CANADIAN ENVIRONMENTAL LAW ASSOCIATION
L'ASSOCIATION CANADIENNE DU DROIT DE L'ENVIRONNEMENT

Responses to International Joint Commission's Experts Workshop Questions

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Background

Many of the responses which the Canadian Environmental Law Association (CELA) makes to the questions posed are based on research we coordinated for the report *The Fate of the Great Lakes-Sustaining or Draining the Sweetwater Seas?* published in 1997 with Great Lakes United and on our work on federal, provincial and municipal law reform and policy since 1970. Because CELA is public interest legal clinic, our staff often hears first from the public with water management challenges, problems and concerns. We base our program priorities on areas where we identify needs for action. The escalation in water use and allocation conflicts and the rapid changes we are seeing in Ontario has led us to focus on this as one of our program priorities since 1998.

A. Questions on sustainability within laws and policies

Most of the laws and policies of jurisdictions in the Great Lakes have been developed well before the acknowledgement that groundwater and surface water in the Basin are one hydrological system and well before the ecosystem approach was espoused. This means that laws and policies are not adequate to achieve Basin-wide sustainability. Every State and Provincial Jurisdiction has a different threshold for requiring permits, consulting with other Great Lakes jurisdictions, reporting withdrawals and in the scope of their regimes. I have attached a chart from *The Fate of the Great Lakes* which demonstrates these differences in 1997. Many of the decisions about the allocation of Great Lakes water are made by municipalities but they are rarely included in Great Lakes forums or policy-making.

Federal inequities are most pronounced. The US Water Resources Development Act as well as the commerce clause of the Constitution with several court cases have entrenched the precedent for the federal government to override State protectionism over water. The Federal powers in Canada are less developed or tested. It is no coincidence that the majority of private export proposals have concentrated on the Canadian side of the Great Lakes. While the Canadian constitution gives federal government domain over transboundary waters, fisheries, navigation and obligations to First Nations, the government has been down-loading some of these obligations. They have transferred responsibilities for freshwater fisheries to the Provinces and responsibility for some Great Lakes ports, navigational waters, and the St. Lawrence Seaway to consortiums of users. Their Federal Policy on Water released in 1987 had the objective of encouraging wise and efficient water use and discouraged large-scale export, however the government has failed to pass any legislation to implement these goals even though there was

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a groundswell of public support for such legislation prior to the negotiation of the Canada-US Free Trade Agreement and the NAFTA. However any national solution might not provide special protections required by a unique watershed like the Great Lakes.

A sustainable water strategy should reach all sectors using and consuming Great Lakes water. However, the only areas which have implemented aggressive programs are areas of groundwater shortage like the Kitchner-Waterloo region or where there are limits placed on use of surface water as in the case of the use of Lake Michigan water at the Chicago diversion. These programs are largely limited to restrictions on municipal and domestic use.

B. Stresses Growing For the Great Lakes

Many stresses are growing both within and outside the Basin which will impact the Great Lakes. Groundwater mining worldwide is a new disturbing trend. In China and in the US southwest water is being diverted from rural areas to fast growing cities. In China some rivers are no longer running to the sea and the country has not been able to grow food for its own people for the first time over the past several years. World food security has to be linked to world water availability. Should the Great Lakes be prepared to send water to continue to support unsustainable water use in the US southwest? Will the world's food in the future need to be grown close to 20% of the world's freshwater in this region? This is a question that needs to be answered by Great Lakes policy managers soon. If we continue to ignore this question we could find ourselves piping and tankering water over North America and beyond going against the recommendations of all of the IJC references on water use and consumption.

Agricultural water use in the basin needs to be examined. One of the largest water withdrawals over the last decade was the Mud Creek irrigation proposal. Since it was not considered as a strict "diversion", it escaped the scrutiny of the Charter although volumes in excess of Charter trigger amounts would be consumed in methods that were not sustainable irrigation. Land use decisions in the Great Lakes Basin continue to promote the paving over of class A farmland. Other withdrawal activities not captured by the Great Lakes Charter also need to be examined to understand the impacts.

Groundwater mining is not unheard of in the Great Lakes. CELA is beginning a study of the mining of Groundwater by bottling operations in Ontario. Over the past few years we have received dozens of calls from distraught farmers whose water tables are falling as unregulated bottling operators buy adjacent properties and tanker trunk loads of groundwater to destinations unknown. Distrust in the quality of tap water in North America is causing this flight to bottled water. It would be interesting to know how much of the consumption of bottled water is by Great Lakes residents. The success of the bottled water business is widening the gulf between the privileged and underprivileged by eroding equal access to water. Recently, Coca-Cola has decided to get into the boutique water bottling business and are seeking water in rural Quebec and along the St. Lawrence.

The water tankering proposals for ocean transport from North America to sites in developing countries are for bottling and sales to tourists and privileged markets in those countries but could never be affordable to those whose health is at risk from lack of clean water. In Ontario,

the only water taking permit that was ever denied was the NOVA permit. While some of the permits granted have terms and conditions they are not based on science nor is it likely they are ever tracked or enforced.

