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Our Water and NAFTA

IMPLICATIONS FOR THE USE OF MARKET-BASED INSTRUMENTS FOR WATER RESOURCES MANAGEMENT

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Executive Summary

INTRODUCTION

In more than a few jurisdictions, various *"market-based instruments"* are being entertained and explored as a possible solution for water allocation, as well as promoting conservation and more economically efficient, productive, and sustainable water use. When it comes to market-based instruments, attention is increasingly focused on two options—attaching a *"price"* for all water use and the regulated *"trading"* of water allocations, licenses, or water use rights.

In Canada, Alberta has been one of the most active provinces when it comes to pursuing this type of policy innovation. In seeking to embed such market-based instruments in provincial water resources management, the Alberta provincial government has taken a number of legislative and policy steps. Alberta has taken these steps in the context of a broader national backdrop that is marked, first, by a broad-based policy preference against any bulk export of water, and second, by Canada's participation in the *North American Free Trade Agreement (NAFTA)*. Some have suggested that Alberta's exploration of market-based instruments for water is risky, since they might trigger an obligation under NAFTA to begin bulk water exports to Canada's NAFTA partners. Bulk water exports can be loosely defined as deliberate releases, diversions, or delivery of significant amounts of raw water from Canada's rivers and lakes for the express purpose of trading and selling that water to foreign consumers, governments, institutions, or business and corporate producers.

PURPOSE

The purpose of this research paper is to assess this claim. The paper examines NAFTA's treatment of water as a "good" (NAFTA Chapter 3) and water as an "object of investment" (NAFTA Chapter 11). Chapter 3 of NAFTA defines what constitutes a good and contains prohibitions against trade restrictions of such goods, while Chapter 11 contains the requirement for all NAFTA parties to provide equal treatment of investors and their investments.

CONCLUSIONS

In both cases, we conclude that the market-based instruments and measures that the province of Alberta is exploring—the "pricing" of water and the "regulated trading" of water allocations or water licenses—do **not** obligate the province, or any other province in Canada, to begin bulk water exports under NAFTA.

NAFTA's provisions for the trading of "goods" cannot work to compel the export of any Canadian good—water included—where no such export is pre-existing or intended. In other words, NAFTA does not create an obligation to engage in bulk water exports. Such an obligation would only be created by NAFTA if bulk water exports currently exist, which they do not. Similarly, the investment provisions of NAFTA do not dictate that water must be exported. However, they do protect water-related investments of investors from other NAFTA party states.

Though NAFTA cannot force the export of water, it would be incorrect to argue that NAFTA is irrelevant to Alberta's present exploration of market-based policy instruments. Though a trade agreement like NAFTA cannot be invoked to force a country to export, there are important aspects of NAFTA that do need to be kept in mind if a new water pricing scheme or exchange system is developed. For example, a change in the water regulatory regime could create the incentive for creating products for export, or it could unintentionally result in water somehow actually being diverted for export. If this were to occur, then government efforts to manage water and its allocation would have to be consistent with Canada's NAFTA obligations. In addition, if a new water pricing or allocation regime were implemented, an investor from the US or Mexico could make a NAFTA-based claim that an investment was in effect "expropriated." Even if the new regime was for a legitimate policy purpose, the investor might claim, and be entitled to, compensation.

Thus, while NAFTA will not operate to require new exports of water, it still has implications of which policy-makers and regulators should be cognizant and cautious. For this reason, any new water pricing and allocation regime should be developed within a broader legal structure that has a clear environmental purpose. The laws should ideally apply to all stakeholders, and would need to provide governments with the tools to effectively manage allocation of water in its natural state.

Any provincial or national export ban on water is best justified—in trade law terms—as a measure designed and purposed for conservation and environmental stewardship. The environmental reasons behind the ban on inter-basin water transfers provides ample grounding, while the growing data and public concern with water scarcity justifies retaining such restrictions. There is at least some evidence that Alberta's current legislative and policy prohibition on inter-basin transfers, and by extension, bulk water exports, are based on an environmental rationale. At the same time, however, there is no unambiguous statement to that effect.

Clearly, a water pricing regime that continues to be in government hands would have the least risk of offending NAFTA obligations, as the greatest impact would likely be on investors and their investments. Under the environmental provisions of NAFTA Chapter 11, such a measure could stand provided, again, that the environmental intent was both clear and justifiable. Compensation to investors might, however, still be an issue.

Alberta has based its current exploration of market-based instruments for water management on the dual grounds of economically and efficiently allocating water as a scarce resource, and environmental stewardship. To the extent that the province pursues policy instruments which are reflections of an ideal economic free market, it runs a greater risk of triggering NAFTA obligations, which might go beyond what is considered acceptable. In the end, then, the best safeguard against that hazard is a policy and regulatory framework where environmental considerations are given clear preeminence.

Introduction

Although Canada possesses a great deal of the globe's accessible fresh water, there are growing concerns with the state of this valuable resource across the country. There is a sense that water quantity and quality in Canada is under increasing pressure. Fears are emerging in some regions that sporadic water shortages may become more chronic and enduring across the long-term. As a result, how water is best allocated, and how a more efficient and productive use of water can be achieved, are questions ascending up public policy agendas across the country.

