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SACRED SUSTAINABILITY: THE SIGNIFICANCE OF ONTARIO'S FIRST NATIONS'WATER VALUES IN RELATION TO THE LAW OF THE GREAT LAKES & ST. LAWRENCE RIVER BASIN & THE CURRENT PROPERTY LAW PARADIGM

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ABSTRACT

With the human population set to reach seven billion people and society's awareness of its effects and demands upon the environment, there exists a general consciousness that new thinking is required to "save" the earth's resources. This is especially true with fresh water, a limited and highly sought after natural resource. In North American, the Great Lakes Basin contains 20% the world's entire freshwater. Yet, before European colonisation of the Americas, the indigenous peoples of these lands lived with a set of environmental values which respected the land as a living thing. The sources of fresh waters were viewed as the lifeblood of the land.

With the colonisation and displacement of indigenous views and values, British common law was implanted. It grew and evolved to meet the needs of what is today the country of Canada. A prime example of the law's evolution is evident when looking at the way the law has dealt with water over time. Today, a tangled web of law exists.

This thesis explores the issue of how First Nations in the province of Ontario are included in the Great Lakes Basin and St. Lawrence River water governance, and how property law and legal theory have shaped the current management structure.

KEYWORDS

The Great Lakes Basin and St. Lawrence River, water law, Ontario First Nations, traditional knowledge, property law, property theory, public trust doctrine, sustainability theory, aboriginal rights, International law.

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We never know the worth of water until the well is dry.

Thomas Fuller, 1732

We owe the Aboriginal peoples a debt that is four centuries old. It is their turn to become full partners in developing an even greater Canada. And the reconciliation required may be less a matter of legal texts than of attitudes of the heart.

The Right Honourable
Romeo LeBlanc

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CHAPTER ONE: INTRODUCTION, PROBLEM, LITERATURE REVIEW & SUBSEQUENT CHAPTER SUMMARIES

Preamble

In his book entitled *The Sacred Balance: Rediscovering Our Place in Nature*, published in 1997, distinguished Canadian environmentalist David Suzuki wrote the following passage:

> Human activities inflict harsh and often irreversible damage on the environment and on critical resources. If not unchecked, many of our current practices put at serious risk the future that we wish for human society and the planet and animal kingdoms, and may so alter the living world that it will be unable to sustain life in the manner that we know. Fundamental changes are urgent if we are to avoid the collision our present course will bring about.[1]

1.1 Introduction

In the spring of 1998, Nova Group Ltd. ("Nova") a company based in Sault Ste. Marie, Ontario, made a proposal to the government of Ontario to take freshwater from Lake Superior and export it, in bulk[2], in order to sell the water to drought-stricken countries in Asia.[3] Ontario's Ministry of the Environment granted a permit to withdraw 10 million liters of freshwater per day for sixty days

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[1] David Suzuki, *The Sacred Balance: Rediscovering Our Place in Nature* (Vancouver, B.C.: Greaystone Books, 1997) at 5. David Suzuki is an environmentalist, academic and a recipient of the Order of Canada. In 2007, Mr. Suzuki received an honorary degree (D.Sc.) from the University of Western Ontario.

[2] According to Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, "Water as a Multiple-Use Resource and Source of Political Conflict" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) **[*Johns et al.*]** at 47:

> Bulk water removal refers to the transfer and removal of water out of its basin not only by manmade diversions but also by tanker ships, trucks, or pipelines. This use is not currently permitted in Canada, but its potential has sparked great political debate.

[3] Peter Bowal, "Canadian Water: Constitution, Policy, and Trade" (2006) Mich. L. Rev. 1141 at 1151 (Westlaw) **[*Bowal*]**. *See also Great Lake Water Deal Draws Criticism,* online: CBC News, November 13, 1998 at <http://www.cbc.ca/news/story/1998/05/04/water980504.html> (last visited 20 May, 2010).

a year, for five years.[4] Allowing this bulk transfer of freshwater was not prohibited by any existing rules pertaining to water export out of the Great Lakes.[5] This permit was met with a chorus of disapproval and public outcry from people in both Canada and the United States, whereupon Nova agreed to cancel the export proposal on the condition that Nova would be"[...] first in line should bulk water become tradable."[6] All in all,

> "[t]he Nova Group water tanker set to sail for China in 1998 provided the singular impetus to develop a clear bi-national water management agreement in the Great Lakes Basin."[7]

Following this incident, Ontario and all of the Great Lakes provinces and states joined together to negotiate an understanding regarding the diversion of bulk water from the Great Lakes Basin and St. Lawrence River. Although the subject matter of bulk water export was a novel issue at that time, the alliance between the two countries regarding Great Lakes waters was not.

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[4] Bowal, *supra* note 3 at 1151.

[5] The *Great Lakes Charter*, Principles for the Management of Great lakes Water Resources, Feb. 11, 1985, *available at* http://www.cglg.org/projects/water/docs/GreatLakesCharter.pdf (last visited 18 May 2010). The 1985 Great Lakes Charter has been described by one lawyer as a "non-binding gentlemen's agreement." *See* Kate Kempton, *Bridge over Troubled Waters: Canadian Law on Aboriginal and Treaty Water Rights, and the Great Lakes Annex*, (Toronto: Walter and Duncan Gordon Foundation, 2005) at 74 **[*Kempton*]**. According to Black's Law Dictionary, a gentlemen's agreement is "[a]n unwritten agreement that, while not legally enforceable, is secured by the parties' good faith and honor." Black's Law Dictionary, Third Pocket Ed. (St. Paul, MN: Thomson West, 2006) at 312. The 1985 Great Lakes Charter will be discussed in more detail in Chapter Two, *infra*.