Human settlement and growth projections in the Great Lakes Basin must be linked to water availability. Poor land use development decisions are being made without adequate information on the availability and renewability of groundwater within the Basin. In 1996, Great Lakes United staff carried out a survey of municipalities within or near to the boundary of the Great Lakes watershed who were dependent on groundwater. Most of those municipalities had plans for unlimited growth because they felt that they could always shift from groundwater to surface waters of the Lakes for future supplies. Several of these region (Akron and the York Region north of Toronto) are now seeking new perpetual supplies of water for future growth and development projected in official plans. Much more understanding of groundwater resources in the basin is needed. However, recharge protection cannot wait on sound science.

In a water poor world will water refugees resettle within the Great Lakes region? As a resident of the City of Toronto, one of the most diverse cities in North America, I think we can already say that immigrants who have come to our region seeking a better life are fleeing from water poor regions like China and Somalia. These kinds of population shifts will likely increase.

Perhaps the most serious threat facing the Great Lakes is the unknown impacts of climate change on the Region. We do not know what our water supply will be in the future. It is unlikely that we will acquire sound science to guide us as far as climate change is concerned because many of its impacts are in extreme sudden events. This leaves us little choice but to act in a precautionary way.

All over the Great Lakes communities have arrived at a common conclusion in remedial action plans and local restoration efforts - that watershed management gives then the best tools for protecting and sustaining waterways. However, with budget reductions and requisite for cost recovery, water managers in Ontario no longer have the budgets to buy water-use data from other jurisdictions. Other huge budget cuts have reduced government water management staff and resources. Has ecosystem management has become unaffordable?

Another protection tool that could prove to be useful in the IJC's deliberations is the "Ecological Footprint" technique developed by Bill Reiss. It measures and places value on all activities and uses of a resource of a region to determine how sustainable that region is. The Commission should invite Mr. Reiss from the University of British Columbia to a session to explain his approach.

C. Questions on Trade and Commerce

While the Federal government has the constitutional authority to govern trade and commerce and protect natural resources, the Canadian government is now struggling post trade agreements to achieve that protection. It is setting about this by seeking anti-export legislation from the Provinces and has promised an accord with the Provinces. However federalism is very weak and Newfoundland and Quebec are actively considering water export.The outcome of

these negotiations with the Provinces will impact all of the Great Lakes. Irregardless of what trade agreements state, a government's right to sustain and protect its natural resources must have ascendency. These agreements should be severed if they continue to force environmental harm and degradation on partners as the Ethyl decision has. The Sunbelt Chapter 11 NAFTA challenge has outraged Canadians and is widely viewed as opportunistic and unfair.

D. The Business Case

Removal of water out of watersheds for distant transport, makes no ecological, economic or ethical sense. Long overdue efforts to work on alternatives should be the focus of the IJC's investigations. I enclose a chart from Worldwatch Paper 132 *Dividing the Waters: Food Security, Ecosystem Health, and the New Politics of Scarcity* by Sandra Postel, September 1996, page 55.

TABLE 7

Estimated Costs of Water Management Options, c. 1995

Management Option	Estimated Cost Range (cents per cubic meter)
Reducing demand through conservation/efficiency	5-50
Treatment and reuse of wastewater for irrigation	30-60
Desalination of brackish water	45-70
Development of marginal water sources	55-85
Desalination of seawater	100-150

Source: World Bank, *From Scarcity to Security: Averting a Water Crisis in the Middle East and North Africa* (Washington, D.C., 1995).

State and Provincial Water Use Policies

	Permits required	Charter legislation	Reporting required	Other
Illinois	All users of Lake Michigan water because of Supreme Court decree	Yes	Yes	Must show that new construction or remodelling will be metered for water use
Indiana	Only public water supplies above 100,000 gallons per day (gpd)	Partial approval needed for all interbasin diversions (no notice to provinces required)	All over 100,000 gpd	Mainly reliant on beneficial use regime for surface waters and riparian rights for groundwater
Michigan	Over 100,000 gpd	Yes	Yes	Mainly reliant on riparian water rights. No out-of-Basin diversions allowed until one year after comprehensive state water plan submitted to governor and legislature
Minnesota	Over 10,000 gpd or 1 million gallons per year (except domestic users)	Yes	Yes	
New York	Only for municipal supplies and private systems affecting municipal uses	Yes	All over 100,000 gpd	Municipal supplies and private systems affecting municipal uses
Ohio	Over 100,000 gpd for diversions; over 2 million gpd for consumption	Yes	Yes	
Ontario	All withdrawals over 13,000 gpd, except household, livestock or poultry watering, or uses before 1961	No. Legislation passed but never proclaimed to be in effect	No	Surface water subject to reasonableness test in riparian rights; Ontario Water Transfer Contol Act prohibits transfer of water from drainage basin without provincial approval
Pennsylvania	Only initial withdrawals for public water supply	No	Periodic survey	Mainly riparian rights doctrine
Québec	No	No		Lower lands required to receive runoff from higher lands; higher lands cannot artificially increase flow; monitor new or increased withdrawals and research; must approve diversions or impoundments or major water development projects
Wisconsin	All surface water users and users over 100,000 gpd for groundwater	Yes	Diversions and consumption over 100,000 gpd and above 2 million gpd over a 30-day period	