In more than a few jurisdictions, nationally as well as internationally, various *"market-based instruments"* are being entertained and explored as a possible solution for water allocation, as well as promoting conservation and more economically efficient, productive, and sustainable water use. When it comes to market-based instruments, attention is increasingly landing on two options—attaching a *"price"* for all water use and the regulated *"trading"* of water allocations, licenses, or water use rights. Both instruments involve establishing a charge for the use of water. The former implies a charge that would be set through a political decision—an "administered price." The latter implies a charge for new water users that would be set through the interaction of buyers and sellers involved in exchanging water use licenses or allocations—a *"market price."*

In Canada, Alberta has been one of the most active provinces when it comes to pursuing this type of policy innovation, particularly with respect to the trading or exchange of water use licenses. In seeking to embed such a market-based instrument in provincial water resources management, the Alberta provincial government has taken a number of legislative and policy steps. The province's *Water Act (1999), the Irrigation Districts Act (2000)*, the original *Water for Life Strategy (2003)*, the renewed *Water for Life Strategy (2008)*, and the new *Land Use Stewardship Act (2009)* all contain explicit references to the use of market-based instruments in attaining sustainable and efficient use of the province's water resources. By opening the door to charging for water use and the trading of water allocations, Alberta is very much on the vanguard of jurisdictions in North America, with all the promises and perils that such a position implies.

One of these possible perils is the impact of market-based instruments on two historical and broadly supported water policies. First is the potential impact on the long-standing policy prohibition against bulk water exports. Second is the potential impact on a similarly long-standing policy prohibition against inter-basin transfers of water from one major river basin to another. Both the federal government and the majority of provinces have passed legislation prohibiting bulk water exports and inter-basin transfers *(see Appendix A)*.

With respect to the first concern, Canada is party to the *North American Free Trade Agreement (NAFTA)*, a compact designed to minimize restrictions on the trading of marketable commodities by facilitating the movement of goods, services, people, and capital. Some critics of market-based instruments for water resources management have warned that they could lead to water being deemed a commodity under NAFTA, and this would compel Canada to export water to the other NAFTA parties (i.e., the US and Mexico). Others argue that a prohibition against inter-basin transfers will restrict the effective and efficient operation of market-based instruments, and will result in a less than ideal economic model for efficient water allocation. Thus, inter-basin transfers of water must form part of the larger package when it comes to employing market-based instruments.

Purpose

The purpose of this research paper is to examine these concerns by focusing on the province of Alberta as a case study. The paper is designed to achieve two objectives. First, the paper explores the nature of Alberta's experimentations with market-based instruments to determine whether they could trigger a NAFTA-based obligation to export water. Second, the paper touches on aspects of NAFTA that may carry implications for any province looking to implement market-based instruments by referring to Alberta's plans.

Alberta's Developing Water Market

Over the last decade, the Government of Alberta has reconsidered several aspects of its policy approach to water resources management. The impetus for this reconsideration included growing concerns over the environmental health of the province's watercourses, a growing public recognition that water is a limited and scarce resource, and a severe drought in the south of the province in 2001 and 2002. Coupled with all this was the province's decision in 2006 to close most of the South Saskatchewan River Basin (SSRB) to new allocations of surface water. As these developments unfolded, the policy emphasis began to shift toward containing water demand, ensuring more efficient water use, and allowing water users to secure additional rights to water through the temporary and permanent transfer of water allocations between private parties.

The legislative provisions that allow for the transferring of water allocations can be found in both the *Alberta Irrigation Districts Act (2000)* and the *Alberta Water Act (1999)*. The former prescribes the conditions under which water can be transferred among irrigators within a local irrigation district. Transfers under the *Irrigation Districts Act* are limited in both scope and effect. For example, any water transfers are among similar users, conducted within the confines of the irrigation district, and affect the same watercourse. Thus, third party or environmental effects are generally limited. The latter establishes the broader transfer system, which carries the potential for more significant implications. Transfers under the *Water Act* can be either temporary or permanent, can result in the transfer of water between sectors (e.g., from irrigation to a municipality or a new commercial user), and can result in significant amounts of water being moved well beyond a mere reallocation off the same stream. Such transfers can also affect third parties and the aquatic environment.

1. Alberta's Water Act

Alberta's *Water Act*, passed in 1999, established the broader allocation and trading system in the province. As such, it is the primary focus of this paper. The purpose of the Act is stated in *Subsection 2:*

> "The purpose of this Act is to support and promote the conservation and management of water, including the wise allocation of water, while recognizing:
>
> a) the need to manage and conserve water resources to sustain our environment and to ensure a healthy environment and high quality of life in the present and future;
>
> b) the need for Alberta's economic growth and prosperity;

c) the need for an integrated approach and comprehensive, flexible administration and management systems based on sound planning, regulatory actions and market forces;

d) the shared responsibility of all residents of Alberta for the conservation and wise use of water and their role in providing advice with respect to water management planning and decision-making;

e) the importance of working co-operatively with the government of other jurisdictions with respect to trans-boundary water management;

f) the important role of comprehensive and responsive action in administering this Act."

There are several fundamental features of the *Water Act*. First, the Act retained the existing allocation regime, with the provincial government retaining full authority to issue licenses to divert and use water. The Act stipulates that the right to issue licenses originates with a vested right of the Crown, and goes on to describe how that right can be allocated to others through the issuing of licenses upon application.

Second, the Act maintains the rights and priorities that pre-existed its 1999 promulgation. Certain specific uses of water are exempted from the requirement to hold a license, including the rights of household use, riparian rights of usage, and rights of traditional agricultural users. Other rights are re-affirmed based on licenses that were in existence prior to promulgation. These include existing diversionary rights, and licenses for drainage, flood and similar hydrological management. Beyond these existing and exempt rights, the Act provides for the issuance of new licenses upon application.

Third, diversionary rights are affirmed to be governed by the principle of prior allocation, where priority to access to water is granted to those license holders with chronological seniority. This system is commonly referred to as "first-in-time-first-in-right" or "FITFIR." Water allocations that were granted more recently—"junior licenses"—are the first to lose access to the water resource in the case of a shortage.

While all of this is not entirely without controversy, neither is it particularly novel or remarkable. It does, however, form the background to current planning of a system of reallocation of rights to provide incentives for water conservation and more economically efficient usage. That system is based upon the transferability of diversionary rights, with the assumption being that such transfers will move water from lower value uses to higher value uses.