[6] John K. Grant, "Against the Flow: Institutions and Canada's Water-Export Debate" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) at 160 **[*Grant*]**. According to Grant,

> [t]he granting of such a permit by the province of Ontario ran counter to principles of conservation and cooperation management set out in joint province-state declarations such as the Great Lakes Charter, a non-binding agreement...aimed at protecting [the Great Lakes Basin]. *Ibid.* at 160.

The *Great Lakes Charter* will be discussed in more detail in Chapter Two.

[7] Bowal, *supra* note 3 at 1151. *See also* Peter Annin, *The Great Lakes Water Wars* (Washington: Island Press, 2006) at 193-210, Chapter 11 "The Nova Group and Annex 2001".

For over a century, beginning with the *Boundary Waters Treaty* of 1909[8] (still in force today), the countries of Canada and the United States of America, and their respective provinces and states surrounding the Great Lakes, have implemented a variety of treaties, compacts, agreements, federal statutes, as well as state and provincial laws that cumulatively encompass the "Law of the Lakes."[9] Moreover, within each province and state, water that forms part of the Great Lakes basin is micro-managed by local governments and agencies.[10] For example, the province of Ontario utilizes local governments, agencies and conservation authorities with specific legislative mandates to manage water resources on a watershed basis.[11] Furthermore, since the 1970s, non-state actors in the form of special interest and community groups have formed partnerships with the government in, as Johns and Rasmussen note,

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[8] *Treaty relating to Boundary Waters and Questions Arising with Canada*, United States and United Kingdom, 11 January 1909, 36 U.S. Stat. 2448, U.K.T.S. 1910 No. 23. The Treaty appears as a schedule to the *International Boundary Waters Treaty Act*, R.S.C. 1985, c. 1-17 as amended. The Boundary Waters Treaty is the main legal instrument dealing with both boundary and transboundary waters of the Great Lakes Basin. The treaty provides that no action can be taken which affects levels or flows of water, except under prescribed procedures for coordination and agreement between the United States and Canada. The treaty is problematic in that it does not deal with all basin waters in a similar manner and makes no reference to groundwater. Grant, *supra* note 6 at 173.

Recently, on May 13, 2010, Bill C-26, an Act to Amend the International Boundary Waters Treaty Act, was tabled. The proposed bill, The Transboundary Waters Protection Act, would increase protection to more basin waters, including the protection to rivers and streams that cross international borders (transboundary waters). *See* Bill Summary (C-26) – Transboundary Waters Protection Act, online: Government of Canada <http://www.canadainternational.gc.ca/can-am/bilat_can/bill-loi.aspx?lang=eng> (last viewed September 1, 2010).

[9] *See* Christine A. Klein, "The Law of the Lakes: From Protectionism to Sustainability" (2006) Mich. St. L. Rev. 1259 at 1266 ***[Klein]***. The history of Great Lakes water governance between Canada and the United States will be discussed in more detail in Chapter Two.

[10] Carolyn Johns and Ken Rasmussen, "Institutions for Water Resource Management in Canada" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) at 83 ***[Johns and Rasmussen]***.

[11] Johns and Rasmussen, *supra* note 10 at 83.

> [...] an attempt to involve citizens and groups at the national, provincial, and local levels in the planning and implementation of improved water and water management.[12]

As Valiante states:

> With many claims on this water for local uses, many stresses on water quality, and many uncertainties about the impacts of climate change, recent threats of diversion and export of Great Lakes water have met with stiff resistance from the public and their politicians.[13]

1.1.1 Freshwater: Definition, Location and Significance

The importance of water for all living things on earth cannot be overstated. First and foremost, without water there would be no life. Water is more than just a "thing." In isolation and in its basic form, water is molecularly simple.[14] But water is also dynamic because it functions within the hydrologic cycle effectively in an "endless circulation."[15] The cycle itself is powered by the sun which causes water to constantly move within the cycle, changing form along the way.

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[12] Johns and Rasmussen, *supra* note 10 at 84-85. Some examples of non-state actors within the Great Lakes region are the Georgian Bay Association and Georgian Bay Forever.

[13] Marcia Valiante, "Management of the North American Great Lakes" in O. Varis, C. Tortajada and A.K. Biswas, eds., *Management of Transboundary Rivers and Lakes* (Berlin: Springer, 2008) at 256 **[*Valiante*]**.

[14] A molecule of water is made up of two hydrogen atoms and one oxygen atom (H_20).

[15] *See* Hydrologic Cycle, online: Environment Canada <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=23CEC266-1> (last modified 27 November 2009) (last visited 16 March 2010).

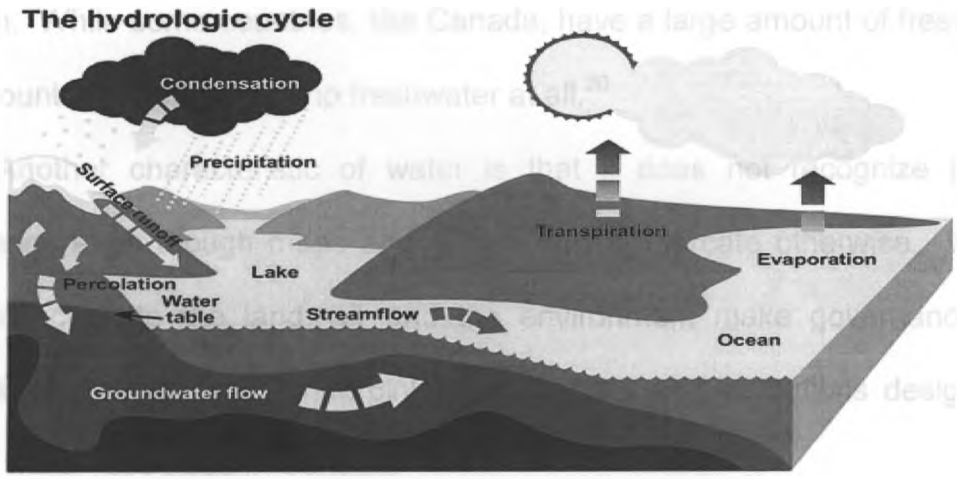

Figure 1: The Hydrologic Cycle[16]

