

Canada-U.S. Water Issues Ted Horbulyk Aug 25, 2004

Introduction:

The identification of water resources as a key aspect of Canada-U.S. bilateral relations should be no surprise. Water evokes many emotions. To varying degrees water is mythical, symbolic and politically polarizing. Canadians may see water as an inheritance, a birthright, an asset, a resource or a commodity. However, an important characteristic of water resources is that they have not historically been "commodified" very effectively. Relatively few water allocation decisions are decided directly by markets and market forces.

In Canada and the U.S., questions and con

To explore these issues, an instructive approach is to look first at the linkages between water and the market forces that shape the two countries' means of production. Then one can look at the linkages between water and the two countries' markets for consumer goods and services, especially in a world of intensified global trade. Finally, one can allow that some water markets are likely to be present, and see what role such markets play. These three "snapshots" suggest a number of key issues, and generate a number of choices to be faced by Canadians. There are potential flashpoints, now and in future, that highlight the importance of the choices to be made.

Key Issues:

There are no specific and effective processes or procedures to balance continental water resources spontaneously. Therefore, it is entirely likely that, in coming years, water will from time to time or place to place, be seen as relatively scarce or relatively abundant on one side of the national frontier but not the other. This situation may become viewed as either temporary or relatively permanent, and will be associated with the impression that water has become relatively "cheap" or "expensive" on opposite sides of the border. This may emerge as a "water quantity" phenomenon, for example, but may also relate to the quality or reliability of any aspect of the nations' water resources. Just as it is predictable that these differences in water valuation may occur, so too is it predictable what

services. Which issues arise when firms in one country see the other country's water as more abundant, less costly, or undervalued?

In increasingly integrated economies, firms or investors from either side of the border can acquire water by investing in the assets to which it may be linked. For example, outside investors may purchase irrigated land that has integrated water rights, or purchase equity positions (directly or indirectly through a

fishing, recreation and travel are uses of water resources that are also affected by socalled "trade in services." Thus, it is possible that some of the increased competition for water resources might be experienced as increased demand for ecological and ecosystem uses of water.

Various U.S. and Canadian jurisdictions have been developing markets for water and / or water rights, or have been introducing other forms of pricing and market-based instruments. Especially where transactions and administrative costs can be kept low, and where market information can be conveyed easily, such as via the Internet, there is considerable potential for markets to anticipate or respond to temporary or permanent imbalances in water supply or demand. Options contracts based on contingent or interruptible entitlements can be a cost-effective means for large consumers to adapt to future supply variability. The use of such markets may introduce policy debates about foreign ownership of water rights and entitlements, or about the desirability of having conservationists acquire and reallocate water supplies, such as from consumptive to nonconsumptive uses.

Experience with water markets in Australia and various U.S. states suggests that "institutions matter." For potential gains to be realized, considerable investments may be required to define the appropriate water market rights, processes and regulatory oversight. Even where local or regional decisions were made to limit such uses of direct and explicit markets for water resources, it seems unlikely that individual jurisdictions could effectively isolate water resources from the many indirect market pressures that work indirectly through the production and trade of goods and services.

Choices for Canadians:

In light of these issues, Canadians face a number of questions and choices.

- 1. Are Canadians satisfied with the methods by which rights to diverse water resources are defined and allocated?
 - If historical, current or future rights could be reassigned—with or without full compensation, temporarily or permanently, whether by market mechanisms or otherwise—what restrictions or controls might Canadians wish to see imposed on the possible outcomes?
- 2. How can the governance of water resources be improved at all levels?
 - There have been historical concerns about accountability and funding adequacy for (urban and rural) water supply, treatment and sanitation infrastructure for example. More recently, public-private partnerships (so-called "P3 initiatives") have been implemented in some jurisdictions, apparently even before broader terms of governance and accountability have been well established or understood. Similarly, the advent of market-based instruments may call for the development of specialized water courts, or for new forms of water market regulation.

- 3. To what extent, and through which processes are Canadians prepared to anticipate and to resolve domestic and bilateral issues of inter-jurisdictional cooperation over water resources?
 - Domestically, potential disputes are not only limited to those between specific provinces and the federal government, but may involve multiple provinces, First Nations, and cities or regions (playing a role that is increasingly independent of provinces). Bilaterally, there may be need to revise the issues and processes covered by the International Joint Commission and the Great Lakes Charter Implementing Agreements, for example.
- 4. What do Canadians view as the appropriate role and influence of civil society and community groups in the governance of water resources?
 - A relatively recent trend in the U.S., for example, has been the growth of small-scale, community-based, local watershed protection groups, along with much larger basin-wide water organizations. How can the potential value of such

Just as the tragic events at Walkerton, Ontario, focused Canadian attention on issues of the safety and security of domestic water supply, any of a wide range of related water resources events continent-wide could have a similar influence on public opinion and on the place of water on the political agenda. In some areas, the associated sense of urgency or expected pace of actions might cause irreversible policy decisions to be made before there is an adequate understanding of the hydrologic resources or ecological processes to be altered.

• terrorism and civil security.

Authorities already have to divert scarce operating resources allocated for public water systems to acknowledge, if not to address fully, the (acute and chronic) threats that could be motivated by terrorism. Some localized preventative measures will be directed to issues of security and protection of supply. Larger scale responses could include the alteration grid designs to increase "resilience" in supply networks or systems, and the creation of standby capacity and processes.

Options/Recommendations:

Water issues have come to prominence bilaterally because water flows not only over and under the Canada-U.S. border, but because water is also embodied in, and influenced by, growing trade in goods and services. Citizens of Canada and the U.S. have started to experience relative water scarcity and to sense these resources may be vulnerable to numerous future threats. If ever water use decisions were isolated from the dictates of market forces, such is no longer true. Greater integration of the two countries' markets is applying additional market pressure, either directly or indirectly, on the allocation and management of water resources. At the same time, greater integration may also provide an opportunity for increased cooperation in the management of trans-boundary water resources, and an opportunity to share experiences in such areas as improved governance and community participation. Canadians face a number of fundamental water policy choices that can better position all of us to address inevitable threats and challenges.

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