There are three means set out in the Act by which a water allocation may be transferred. First, a water license or exempt use can be transferred when the land to which it is attached is sold or the title passes hands. This is a long-standing aspect of water rights in Alberta and is not directly relevant to the considerations of this paper. (In such circumstances, the transfer is not subject to regulatory approval, although notice must be given to the "Director." The term "Director" is used throughout the Act to describe a position that holds a certain authority. Currently, all reviews and approvals of any transfer of water rights are carried out by Regional Approval Managers.)

Second, a water license can be transferred by way of a temporary assignment of the right to divert water. Section 33 of the *Water Act* allows the owner of a water license to enter into a written agreement that assigns some or all of their right to divert water to another license holder or a traditional agricultural user. This ability to transfer is limited by several factors. The transfer cannot be to a new water user, and it cannot negatively affect the rights of a household user, those who hold an existing license, or a traditional agricultural user with a higher priority. In addition, no transfer can adversely affect a water body or the aquatic environment, and the new "assignee" must also be able to access the water in its natural flow or water body. Finally, the Director must be provided with a copy of the written assignment, and may decide to disallow it if any prohibited adverse impacts are likely to occur.

Third, the *Water Act* provides for the permanent or temporary transfer of all or part of a water allocation. In this kind of transaction, the licensee will permanently or temporarily transfer its rights to another party. In this case, the recipient party need not be a current license owner or a traditional agricultural water user. As might be expected, this is a more heavily regulated transfer. Such transfers can only occur upon application to the Director who must hold a public review in a form and manner considered appropriate, and who has authority to approve or refuse the application. While the statutory direction as to what the Director is to consider in making this determination is broad and somewhat uncertain, there are matters which are clear and mandatory.

For example, the Director can only consider the application if it is in a part of the province where such transfers are allowed by an approved *"water management plan"* or by an Order of the Lieutenant Governor in Council. This is currently a critical restriction, as the only approved water management plan to date is for the South Saskatchewan River Basin (SSRB). Further, when considering an application for a transfer, the Director must take into account the factors that are set out in the approved water management plan. In the case of the South Saskatchewan water management plan, the factors repeat and reinforce the factors set out in the various provisions of the Act. However, this may not necessarily be the case as other plans are developed, which might include additional factors. As well, the Act leaves many of the key factors to the discretion of the Director.

A potentially important aspect of the regulatory system for the transfer of water allocations set out in the Act is a unique provision that gives the Director the discretion to hold back up to 10% of the water to be transferred if the holdback is deemed to be in the public interest, to protect the aquatic environment, or to implement a "water conservation objective" (WCO). The amount of water held back may remain in the natural water body, or it may be reserved for other uses by Ministerial order:

> "The South Saskatchewan River Basin Water Management Plan authorizes the use of water conservation holdback in transfers. The operation of the transfer system thus creates a rare win-win situation. In exchange for granting the right to transfer water allocations that were previously tied to the land and for allowing new users to acquire water that was previously unavailable, the Act permits some progress towards important environmental objectives" (Adamowicz, Percy, and Weber 2010).

Since it was promulgated, there have been few transfers of water rights pursuant to the Act. As of May 2010 only 52 transfers had been made, of which 48 were permanent and 4 were temporary. The majority of transfers—about 30—did not involve a major re-purposing of the water (Alberta Environment 2010).

Layered on top of the regulatory framework under the *Water Act* is the relatively new *Alberta Land Stewardship Act (2009)*, which adds a further critical consideration to water management in the province. All actions taken under the *Water Act* must now be in accordance with the applicable regional plans developed under the *Land Stewardship Act*. To date, no such plans have been finalized, although work is underway on plans for the Lower Athabasca and South Saskatchewan regions, whose boundaries correspond with the Athabasca and South Saskatchewan river basins. Thus, future management actions for land and water in certain regions will have to be coordinated and complementary so that the goals and objectives of both are achieved.

2. Statutory Limits on Transferring Water Allocations

The provisions above set out the process by which water licenses can be transferred from one user to another user. As such, the provisions also form the basic foundation for any future development, extension, or enhancement of market-based instruments for water resources management. Before examining any of this, however, it is important to take note of two broad prohibitions contained in Section 46 and Section 47 of the *Water Act* that are directly relevant to questions of water in international trade:

Section 46 (Subsection 2): No Licenses to Transfer Water Outside Canada

"For the purpose of promoting the conservation and management of water, including the wise allocation and use of water, a licence shall not be issued for the purpose of transferring water from the Province outside Canada by any means, unless the licence is specifically authorized by a special Act of the Legislature." (Subsection 3 specifies that the prohibition in subsection 2 does not apply to "processed" or "municipal water." These terms are defined by *Water Regulation* AR 205/1998. The definition of "municipal water" effectively limits the exception to water processed by a local authority which was already being exported at the time the *Water Act* was enacted. The term "processed water" is defined as water packaged as a beverage or part of the processing of a food or industrial product, and that forms part of the product or a means of its transportation. These exemptions, therefore, appear to be quite narrow.)

Section 47: No Transfer Between Basins

"A licence shall not be issued that authorizes the transfer of water between major river basins in the Province unless the licence is specifically authorized by a special Act of the Legislature."

These restrictions are far from unique to Alberta. In fact, they enunciate an important and broadly-held policy preference of Canadians. The first restriction in Section 46 was clearly part of Alberta's effort to limit water exports—in particular bulk water exports. The International Joint Commission (IJC) has studied bulk water exports (Anderson and Landry 2001, Johansen 2002, and IJC 2004). A 2000 report by the IJC on the Great Lakes system made certain recommendations focused on limiting adverse environmental effects, and also concluded that the costs associated with shipping would continue to be an impediment to any serious efforts to ship Great Lakes water to foreign markets. (The IJC is a Canada-US commission formed as part of implementing the *1909 Boundary Waters Treaty*. The IJC provides policy recommendations to the two countries and also helps settle disputes over shared waters.)