Water is located in different areas of the world and in different forms, including as a solid (a glacier for example), a liquid (a lake) or a gas (through the process of evaporation). No matter what form it takes, water is abundant on earth. There is estimated to be 1 386 000 000 km^3 of water distributed globally.[17] This abundance, however, is misleading. As Bowal asserts, "[w]ater is not scarce in the absolute sense, but rather in the way in which it is distributed."[18] The great quantity of water in the oceans, roughly 97% of all water on earth, is salt water.[19] Furthermore, this distribution of global freshwater is varied in its

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[16] *Ibid.*

[17] Earth's Water Distribution, online: *U.S. Geological Survey* (U.S.G.S.), *Department of the Interior* <http://ga.water.usgs.gov/edu/waterdistribution.html> (last modified 9 October 2009) (last viewed 16 March 2010).

[18] Bowal, *supra* note 3 at 1146.

[19] Earth's Water Distribution, online: *U.S. Geological Survey* (U.S.G.S.), *Department of the Interior* <http://ga.water.usgs.gov/edu/waterdistribution.html> (last modified 9 October 2009) (last viewed 16 March 2010). Furthermore, the distribution of Earth's water may be further subdivided when looking exclusively at freshwater. The majority of the Earth's freshwater (68.7%) is contained in icecaps and glaciers. The remaining freshwater is groundwater (30.1%), surface water (0.3%) and other water (0.9%) within the hydrologic cycle. *Ibid.*

location. While some countries, like Canada, have a large amount of freshwater, other countries have little or no freshwater at all.[20]

Another characteristic of water is that it does not recognize political boundaries even though maps and globes may demarcate otherwise. Water's interconnection to the land, air and the environment make governance of it particularly complex and "underpin[s] the conflicts and institutions designed to govern water resources in Canada."[21]

1.1.2 Ontario and the Great Lakes-St. Lawrence River System

The provinces of Ontario and Québec and the eight U.S. states[22] share political borders along the five Great Lakes[23] and the St. Lawrence River.[24] This system of water is collectively referred to as the Great Lakes Basin.[25]

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[20] Canada is considered a "freshwater-rich" country. For a distribution of freshwater by province and territory, *see* The Atlas of Canada: Distribution of Freshwater, online: *Natural Resources Canada* <http://atlas.nrcan.gc.ca/site/english/maps/freshwater/distribution/1> (last modified 26 February 2009) (last visited 18 March 2010).

[21] Johns et al., *supra* note 2 at 19.

[22] The states are: Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin.

[23] The Great Lakes, from largest to smallest in terms of volume (km^3) are Lake Superior (12 100), Lake Michigan (4 920), Lake Huron (3 540), Lake Erie (484) and Lake Ontario (1 640), for a total of 22 684 km^3. According to the Ontario Ministry of Natural Resources, more than 8 million people live within Lake Ontario and the St. Lawrence River basins. Ontario's major industrial and urban centres, including Toronto, Mississauga and Hamilton, are concentrated along Lake Ontario's northwest shore in an area called the Golden Horseshoe. This is one of the fastest growing regions in Canada. *See* Great Lakes: Lake Ontario and the St. Lawrence River, online *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Business/GreatLakes/2ColumnSubPage/STEL02_173908.html> (last modified 5 March 2010) (last visited 21 May 2010).

[24] According to Environment Canada, the St. Lawrence River is made up of several different water masses, each with its own distinct natural physical and chemical characteristics. Furthermore, there are five main water masses and nine secondary water masses associated with the river's main tributaries. For more information, *see* St. Lawrence Centre: St. Lawrence Info, online Environment Canada <http://www.qc.ec.gc.ca/CSL/inf/inf010_e.html> (last modified 10 July 2007) (last viewed 17 March 2010).

[25] Great Lakes: Living Systems, online: *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Business/GreatLakes/index.html> (last modified 10 February 2010) (last viewed 16 March 16, 2010). "The Great Lakes form the largest system of freshwater lakes in the world."

Figure 2: The Great Lakes Basin[26]

Although this basin holds nearly 20% of the world's entire surface freshwater,[27] the annual renewal of the Great Lakes basin water is only 1%.[28] The Great Lakes basin is also part of the Atlantic drainage basin, one of Canada's five major water drainage basins.[29] Moreover, "[f]orty percent of Canada's boundary with the United States is composed of water."[30] In addition,

> [a]ll aspects of the natural environment, from weather and climate, to wildlife and habitat are affected by the Great Lakes system. The long history of agricultural and industrial development has placed the Great Lakes basin's ecosystem under tremendous stress.[31]

Ibid. Furthermore, "[t]he Great Lakes system is a chain of lakes and connecting channels descending like a series of steps toward the Atlantic Ocean." Great Lakes-St. Lawrence Water Flows: Overview, online: *Great Lakes Information Network* (GLIN) < http://www.great-lakes.net/envt/water/levels/flows.html > (last modified 18 June 2009) (last accessed 16 March 2010).

[26]The Great Lakes, online: *The Great Lakes Information Network* (GLIN) http://www.great-lakes.net/lakes/basinMap2.gif (last modified 31 March 2010) (last accessed 15 May 2010).

