the participation of the St-Regis tribe was very beneficial. He noted that their involvement is not on a rights basis.
- The commissions were also asked how they cooperate on joint approaches or lessons learned. The representative of the IBWC replied that, as a result of recent CEC efforts, the commissions have begun a dialogue on common issues such as flooding and invasive species. The IJC representative agreed that the CEC has provided a forum for communication.
- The commissions were asked if there is a role for the CEC in the area of exotic species, given that both commissions have programs on this subject. The IJC representative replied that aquatic invasive species has been identified as the number one threat to the biological productivity of the Great Lakes. The CEC could play a role in pressing for common shipping standards. The representative of the IBWC urged the CEC to look at harmonization of data-gathering and methods for control of invasive species.

**Session IV: Review of CEC draft summary of water issues**

Tim Whitehouse, Head of the Law and Policy program area, introduced the study team, Greg Thomas, Adele Hurley, Joanna Kidd, and Manuel Contijoch Escontria. He explained that the team was asked to gather information and develop policy analysis in three areas:

- Regional environmental concerns
- Avoidance and prevention of trade disputes
- Enforcement of environmental laws

He explained that the CEC does not manage water resources nor implement projects. The CEC can be most effective where it can shine light on an environmental issue, bring it to a higher level, and assist policy makers, managers and the public to make better decisions. He emphasized that, in the freshwater context, the CEC will have to complement and support work already being done. It can usefully assess short-term and longer-term strategies to determine if change has occurred.

Greg Thomas, on behalf of the study team, reviewed the draft summary, concentrating on the options. He explained that each has a common attribute—positioning the CEC to say something useful about the sustainable use of freshwater resources without stirring up more controversy. The seven options are:

**Option A: North American Freshwater Information Network (NAFIN): A Portal for Freshwater Data**

This project would create an Internet data portal that provides the user with a GIS overlay to existing data and information on freshwater.

**Option B: State of Groundwater Report**

The report would draw on existing data and information to document the state of the resource in North America, including its supply, use, management, stresses and status.

**Option C: Structures for Effective Transboundary Watershed Management**

The project would identify what is needed for effective and integrated management of transboundary water resources and would examine how the role of existing management institutions could be expanded to allow for integrated water management.

**Option D: Affordable Technologies for Improved Water Management**

The project would involve investigation and analysis of the current application and future potential of a number of affordable techniques for improving water management.

**Option E: Economic Tools to Achieve Water Efficiency**

The project would investigate and analyze the current application and future potential of economic tools to promote water conservation in the agricultural sector.

**Option F: Environmental Restoration Opportunities in Water Development**

This project would investigate the opportunities to build environmental enhancement into water resource development projects, with particular focus on the two shared international borders.

**Option G: Water Quality Policies, Regulatory Approaches and Standards in North America**

This project would examine the different policies, approaches and standards being used. The issues examined would include: health implications, water quality indexes, standards versus guidelines, and impacts of harmonization.

The Chair then opened the floor to questions and comments:

- Page 159 of the CEC's *North American Boundary and Transboundary Inland Water Management Report* lays out options for producing water in the context of dire shortages (bulk water exports). These are very controversial and all other possibilities should first be exhausted. Is this where we are headed?
- The CEC will not pronounce on policy questions, but rather advance knowledge and understanding about tools, techniques and options available for better management. Ultimate policy decisions are for governments to take.
- It is important to have a clear understanding of target audiences before developing information portals (Option A).
- A change of mind-set is needed. The language used in the options paper is alarming. Most of the decisions about water takings are based on human uses and needs. Nature and wildlife are not clearly factored into the assessment. The CEC can assist by first, stressing this connection in its work on biodiversity and second, providing advice on changing decision-making processes so that these needs are in the forefront. No other organization is doing this.
- An approach that fully integrates ecological, social and economic factors is required in order to assess how change in one area impacts another. An interesting tool would be to recognize the full economic value of water as a resource—not simply for human use.
- A participant commented on each of the options:
  - Option A: Agree that an audience should be identified before anything is spent. However, the idea is interesting. It would quickly show how much poor information there is and provide a platform for arguing for improved monitoring and data gathering.
  - Option B: Similar to above. Would show deficiencies in our knowledge.
  - Option C: Questioned why the focus was only on transboundary water—why not the entire North American region? Water is mostly about politics and jurisdiction. If this option is selected, it will be very important to consult with all existing agencies.
  - Option D: This is a good niche for the CEC.
  - Option E: Again a good niche for the CEC. Pull all the information together and make it available.
  - Option F: The CEC would have to coordinate carefully with governments.
  - Option G: This is a good niche for the CEC.
- Concern was expressed that most of the options involved doing studies and reports, giving the appearance of starting from scratch. There should be a focus on quickly gathering experience from existing agencies and moving to propose solutions and action plans.

- It is also important to remember that enforcement and compliance will continue to be key factors, and law makers at all levels will have to play a fundamental role. Ultimately it is a matter of political will.
- Because of its trinational mandate, the CEC can analyze technologies and tie these to management.
- Monitoring and inspection responsibilities should be given to independent agencies.
- Agriculture is the largest consumer of water. There is clearly a need to reduce use, not find new sources. Policies for reduction in all sectors are absolutely essential.
- Another participant commented on each option. Options A, E and G are the most interesting for the CEC. In Option A, the CEC already has had much experience; Option E is clearly in the CEC's mandate; and Option G is necessary and would be a good task for the CEC. Option B would be very difficult to achieve. For example, the information does not exist in Canada. Option D should focus on diminishing demand, not simply managing it.
- Other areas for consideration could be invasive species, solutions for financing infrastructure and full valuing of aquatic resources.
- The world is getting smaller and cross-fertilization of ideas and initiatives is important. Any CEC work should take into account the UN process. All countries are working to develop integrated water management and water efficiency plans by 2005. Gender equity and indigenous knowledge are elements of the UN process and the CEC could benefit from this experience. If an information portal is developed, it should be from the perspective of support for policy-making. It is necessary to be able to overlap information, such as population growth. Desalination is extremely controversial; it is not eco-friendly and was a very hot topic at the WSSD.
- There are ideological underpinnings to the language we choose to use. A shift is necessary towards better use rather than managing human use. Access to clean, potable water and sanitation are key concerns and clear indicators for children's health—a priority for the CEC.
- Any information-gathering and sharing process should reflect the needs of communities and seek their active participation.
- Regarding Option D, the CEC could sponsor a trade show or similar event with commercial partners.
- *Taking Stock*, for example, shone a light on pollutant releases and transfers and created a basis for advocacy. If a portal is developed, it should be from the point of view of what makes most sense for users.
- Water has a religious meaning for many indigenous peoples. Water should be "free." Any water management work must respect cultural diversity. Indigenous peoples who are trying to protect water resources should be remunerated and supported, as opposed to focusing on charging people to use water.

### **Closing remarks**

Tim Whitehouse thanked everyone for a very productive session. All comments will be carefully considered. He also encouraged the participants to feel free to call or send in further comments

The Chair explained that a summary of the session would be prepared and made available on the CEC web site. He also thanked all the presenters, the public, the CEC staff and interpreters and adjourned the session.