The second restriction in Section 47 is designed to ensure that water is used within the major river basin from where it is drawn. This restriction is complemented by a principle in the *Water for Life Strategy* that aims to have Alberta's water resources managed within the capacity of individual watersheds (Alberta Environment 2003). The Water Matters Society, an organization formed in 2007 to connect Alberta citizens concerned about watershed protection in the province, has noted that this restriction can be amply justified as a means to preserve the ecological integrity of water basins (Beveridge 2008).

Ongoing research continues to demonstrate that the diversion of larger amounts of water from a source river can result in harm to aquatic environments and is not a sustainable source of water supply over the long-term (Arnell 2002 and Hunt 2004). Both inter-basin transfers (from one major river basin to another major river basin) and intra-basin transfers (from one sub-basin to another sub-basin) can negatively affect aquatic habitats even when as little as 2% of river flow is diverted from the source watershed (Laserre 2006). Such diversions can change the water quality and physical area of the aquatic habitat in the source watershed. In some instances, diversions can even degrade water quality, increase erosion and channel scouring, destabilize sediment in the receiving watershed, and lead to the introduction of harmful non-native species (Hunt 2004). Indeed, Water Matters has recommended that this same rationale should be applied to significantly restrict intra-basin transfers as well, a measure not currently found in Alberta legislation or policy (Beveridge 2008).

Two conclusions emerge from the discussion of Section 46 and Section 47 above. First, there is at least some evidence that Alberta's legislation and policy prohibition on inter-basin water transfers is based upon an environmental protection rationale. Certainly, there has been significant discussion and research based around the environmental impacts. At the same time, however, there is no unambiguous statement to that effect. As noted below, this may be of some importance when considering the application of certain provisions of NAFTA.

Second, it is important to note that the legislative prohibition on inter-basin transfers complements and reinforces the legislative ban on water exports. It is simple geographic fact that none of Alberta's river basins—the Milk River excluded—run across the Canada-US border. Thus, retaining water within each major river basin constitutes a *de facto* ban on water export. The Milk River is exceptional in a number of ways, and likely requires unique policy treatment. The Milk originates in Montana and flows back to Montana. It is the smallest river basin in Alberta, with an area of only 6,500 km^2 and a relatively small flow of which 35% is allocated (Vander Ploeg 2010). At the same time, the Milk River watershed and the river itself are ecological treasures, containing some of the best native grass prairie in North America, and serve as habitat to many of Alberta's endangered species.

3. Market-Based Instruments and Water Resources Management

With the above provisions both enabling and circumscribing the opportunity for the transfer of water rights between private parties, Alberta's first iteration of the *Water for Life Strategy (2003)* has taken the concept further, calling for further exploration and development of various economic and market-based instruments as a means of improving the overall efficiency and productivity of water use (Alberta Environment 2003). The strategy further commits to reviewing "the water allocation transfer system to ensure a viable market that moves water to support sustainable economic development," (Alberta Environment 2003). A later update of the strategy in 2008 more strongly links the use of market-based instruments to the goal of resource conservation (Alberta Environment 2008).

Under the broad rubric of market-based or economic instruments, a range of potential tools are currently under consideration in various circles. It is beyond our scope to consider all of them. We will focus, therefore, on two scenarios which have been presented in works commissioned by the Alberta Water Research Institute (AWRI).

In a research paper prepared for AWRI in 2010, Dr. Theodore Horbulyk proposed and described a system of "administered pricing" where all water usage would be metered and a per-unit price attached (Horbulyk 2010). The per-unit price may or may not accompany a fixed monthly price. The administered prices as conceived by Horbulyk would apply at multiple levels of the supply chain. The price might also reflect the social and environmental costs of water diversion, thereby offering some protection to those types of water uses through price signals that encourage conservation. The system envisioned by Horbulyk would no longer require the existing water license system. In order to secure water, users would simply pay the going price. For Horbyluk, such a system would effectively allocate the available water, allow for new water users and water uses, and ensure more economical water use as well.

Dr. Richard Sandor, Dr. Michael Walsh, and Dr. Jeffrey O'Hara also prepared a paper for AWRI in 2010, but suggested a more sweeping type of reform—the establishment of a regulated market or "exchange" where rights to water would be sold and purchased (Sandor, Walsh and O'Hara 2010). This paper explored the creation of a rules-based trading platform where pre-established contracts would be transparently exchanged, with such exchanges resulting in a "market price" for water on an ongoing basis. However, the liquidity that such a system would require dictates against a thorough administrative review of transfers, and would also require that water licenses—and the contracts based upon them—be standardized in order to be easily interchangeable. In several respects, this option would require major changes in how water license transfers are currently governed in Alberta.

As Alberta considers how "administered pricing" or a "regulated exchange" might be developed, and what changes might be entertained toward achieving those goals, it is important to be cognizant of the implications on other markets. Again, a particular concern is whether Alberta's experiments run the risk of triggering international trade obligations under NAFTA, particularly if they create an obligation to export water in a manner contrary to Canada's and Alberta's long-standing policy against such exports.

NAFTA

1. General Description of NAFTA

The *North American Free Trade Agreement (NAFTA)* was formally entered into by Canada, the United States, and Mexico in 1994. For Canada and the US, NAFTA was the successor to the 1989 Canada-US *Free Trade Agreement (FTA)*. Some NAFTA provisions refer to the *General Agreement on Tariffs and Trade (GATT)*, the larger multilateral trade agreement in force when NAFTA was signed. Today, NAFTA must be understood within the context of the World Trade Organization (WTO) agreements, many of which came into existence after NAFTA was signed. Nevertheless, many fundamental provisions of NAFTA—especially with respect to the treatment of goods—do draw on the previous GATT provisions.