[27] Our Great Lakes—Great Lakes Overview, online: *Environment Canada* <http://www.on.ec.gc.ca/greatlakes/default.asp?lang=En&n=FC147FA0-1> (last modified 6 January 2010) (last accessed 23 February 2010). [***Our Great Lakes***].

[28] Valiante, *supra* note 13 at 256.

[29] Johns et al., *supra* note 2 at 25. According to the authors, at 24:

> [a] drainage basin is an area that drains all precipitation received as either runoff or base flow (groundwater sources) into a particular river or set of rivers. The boundary of a drainage basin is defined as the ridge beyond which water flows in the opposite direction.

[30]Quick Facts, online: *Environment Canada* <http://www.ec.gc.ca/eau water/default.asp?lang=En&n=11A8CA33-1> (last modified 26 November 2010) (last accessed 23 February 2010).

[31] *Our Great Lakes, supra* note 27.

The province of Ontario borders on four of the five Great Lakes,[32] and, not surprisingly, the Great Lakes and the St. Lawrence River form a very large part of Ontario's total freshwater. In sum, Ontario contains "more than a quarter of a million lakes, rivers and streams and rich groundwater resources."[33] When compared to the other states and provinces within the Great Lakes Basin, Ontario is the most densely populated as well as the largest consumer of freshwater.[34] This is clearly obvious when looking at statistics. Fresh water withdrawal per jurisdiction is summarized in the following table:

Jurisdiction	Water withdrawal (billions of liters per day)	Water withdrawal (billions of gallons per day)
Ontario	51.85	13.70
Quebec	5.19	1.37
Illinois	7.46	1.97
Indiana	9.92	2.62
Michigan	39.94	10.55
Minnesota	0.58	2.19
New York	15.94	4.21
Ohio	13.40	3.54
Pennsylvania	0.15	0.04
Wisconsin	13.51	3.57

Table 1: Great Lakes Water Withdrawal[35]

[32] Lake Michigan is the only Great Lake which is completely located within the territorial border of the United States.

[33] Water: A Fresh Outlook on Water, online: *Ontario Ministry of the Environment* <http://www.ene.gov.on.ca/en/water/index.php> (last modified 16 September 2009) (last accessed 16 March 2010).

[34] Adele Hurley, "Sucking the Great Lakes Dry: Neglect, Climate Change and Bad Politics Threaten Fresh Water in the Great Lakes," *Canadian Perspectives* (Autumn Issue 2005) online: *The Council of Canadians* < http://www.canadians.org/publications/CP/2005/fall/CP_Fall05_GreatLakes.pdf> (last accessed 20 May 2010).

[35] This chart is adapted from the Annual Report of the Great Lakes Regional Water Use Database Repository, online: *The Great Lakes Commission* <http://www.glc.org/wateruse/database/pdf/2006%20Water%20Use%20Report.pdf> (last accessed 20 May 2010) at 3 [Great Lakes Commission Report]. The chart **does not** take into account water withdrawn and used for hydroelectric power. If it did, the province of Québec's use would be dramatically increased because of its hydroelectric damns.

The demand for freshwater placed upon the Great Lakes and St. Lawrence River by the human population,[36] coupled with global warming, has an effect on the amount of freshwater available within the Great Lakes Basin and St. Lawrence River.[37] This is in line with a growing international concern regarding the world's limited freshwater supply:

> Water is linked to the crises of climate change, energy and food supplies and prices, and troubled financial markets. Unless their links with water are addressed and water crises around the world are resolved, these other crises may intensify and local water crises may worsen, converging into a global water crisis and leading to political insecurity and conflict at various levels.[38]

From a global standpoint, "world water use has tripled in the last fifty years, and demands will continue to rise with both increased population and industrial growth."[39] It is no surprise, then, that sustainability of the Great Lakes waters has become an issue for everyone reliant upon the waters for both present and future use.

Yet, despite assurances from the International Joint Commission that bulk water transfers and diversions in Canada and the United States have ended,

> [r]egional residents on both sides of the border remain worried about outsiders taking Great Lakes water. These fears are driven,

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[36] For a detailed overview of water withdrawals, diversions and consumptive uses by all jurisdictions and the sources of withdrawal, *see ibid.* In Ontario, in 2000, public supply represented the largest total consumptive use sector, with nuclear power and industrial use being the next two largest consumptive uses respectively. *See ibid.*, figure 11 at 41.

[37] For Great Lakes water levels over time, *see* Historical Monthly and Yearly Mean Water Level Graphs 1918-2009, online: *Fisheries and Oceans Canada* <http://www.waterlevels.gc.ca/C&A/netgraphs_e.html> (last accessed 24 May 2010). *See also* Current Great Lakes-St. Lawrence Water Levels, online *Great Lakes Information Network* at < http://www.great-lakes.net/envt/water/levels/levels_current.html> (last accessed 24 May 2010).

[38] *See* The United Nations World Water Development Report 3: Water in a Changing World, Overview of Key Messages, online: *United Nations Educational Scientific and Cultural Organization* <http://www.unesco.org/water/wwap/wwdr/wwdr3/pdf/08_WWDR3_overview_of_key_msgs.pdf> at 2 (last accessed 20 May 2010).

[39] Johns et al., *supra* note 2 at 47.