With respect to a legal analysis of Canada's NAFTA obligations, it is important to note that NAFTA's dispute resolution process follows the applicable rules of international law. As such, the doctrine of *stare decisis* does not apply. The principle of *stare decisis*, foundational to Canada's common law system, is that once a decision on a certain set of facts has been made, another court of the same or a lower rank must apply that decision in cases presenting the same set of facts. In other words, *stare decisis* involves the principle of precedents that bind courts of similar rank. Under NAFTA, decisions by dispute resolution tribunals are to use particular trade rulings as a source that is persuasive, but not binding, as is often presumed in Canada's domestic legal context.

2. The Position of the Government of Canada on Water and NAFTA

When it comes to water, the Government of Canada has taken the position that NAFTA does not apply to any water in its natural state. To support this position, the Government of Canada has cited Section 7 of the *North American Free Trade Agreement Implementation Act*, which specifically exempts bulk water from the majority of NAFTA provisions:

> *Section 7, Subsection (1):* "For greater certainty, nothing in this Act or the Agreement (i.e., NAFTA), except Article 302 of the Agreement, applies to water."
>
> *Section 7, Subsection (2):* "In this section, 'water' means natural surface and ground water in liquid, gaseous or solid state, but does not include water packaged as a beverage or in tanks."

The rationale behind this assertion, however, has been questioned. It has been pointed out, for example, that the *North American Free Trade Agreement Implementation Act* is not part of NAFTA. Rather, it is a Canadian domestic law that is not binding on other NAFTA parties or on NAFTA dispute panels (Appleton 1994).

The federal government has also pointed to a "Joint Declaration" made by the NAFTA parties in 1993. The declaration, in part, reads as follows:

> "Unless water, in any form, has entered into commerce and becomes a good or product, it is not covered by the provisions of any trade agreement, including the NAFTA. And nothing in the NAFTA would oblige any NAFTA party to either exploit its water for commercial use, or to begin exporting water in any form. Water in its natural state in lakes, rivers, reservoirs, aquifers, water basins and the like is not a good or product, is not traded, and therefore is not and never has been subject to the terms of any trade agreement."

The legal weight of this declaration has also been called into question. For example, Steven Shrybman has noted that:

> "The 1993 statement is no more than an unsigned document, on blank paper, released as an attachment to a press statement issued by the government of Canada on December 2, 1993. There is no indication that either government offered formal support for it. Yet approval by the US Senate is required under the US constitution with respect to all international treaties. Given the rather startling degree of informality that surrounds this 1993 statement it is not certain that it would even rise to the status of a non-binding agreement" (Shrybman 2000).

Comments by US trade representative Mickey Cantor in this regard are also instructive:

> "…when water is traded as a good, all of the provisions of the agreements governing trade in goods apply." However, he also adds that "inter-basin transfers of water in which water is not traded as a good are not governed by either trade agreement" (Appleton 1994).

The perspectives offered in the statements above lend themselves to at least two preliminary conclusions. First, the *NAFTA Implementation Act* and the *Joint Declaration* cannot be said to categorically preclude the application of NAFTA to water. In fact, both admit that, at least under certain circumstances, NAFTA could be made to apply. Second, the underlying issue with NAFTA and whether it applies to water would appear to depend on whether the water in view is a "good" that becomes subsequently "traded." But whether or not the use of market-based instruments in water resources management create the conditions and the potential to trigger any export obligations under NAFTA, requires a more in-depth exploration of the relevant NAFTA provisions.

Water and NAFTA

Water and water services are affected by four different chapters in NAFTA, each with its own set of rules and implications. These chapters speak to water as a good (Chapter 3), water services as a service provided by government (Chapter 10), water as an object of investment (Chapter 11), and water as it may be supplied as a private service to private customers (Chapter 12). Water as a "good" and water as the "object of investment" are the two NAFTA provisions (Chapters 3 and 11) that are most likely to be of concern with respect to the usage of any market-based instruments for water resources management.

1. NAFTA Chapter 3: Water as a Good

Chapter 3 of NAFTA encourages the gradual implementation of free trade in goods, mainly by the elimination of duties between the parties. In NAFTA a "good" is defined as "… domestic products as these are understood in the General Agreement on Tariffs and Trade or such goods as the parties may agree, and includes originating goods of that party."

Article 309 in Chapter 3 goes on to speak against any party adopting or maintaining "… any prohibition or restriction on the importation of any good of another party or on the exportation or sale for export of any good destined for the territory of another party." This statement is the most direct dictate against export or import restrictions found in NAFTA. In short, if NAFTA applies to water, a great deal will indeed turn on whether water is a "good" as contemplated by Article 309.

A large amount of energy has been expended, and ink spilled, on the question of whether water is a good. David Johansen, writing in a parliamentary brief, has noted that goods are objects that are somehow "produced" or transformed in some way into an item of commerce (Johansen 1999). With that in mind, water can certainly become a good. For example, when water has been treated, processed, and bottled with an intention to sell the water or export it, then water has become a good. But some have argued that even water in its natural state is a good or product. They point to provisions in the *General Agreement on Tariffs and Trade* that identify goods, which includes "ordinary water of all kinds" other than sea water. Such water remains as a good under this GATT heading whether or not it is in its natural state (Appleton 1994).

However, we need not resolve this debate here—it is largely irrelevant. Water, in whatever state it is found, can be considered a "good" but this in itself does not make it automatically subject to NAFTA. The reason is that NAFTA Article 309 very clearly applies only to goods "… destined for the territory of another party." For water in whatever form it is in to be subject to NAFTA, it must also be exported, or intended for export (Appleton 1994). This appears to complement the 1993 Joint Declaration and the statement of the US trade representative above. A good only becomes subject to NAFTA once it is traded. This would not apply to water in its natural state, or even in domestic commercial use, within the confines of Canada or within particular Canadian watersheds. The central issue with NAFTA, and whether it applies to water, is at what point water has become a good that is also intended for export, or "… destined for the territory of another party." Article 309 cannot, therefore, be used to force the export of water where there is no pre-existing export.

It is important to also understand that the prohibition against trade restrictions in Article 309 of NAFTA is subject to certain exceptions as set out in Articles 309 and 315, which in turn make reference to Articles XI and XX of the GATT. Such exceptions do not affect whether water is considered a good destined for export, but they do set out specific situations in which export restrictions can be applied. For example, restrictions are allowed if they are necessary to protect human, animal or plant health and life, or if they are related to the conservation of an exhaustible natural resource.

However, NAFTA Article 315 also sets limits on how these exceptions can be applied. Thus, one should not assume that these exceptions will be a simple way to manage or prevent bulk water exports. Depending on the exception, the measure that the government applies may need to be the least trade-restrictive (i.e., GATT Article XX) or it may require that any reduction in exports to the NAFTA party be proportionate relative to total supply (i.e., NAFTA Article 315).

For example, an appeal panel in a WTO case (a case about GATT Article XX) commonly referred to as the "Shrimp-Sea Turtle" case *(United States–Import Prohibition of Certain Shrimp and Shrimp Products*, WTO document WT/DS58/AB/R), ruled that though the exceptions may apply broadly, the measures the government imposed must nevertheless be the least trade-restrictive possible. The "Shrimp-Sea Turtle" case reflected how trade dispute resolution panels do not expect the government's restrictive legislation to be dismantled, but simply be made consistent with that country's trade obligations.

It is important to note that should water at some point be ever destined for export, or actually be exported, Chapter 309 could make it very difficult to later restrict or scale back those exports. Any such restriction would rely on the exceptions in NAFTA, in which good data and thinking respecting the scarcity and conservation of the resource will be key. Any government measure used to restrict exports would need to also be carefully crafted as to be the least trade restrictive possible.

With all of the above in mind, policy-makers considering a new pricing regime for water must properly assess outcomes, particularly whether the new pricing regime will allow water to be used however and wherever the purchasing enterprise would like to use that water. A central concern here is whether the government will continue to have the regulatory levers to ensure that appropriate amounts of water in its natural state are available for all stakeholders. A pricing regime that removes the government's ability to regulate the volumes of water that are drawn, how it is allocated, and how it is used, would complicate the government's role. To act consistently within Canada's NAFTA commitments, it would be much more complicated for government to ensure appropriate distribution by intervening after a transaction has occurred.

For example, can a water user under the new pricing regime purchase either the right to draw water, or even the water itself, away from other domestic users (i.e., irrigators) in order to have the water bottled and then to export it? Does the new pricing regime leave it to market forces to allocate the water? An answer of "yes" to any of these questions may make it difficult for government to manage water resources. If a time comes when there is less water available, and that also comes to affect other stakeholders—whether it be farmers, the oil and gas industry, or even municipalities—at what point in the process can the government intervene and influence allocation?

Once water is withdrawn and intended for a particular use—it is very hard to put the "genie back in the bottle." It is a more complex task—and vulnerable to NAFTA challenges—if the government were to try and turn back the clock by reallocating water that has been already put to a certain use that has made the water subject to NAFTA. If market forces dictate that water bottling, or piping water out of the province, were the highest value use of water, and this significantly affects the allocation to other uses, the provincial government would have to be careful in how it sought to influence how the water was being distributed.

2. NAFTA Chapter 11: Water as an Object of Investment

NAFTA Chapter 3 cannot compel exports of any good or product, water included. NAFTA Chapter 11 also cannot compel export, as its provisions do not apply to exports or imports. Rather, Chapter 11 is intended to protect investors from one NAFTA nation that has invested in another NAFTA nation. According to Chapter 11, foreign investors and their investments are to be accorded "equal treatment" with the nationals of the party at issue by the national government. Further, a province must treat foreign investors and their investments as well as it treats any investor from another province, and their investment in that province. In short, Chapter 11 ensures that foreign investors based in NAFTA countries who have decided to invest in another NAFTA country will be treated fairly and will not have their investments expropriated without compensation.

At the same time, neither is Chapter 11 irrelevant. David Boyd maintains that NAFTA Chapter 11 may provide the most significant threat to water, and more generally, Canada's ability to legislate environmental issues (Boyd 2003). In order for Chapter 11 to apply in relation to water or water rights, water does not have to qualify as a "good" and it does not need to be "exported." Rather, Chapter 11 could apply to foreign water investments where water is transformed for Canadian consumption. Even the federal government has acknowledged that Chapter 11 applies to investments in water (Shrybman 1999). Thus, NAFTA will apply regardless of whether water is considered a good (Boyd 2003).

Some objectives of Alberta's current *Water Act* could be undermined by Chapter 11 Article 1110 of NAFTA, which prohibits nationalization or expropriation unless there is proper compensation (Cumming and Froelich 2007). Here, much depends on whether a new government imposed pricing scheme is interpreted so as to conclude that the investment has been "expropriated".

NAFTA Chapter 11 would therefore likely apply to an investor from the US or Mexico who owns a license to divert water, access to which is important to the success of an investment (Cumming and Froelich 2007). Where the investor can establish a claim that a regulatory scheme or government action has affected its investment—in effect expropriating the investment—the investor would have a right to be compensated.

Considerations by NAFTA Chapter 11 panels of what constitutes "expropriation" have created a spectrum of possible interpretations such that all NAFTA countries are exposed to significant risk (Cumming and Froelich 2007). Though there is no clarity on the definitive test for whether there has been an expropriation, any proposed new water regime would need to be assessed based on the different interpretations proposed by panels. The basic questions that different panels have asked have included:

→ Would the government action be considered a direct expropriation, where the government action reflects an interest in taking ownership of the investment?