> in part, by a general lack of faith that government institutions will protect the environment. But such worries can also be attributed to the almost spiritual connection that millions of people have with the Great Lakes (for many Native Americans in the United States, and First Nations people in Canada, it is a spiritual connection). In other parts of North America, mountains, oceans and old-growth forests serve as the ecological talismans of the people. But for Canadians and Americans living in the Great Lakes region, nothing defines their relationship with the environment more than an abundance of freshwater—especially their sacred "Sweet Water Seas."[40]

1.2 Impetus for Study & Resulting Limitations

In Canada, most water use regulation is derived from a Western perspective that views water as part of the physical environment only.[41] The Aboriginal peoples[42] of Canada, however, have viewed water as something that is culturally and spiritually connected to them.[43] Whereas there is a link in the hydrologic cycle between water and all five of the Great Lakes, there is also a link between the Aboriginal peoples and the same waters from time immemorial when the Creator gave instructions to respect all water.[44] These cultural perspectives also "provide a rich arena in which to examine [water] management issues."[45] In addition,

> [u]nderstanding and identifying cultural practices and traditional ecological knowledge is for some an important first step in

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[40] Peter Annin, *The Great Lakes Water Wars* (Washington: Island Press, 2006) at 12.

[41] Johns et al., *supra* note 2 at 50.

[42] According to Indian and Northern Affairs Canada, the term "Aboriginal peoples" refers to "the descendants of the original inhabitants of North America. The Canadian Constitution recognizes three groups of Aboriginal people — Indians, Métis and Inuit. These are three separate peoples with unique heritages, languages, cultural practices and spiritual beliefs, " Citing to "Worlds First: An Evolving Terminology Relating to Aboriginal Peoples in Canada" online: *Indian and Northern Affairs Canada* <http://www.collectionscanada.gc.ca/webarchives/20071114213423/http://www.ainc-inac.gc.ca/pr/pub/wf/index_e.html> [***Terminology Source***].

[43] Johns et al., *supra* note 2 at 50.

[44] *Ibid.*

[45] *Ibid.*

> collaborative resource management between different user groups to prevent and resolve conflict.[46]

First Nations[47] peoples living in Canada hold a common indigenous perspective.[48] This indigenous perspective has been described as being a perspective of "embeddedness and holistic integration and sharing."[49] First Nations peoples also have a sacred connection to water that predates European first contact by the people originally living in what is today the country of Canada.[50] According to this sacred perspective, the environment, including water, is interconnected within the identity and existence of humans, and humans are interconnected with the environment.[51] This interconnection may be represented by a circle which has no end and is self-sustaining.[52] The Euro-Canadian worldview, on the other hand, may be described as linear, hierarchical, based on dominance, and fragmented.[53] Within the Euro-Canadian worldview, the environment is separate from human identity and exists under human

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[46] *Ibid.* at 51.

[47] According to Indian and Northern Affairs Canada, "First Nation" is

> [a] term that came into common usage in the 1970s to replace the word "Indian," which some people found offensive. Although the term First Nation is widely used, no legal definition of it exists. Among its uses, the term "First Nations peoples" refers to the Indian peoples in Canada, both Status and non-Status. Some Indian peoples have also adopted the term "First Nation" to replace the word "band" in the name of their community.

Terminology Source, *supra* note 42.

[48] An important caveat is noted from the outset. Reference to a "common indigenous perspective" does not suggest that all First Nation peoples share the same/identical perspective relating to the environment and its resources. This will be discussed briefly *infra*, and in more detail in Chapter Three.

[49] Kate Kempton, Bridge Over Troubled Waters: Canadian Law on Aboriginal and Treaty Water Rights, and the Great Lakes Annex (Toronto: Walter and Duncan Gordon Foundation, 2005) [***Kempton***].

[50] *See* Ardith Walkem, "The Land is Dry: Indigenous Peoples, Water, and Environmental Justice" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 304 [***Walkem***].

[51] Kempton, *supra* note 49 at 20.

[52] *Ibid.*

[53] *Ibid.*

domination, allowing for private property fragmentation.[54] Property, under this view, has the potential to be subjugated and exploited.[55]

This thesis focuses on the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*[56] (the "*Great Lakes Agreement*"). In order to comply with the *Great Lakes Agreement*, the province of Ontario is amending its existing water laws and programs to create greater regional consistency with the other Great Lakes states and the government of Québec.[57] The agreement recognizes, among other things, that:

> In light of possible variations in climate conditions and the potential cumulative effects of demands that may be placed on the Waters of the Basin, the States and Provinces must act to ensure the protection and conservation of the Waters and Water Dependent Natural Resources of the Basin for future generations;
>
> ...
>
> Sustainable development and harmony with nature and among neighbours require cooperative arrangements for the development and implementation of watershed protection approaches in the Basin[.][58]

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[54] *Ibid.*

[55] *Ibid.*

[56] *Great Lakes-St. Lawrence River Basin Water Resources Agreement*, Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Quebec, Wisconsin, 13 December 2005, online: <http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@water/documents/document/200040.pdf> [***Great Lakes Agreement***].

[57] Pursuant to Article 300 of the Agreement, Ontario, as well as every other jurisdiction under the Agreement, must provide a report one year from the date that Article 300 comes into force and thereafter every 5 years. Under Article 709 "Entry Into Force," Article 300 came into force "60 days after the last Party had notified all others that it had completed the Measures necessary to implement this Agreement" including Article 300. *See Great Lakes--St. Lawrence River Basin Sustainable Water Resources Agreement*, Art. 300(2)(j).

[58] *Great Lakes Agreement*, *supra* note 56.

This thesis will examine the views of First Nation people in Ontario who have a connection[59] with the Great Lakes. This thesis will examine primary legal materials to determine the extent to which the current Great Lakes and St. Lawrence River Basin regime either directly provides for the integration of First Nations knowledge or indirectly reflects First Nations values[60] through a holistic and ecological characterization of water. Furthermore, this thesis will examine to what extent First Nations knowledge and values should be a required component in Great Lakes and St. Lawrence River water legislation, from both a legal standpoint as well as an ecological perspective.