→ Is there a "regulatory taking?" In other words, was there an "incidental interference with the use of property which has the effect of depriving the owner, in whole or in significant part, of the use or reasonably-to-be-expected economic benefit of the property, even if not necessarily to the obvious benefit of Canada?"

→ Has there been a "creeping expropriation" such that there is a "lasting removal of the ability of the owner to make use of its economic rights?" Does the regulatory scheme "substantially deprive the investor of profits which would otherwise have resulted from the investment?"

→ Was the effect sufficiently significant as to create a "detriment substantial enough to warrant a successful expropriation claim?"

→ Has the measure been taken for a public purpose, where the effect is non-discriminatory, accomplished with due process, and appropriate compensation has been paid?

The last question above highlights that a government can take action for a public purpose. However, the government is also required to compensate appropriately. Thus, the governments of Canada and Alberta could claim that the purpose of the changed pricing regime, and the accompanying changes to the *Water Act*, are environmental in nature and for reasons of conservation. This would be in accordance with NAFTA Article 1114, which reads, in part:

> "Nothing in this Chapter shall be construed to prevent a party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in manner sensitive to environmental concerns."

The "environmental measures" in Article 1114 might allow the governments of Canada and Alberta to avoid liability, but it does not alleviate them from the obligation to compensate (Cumming and Froelich 2007). Cumming and Froehlich suggest that, based on this approach, the governments could argue that the corporation receiving the water license knew the limitations of the license pursuant to the *Water Act*. Even if Article 1114 applied, the investor could still counter that it is entitled to compensation (Cumming and Froelich 2007). Even if the change in regulation was for conservation purposes and a panel concluded that there was no expropriation, governments might still be required to compensate investors for their investments covered by NAFTA Chapter 11 (Cumming and Froelich 2007).

In short, the provisions of Chapter 11 might complicate the administration of market-based based policy instruments. All investors, whether Canadian or from the other NAFTA parties with water rights, services, or products might be aggrieved by a provincial change in the water pricing mechanism or in market operations for trading water licenses. However, it is only foreign investors based in the other two NAFTA party states who would have the option of filing a complaint under NAFTA.

NAFTA and Actions by Provinces

While the Canadian government has the jurisdiction to enter into international treaties with other states, federal and provincial power over water is not entirely clear (Bowal 2006). The introduction of NAFTA into the mix changed the federal government's ability to outright ban exports, and did so almost instantly (Heinmiller 2003). Management of water resources and waterworks is either an area of shared jurisdiction, or in other cases, it is within the purview of the provincial governments. Thus, for any particular piece of legislation, it is left to the courts to decide who has the power to legislate. Finally, in any case of "national concern" or where there is a need for coordination of a matter that crosses provincial boundaries, the federal government has been found to have the power to regulate (Luz and Miller 2002). In assessing the effects of one province's activities on how NAFTA would apply to other provinces in Canada, however, we need to look in two directions.

First, we need to examine what NAFTA says about imports and exports. Under the national treatment provisions of Part II (Trade in Goods), a province must treat all goods equally. In other words, if somehow there is an improvement in the treatment of a domestic product which is equivalent to a certain import from the US or Mexico, then the import must also be treated the same as the domestic product. If in an emergency situation, a province places limitations on water removal, exports can then only be reduced so as to keep constant the proportion of exports *vis-a-vis* the total volume. Finally, any restrictions or regulations on water should be focused on water before it is to be processed in some way, such as before it is gathered, stored, treated, bottled or otherwise packaged (Johnson 1994, Anderson and Landry 2001).

Thus, within a province, NAFTA would apply to imports from, or exports to other NAFTA territories. But, it would not force other provinces to follow suit unless all of the other provinces have adopted the same regime and it is subsequently found to be inconsistent by a NAFTA panel. This is an important consideration, for the overwhelming majority of shared waters between Canada and the US are located not in Alberta, but in other provinces. There are about a dozen major drainage basins shared between Canada and the US. In Alberta, only the Oldman River Basin and the Milk River Basin are shared. The Oldman receives some flow from Montana via the St. Mary River, while the Milk originates in Montana, flows into Alberta, and then back out again. Both of these basins are very small. The Oldman has an average annual flow rate of 95 cubic metres per second while the Milk has an average annual flow of about 19 cubic metres per second. The other nine shared waters are much more substantial. For example, the Columbia River, which originates in British Columbia and flows over the US border, has an average annual flow rate

of 7,500 cubic metres per second. Other shared waters include the Yukon River, the Fraser River the Souris River, the Red River, the Rainy River, the Great Lakes-St. Lawrence River, Lake Champlain, and the St. Croix River. All of these are simply more substantial.

Second, we must assess how the change in a province's legislation, or its actions, affect investment. In NAFTA Chapter 11 on investment, under the provisions for national treatment, the province must treat all investors and their investments equally with Canadian investors from outside the province. For provinces, then, as with the import and export of goods, the main challenge is to ensure that any changes in the regulatory regime apply equally to domestic investors, whether in the province or from outside, as well as investors from the other two NAFTA countries and their investments. When it comes to a water pricing scheme, it should be part of a broader regulatory structure focused on water management with an environmental purpose, as discussed above.

Conclusions

When it comes to water and NAFTA, the two most important sections to consider are Chapter 3 and Chapter 11. Chapter 3 defines what constitutes a good, and contains prohibitions against trade restrictions of such goods. Chapter 11 speaks to a requirement for all NAFTA parties to provide equal treatment of investors and their investments.

In both cases, we conclude that the market-based instruments and measures that the province of Alberta is exploring—the administered pricing of water and the regulated trading of water licenses—do not obligate the province to export water under NAFTA. In no way can NAFTA work to compel the export of Canadian water where no such export is pre-existing or intended.

That said, it would be incorrect to argue that NAFTA is irrelevant to Alberta's present exploration of market-based policy instruments. Though a trade agreement like NAFTA cannot be invoked to force a country to export, there are important aspects of NAFTA that do need to be kept in mind if a new water pricing system or exchange is developed.

First, any provincial or national export ban on water is best justified—in trade law terms—as a measure designed and purposed for conservation and environmental stewardship. The environmental reasons behind the ban on inter-basin water transfers provides ample grounding, while the growing data and public concern with water scarcity justifies retaining such restrictions.

In turn, this suggests certain lessons for pricing and allocation for Alberta, and indeed any Canadian province considering a system or regime of market-based water pricing mechanisms:

1) In order for the government to be most certain that it is compliant with NAFTA, any new water pricing regime or system for the exchange of water licenses will need to begin from the perspective of an environmental purpose. The implementation of any government measure would need to be consistent with this purpose.

2) If the government anticipates placing any restrictions on water, those restrictions should be on water in its natural state before it has been diverted or removed. Government regulation should also apply generally—applying to all users without distinction.

3) In designing a new water pricing or market regime, the government needs to ensure that any changes to the current regime do not take away from its ability to oversee and manage the allocation of water in its natural state. A move to a water exchange, for example, might dictate in favour of greater liquidity and fungibility. Though these two characteristics are desirable in a freely functioning market (e.g., the model put forward by Sandor, Walsh, and O'Hara) it could lead Alberta into having little control over the end use of its water resources, which could lead to difficulty justifying policy actions under NAFTA. This may be a delicate balancing act.

4) The proposed pricing regime should be analysed from the perspective of how the changes will result in an increase or decrease in the price of water, and determine the effects on investors who have investments for which water plays an important role. Regardless of whether the new regime has an environmental purpose, if challenged, a NAFTA panel could still require compensation.

Beyond these considerations, policy-makers need to be aware of the following possible results that could make it more challenging to revert back to a regime without pricing or an exchange, and with more government oversight:

1) If water exports were to ever begin, and then be expanded beyond a sustainable level, any government efforts to scale back those exports would have to be justified as a NAFTA exception by an environmental purpose, for example, concerns over scarcity and conservation of an exhaustible resource. Good transparent data on water quantity and quality, and its clear and logical linkage to water policy, would be very helpful should such an argument be required.

2) Depending on which exception a government seeks to rely on in restricting any exports, there may still be a requirement to use the least trade-restrictive practices.

3) It would be more difficult to justify restrictions on any water exports under NAFTA where there is an outright prohibition, and where the government measures depart from having an environmental purpose, and instead, take on the colour of economic nationalism.

4) There is a level of uncertainty that continues to surround NAFTA Chapter 11 adjudication. Therefore, the development of any water exchange or market should determine whether that step could be interpreted as constituting expropriation. The province of Alberta should analyse the proposed regime from the perspective of each of the various NAFTA tests for expropriation.

Alberta has been taken as the case study in this paper as the discussion about employing any administered or market pricing and allocation mechanisms have been advancing more quickly in Alberta than elsewhere in Canada. Alberta's current *Water Act* enables a number of market-based mechanisms, and the province's policy-makers are attempting mechanisms to incent current licensees and traditional water users to conserve or transfer their rights to other higher-value uses.

Taking the next step and determining what type of water pricing system to implement—whether an administrated pricing scheme (government regulated) or a water exchange—must be taken carefully. Restrictions on water allocations that have the effect of limiting export will best be justified by a clear and consistent policy commitment to conservation of the province's water resources. Further, new exports will not be compelled beyond that which exists at any given time.

Clearly, a water pricing regime that continues to be in government hands would have the least risk of offending NAFTA obligations, as the greatest affect would likely be on investors and their investments. Under the environmental provisions of NAFTA Chapter 11, such a measure could stand provided, again, that the environmental intent was both clear and justifiable. Compensation to investors might, however, still be an issue.

Alberta has based its current exploration of market-based instruments for water management on the dual grounds of the economically rational and efficient allocation of water as a scarce resource and environmental stewardship. To the extent that the province pursues policy instruments which are reflections of an ideal economic free market, it runs a greater risk of triggering NAFTA obligations which might go beyond what is considered acceptable. In the end, the best safeguard against those hazards are a clear policy and regulatory framework where environmental considerations are given a clear preeminence.

Appendix A: Federal and Provincial Statutes

The following are the statutory restrictions across Canada on bulk water exports, out-of province transfers of water, and inter-basin transfers of water.

Federal:

International Boundary Waters Treaty Act (SC 2009, c. I-17) s. 13.

International Boundary Waters Regulations (SOR/2002-45) ss. 5-6.

North American Free Trade Agreement Implementation Act (SC 1993, c. 44) s. 7.

British Columbia:

Water Protection Act (RSBC 1996, c. 484) ss. 4-7.

Alberta:

The Water Act (RSA 2000, c. W-3) ss. 46-47.

Saskatchewan:

The Saskatchewan Watershed Authority Act, 2005 (SS, 2005, c. S-35.03) s. 55.

Manitoba:

Water Resources Conservation Act (C.C.S.M. c. W72).

Ontario:

Ontario Water Resources Act (RSO 1990, c. O.40, as am).

Quebec:

Water Resources Preservation Act (RSQ, c. P-18.1).

Nova Scotia:

Water Resources Protection Act (NSA 2000, c. 10).

Prince Edward Island:

Environmental Protection Act (SPEI, c. E-9) s. 12.1.

Newfoundland and Labrador:

Water Resources Act (SNL 2002, c. W-4.01, as am) s. 12 (2).

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