By examining the law relating to water in Ontario and by looking at the current Canadian property law paradigm, two hypotheses are made from the outset. First, models of water sustainability and conservation can be found in emerging property theories that parallel the cultural values of the First Nations people in the province of Ontario relating to water. Second, the legal reception of First Nations water values within the current mainstream water law system would both confer greater significance to the First Nation cultures and ensure ecological integrity of water use in the province of Ontario.

A number of assumptions will be made in this thesis. Doing this will inevitably create inherent limitations for this study. This thesis recognizes that

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[59] The connection referred to in this thesis is complicated and will be explained fully in Chapter Three. To begin here, Ross posits that,

> [...] First Nations peoples' relationship with the land is fundamentally and irreducibly spiritual...The spiritual connection First Nations peoples have to the land is a connection not only to the land as whole but also to particular portions of the land. First Nations peoples do not view the land as spiritually homogeneous or uniform.

Michael Lee Ross, *First Nations Sacred Sites in Canada's Courts* (Vancouver: UBC Press, 2005) at 3 [***Ross***].

[60] This thesis will not examine Indigenous law, as the engagement of this concept, although relevant, is beyond the scope of study.

not all First Nations share the exact same cultural values regarding water. It is acknowledged that differences exist among First Nation communities across the province of Ontario as well as across the country of Canada. There is further variation in cultural values if the scope is broadened to include American tribes.[61] There is an inherent difficulty in oversimplifying First Nations values into written form for the purposes of this thesis when the culture of these peoples has historically been an oral traditional and has included historical evolution.[62] This thesis relies solely on the limited written material available that describes Ontario First Nation water values and acknowledges that some Ontario First Nation perspectives will therefore not be relied upon in this study.

The law pertaining to Aboriginal water rights in the province of Ontario is currently in flux. This thesis will refer to the law as it currently stands and will inform the reader of the important issues currently before the courts.

1.3 Relevant Literature Review

1.3.1 The Great Lakes Basin

Academics who have written on the topic of the law and the management structures pertaining to the Great Lakes Basin have focused on providing studies

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[61] It is important to note here that there is also concern among the numerous American tribes regarding the water of the Great Lakes Basin. For example, *see* Joyce Tekahnawiiaks King, "The Value of Water and the Meaning of Water Law for the Native Americans Known as the Haudenosaunee" (2007) 16 Cornell J. L. & Pub. Pol'y 449 at 452 (articulating Haudenosaunee law treating water as a sacred element that must not be abused, as a basis for Great Lakes management).

[62] *See* Marie Battiste and James (Sa'ke'j) Youngblood Henderson, *Protecting Indigenous Knowledge and Heritage: A Global Challenge* (Saskatoon: Purich Publishing Ltd., 2000) at 75-79 [***Battiste and Youngblood Henderson***].

from both a Canadian and an American perspective, although most are focused on either the Canadian or American experiences solely.

Writing before the *Great Lakes Compact* was signed into law in the United States, Squillace focuses on the negotiations that led to the Compact's development and identifies the structural flaws and inherent limitations.[63] Squillance also suggests an alternative framework that would likely "achieve the important and widely-shared goals for promoting the sound management of the water resources of the Great Lakes Basin."[64]

The literature since the *Great Lakes Charter Annex of 2001*[65] (the state-provincial agreement that produced both the *Great Lakes Agreement* and the *Great Lakes Basin Water Resources Compact*) has been diverse. In *Bridge Over Troubled Waters: Canadian Law on Aboriginal and Treaty "Water" Rights, and the Great Lakes Annex* (2005), Kempton's analysis focuses in part on how the *Great Lakes Annex Regime*, the set of proposed agreements at the time of her writing, would allow for large water withdrawals from the Great Lakes Basin.[66] Kempton focuses on the water law in Ontario and charts the evolution of the law and the agreements made between the relevant provinces and states concerning the Great Lakes Basin.

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[63] Mark S. Squillace, "Rethinking the Great Lakes Compact" (2006) Mich. St. L. Rev. 1347-74 [***Squillace***].
[64] *Ibid.* beginning at 1366 (Part III).
[65] Annex to the Great Lakes Charter, June 18, 2001, available at http://www.cglg.org/projects/water/docs/GreatLakesCharterAnnex.pdf (last visited 18 May 2010). The *Great Lakes Charter Annex 2001* is a supplementary agreement to the *Great Lakes Charter*, February 11, 1985. The *Great Lakes Charter*, along with all other documents related to the Great Lakes and relevant to the scope of this thesis will be discussed in Chapter Two, *infra*.
[66] Kempton, *supra* note 49 at 3.

Writing from an American perspective, Hall and Stuntz make clear that, as the earth's climate continues to warm, the impact on the Great Lakes may be one of increased demand and reduced supply of freshwater.[67] Both authors assert that the *Great Lakes Basin Water Resources Compact*[68] is "an important step in improving the Great Lakes and St. Lawrence River water resource policy to meet the challenge of climate change."[69] Furthermore, Valiante, a legal academic and current Professor of Law in Ontario, examines the strengths and weaknesses of the Great Lakes Governance Regime and finds that "political and structural problems have hampered the effectiveness of the Great Lakes regime."[70]

Klein's academic work focuses on the history of the law of the Great Lakes (including the *Great Lakes Agreement* and *Great Lakes Compact*) in order to make the distinction between "protectionism and true sustainability."[71] Klein examines the existing legal documents for evidence of both. Writing on the subject of the "Law of the Lakes," Klein admits that the law is still a work in progress.[72] In order to achieve sustainability, however, the law of the states and provinces must take a "more nuanced approach...based upon ecological rather than political or protectionist factors."[73]

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[67] Noah D. Hall and Bret B. Stuntz, "Climate Change and Great Lakes Water Resources: Avoiding Future Conflicts with Conservation" (2008) 31 Hamline L. Rev. 641 [***Hall and Stuntz***].
[68] *Great-Lakes-St. Lawrence River Basin Water Resources Compact*, Pub. L. No. 110-342, 122 Stat. 3739 (2008).
[69] Hall and Stunz, *supra* note 67.
[70] Valiante, *supra* note 13 at 261.
[71] Klein, *supra* note 9.
[72] *Ibid.* at 1278.
[73] *Ibid.*

1.3.2 Academic Study of the Law, Aboriginal Values and Water

Since the Supreme Court of Canada recently outlined the legal tests required in order to establish Aboriginal title and an Aboriginal right to land[74], the current literature within this field is both novel and growing. Aboriginal title and rights to water have garnered much attention, especially because this area of law is in part unsettled in the province of Ontario.

Kempton's work, *supra*, also provides an overview of the law that applies to Aboriginal and treaty rights in Canada beginning with the common law and extending to the growth of Canadian constitutional law. Aboriginal and treaty rights in relation to water and Canadian law are analyzed. Kempton gives an analysis of the potential effects of the Annex Regime on Aboriginal and treaty rights.[75] Within her work, Kempton acknowledges that, in the development of the Annex Regime, Aboriginal peoples were given almost no involvement and this was followed by inadequate involvement in the comment and review period.[76] According to Kempton,

> [t]he Regime, if adopted, proposes that this lack of meaningful involvement and voice would continue. Consultation requirements are minimal, and there is no direct voice for aboriginal peoples contemplated within any regional review body or in any other capacity in this Regime.[77]

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[74] *See* Chapter Three of this thesis.
[75] Kempton, *supra* note 49 at 4.
[76] *Ibid.*
[77] *Ibid.*

Phare's thesis[78] on Aboriginal water rights and the North American Free Trade Agreement ("NAFTA") calls for a holistic and ecological characterization of water as "necessary for [the Canadian] legal and economic systems [in order] to manage water resources in a truly sustainable fashion."[79]

In discussing the "Aboriginal Role" in Canadian water law, Muldoon and McClenaghan assert that, in the Annex 2001 negotiations, the Great Lakes provinces and states did not include First Nations' governments in the negotiations.[80] Specifically, in Ontario, it was only very late in the process of negotiations that the provincial government began to inform *some* of its First Nations communities.[81] As a result,

> [s]everal Ontario First Nations see enormous implications in the terms of Annex 2001 for their unceded Aboriginal rights and properties, including lake beds and the ability to govern and control the water resources upon which their communities depend, both economically and culturally.[82]

Canadian academics who focus on Aboriginal values pertaining to water include Walkem, who posits that Aboriginal water management norms and ethics should be a part of Canadian water resource management practices as a matter of environmental justice.[83] In addition, Battiste and Henderson state that there is a need for continued legal and policy reforms by the governments of Canada in order to protect Indigenous knowledge and heritage because of the inherent

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[78] Merrell-Ann S. Phare, "International Trade Agreements and Aboriginal Water Rights: How the NAFTA Threatens the Honour of the Crown" (LL.M. Thesis, University of Manitoba, 2004) [National Library of Canada] [***Phare***].

[79] *Ibid.* at 34.

[80] Paul Muldoon and Theresa McClenaghan, "A Tangled Web: Reworking Canada's Water Laws" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 256 [***Muldoon and McClenaghan***].

[81] *Ibid.*

[82] *Ibid.*

[83] Walkem, *supra* note 50 at 303-19.

value in the localization of indigenous traditional ecological knowledge. They state the following:

> Ecological knowledge is conceptualized as a way of understanding the web of social relationships between a specific group of people (whether a family, clan or tribe) and a place where they have lived since their beginning. Many Indigenous peoples speak of their knowledge in terms of the "operating instructions" for the land, given to them from time to time by the Creator and the spirit world, not just through revelations or dreams but also through frequent contacts with the minds and spirits of animals and plants. They further describe the ecosystem itself in terms of historical marriages or alliances between humans and non-humans, and among different non-human species. Hence, the present structure of the local eco-system is the cumulative result of a large number of historical contracts, which create reciprocal obligations of kinship and solidarity among all the species and forces which co-exist in that place. The ecosystem is seen as a product of historical choices with an inherent legal structure. It is a moral and legal space characterized by negotiated order, rather than be mere chance.[84]

These authors write in the aftermath of the 1996 *Report of the Royal Commission on Aboriginal Peoples,*[85] a defining moment in the life of Canada and in the continuation of policy reform for Canada's indigenous populations.[86]

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[84] Battiste and Youngblood Henderson, *supra* note 62 at 44-45.

[85] *Report of the Royal Commission on Aboriginal Peoples* (Ottawa: Supply and Services Canada, 1996). The report is composed of five volumes. The report was a cooperative effort between both Canadian and Aboriginal academics, governments, and politicians. As the Commissioners noted in the report at "A Word From Commissioners":

> Canada is a test case for a grand notion - the notion that dissimilar peoples can share lands, resources, power and dreams while respecting and sustaining their differences. The story of Canada is the story of many such peoples, trying and failing and trying again, to live together in peace and harmony.
>
> But there cannot be peace or harmony unless there is justice. It was to help restore justice to the relationship between Aboriginal and non-Aboriginal people in Canada, and to propose practical solutions to stubborn problems, that the Royal Commission on Aboriginal Peoples was established. In 1991, four Aboriginal and three non-Aboriginal commissioners were appointed to investigate the issues and advise the government on their findings.

The report will be examined further in Chapter Three.

[86] Battiste and Youngblood Henderson, *supra* note 62 at 273.

The above is but a small sampling of recent acknowledgement by academics of the importance and value of Aboriginal knowledge relating to the environment (and the water found within it). The academic study underway in this area is in part the "decolonization of existing thought and law" in order to decolonize cognitive imperialism and to maintain "the Indigenous renaissance and empower intercultural diplomacy."[87]

1.3.3 Academic Contributions to Property Theory

1.3.3.1 The Current Property Paradigm Relating to Water

In "Property Rights and Water,"[88] Sproule-Jones acknowledges that property is an important feature of water resource governance.[89] In viewing property rights as a meta-theory, Sproule-Jones states that an analysis of water rights in any body of water requires an exploration of the web of "jural relations," as pioneered by Hohfeld.[90] Hohfeld's analytical system of jural relations consists of legal positions that are connected with each other by logical relations of entitlement and negation regarding property.[91] Simply put, the jural relations describe the relationships between a holder of a right and others who may have

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[87] *Ibid.* at 13, citing in part to Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London: Zed Books, 1999).

[88] Mark Sproule-Jones, "Property Rights and Water" in Mark Sproule Jones, Carolyn Johns and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) [***Sproule-Jones***].

[89] *Ibid.* at 116.

[90] Wesley N. Hohfeld, *Fundamental Legal Conceptions* (New Haven, CT: Yale University Press, 1919) as cited in Sproule-Jones, *supra* note 88 at 123-25. For more information *see* Arthur L. Corbin, "Jural Relations and Their Classification" (1921) 30 Yale L.J. 3, 226-238.

[91] Matthew H. Kramer, "Rights Without Trimmings" in Matthew H. Kramer, N. E. Simmonds, and Steiner Hillel, *A Debate Over Rights: Philosophical Enquiries* (New York: Oxford University Press, 1998) at 22.

claims on the property holder in some way.[92] This helps provide a precise analysis of legal rights (including duties and obligations of the right holder and everyone else in relation to that right) and also helps to prevent confusion that may arise from inadequate and ambiguous terminology when referring to the use of rights, liberties and powers, in the actual practice of law. The complex relationships between different types of property rights and the persons who hold them can be included in a meta-theory about how persons relate to each other in a network of relationships found in any community.[93]

Furthermore, in the current property rights paradigm, an analysis of water governance using jural relations is, according to Sproule-Jones,

> [...] a mix of elaborate judicial determinations of privileges, claims, duties, and exposures together with governmental rules that create complementary and sometimes conflicting incentives for people.[94]

The property rights paradigm, however, is intellectually limited for analyzing some common-pool problems.[95] Among the limitations, the paradigm is inadequate in the way of "theoretical argument to resolve multiple-use competition over water resources."[96] Currently,

> [e]conomic theory takes us some of the way in that it can specify that the marginal net value of one use should equate with the marginal net values of other uses...The property rights paradigm tells us that courts, bureaucracies, and legislators can specify priorities among multiple uses...[and] many legislators have

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[92] Sproule-Jones, *supra* note 88 at 123.
[93] *Ibid*
[94] *Ibid.* at 125.
[95] *Ibid*. at 126.
[96] *Ibid*. at 126. For a detailed explanation of the meaning of "common pool", *see* Charlotte Hess and Elinor Ostrom, "Workshop in Political Theory and Policy Analysis" (2001) online: http://www.law.duke.edu/pd/papers/ostromhes.pdf (last visited July 23, 2011).

> attempted to draw up a lexicographic list of preferred uses, with human domestic consumption at the top.[97]

Another problem that relates directly to water and the Great Lakes Basin and St. Lawrence River is the fact that the current property rights paradigm assumes that all rights can be assigned and all liabilities can be enforced within one sovereign jurisdiction.[98] As is the case with the Great Lakes Basin and St. Lawrence River system,

> [w]hen a resource spreads over two or more sovereign jurisdictions, it necessarily requires supplementary theory about alliances, treaties, and intergovernmental cooperations.[99]

Sproule-Jones avers that the current property rights paradigm provides a logical set of arguments about the necessity for, among other things, interpersonal collaboration over common-pool problems but, this same paradigm requires supplementary arguments regarding governance in order to fit the requirement of the paradigm.[100]

1.3.3.2 Paralleling Indigenous Culture and Emerging Property Theory

In their work "In Defense of Property", Carpenter, Kaytal and Riley assert that there is an absence of a comprehensive theory regarding indigenous cultural property.[101] In their opinion, indigenous cultural property transcends the classic legal constructs of markets, title and alienability.[102] The authors assert that,

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[97] *Ibid*. at 126-27.
[98] *Ibid*. at 127.
[99] *Ibid*.
[100] *Ibid*.
[101] Kristen A. Carpenter, Sonia Katyal and Angela Riley, "In Defense of Property" (2009) 118 Yale L.J. 1022, at 1026 (Westlaw) [***Carpenter et al.***].
[102] *Ibid*. at 1026.

> [b]y challenging classic property theory, indigenous cultural property claims have unearthed one of property law's most complex conceptual dilemmas, forcing us to contemplate the intellectual divide between two competing visions of property law itself. The classic view focuses on the predictability and certainty of protecting the individual owner's rights of exclusion and alienation, whereas a more relational vision [honours] the importance of ensuring access to non-owners and other particular groups.[103]

The authors build upon the work of Margaret Jane Radin[104] in developing a theory of "peoplehood" in order to articulate a justification for group-oriented claims to indigenous cultural property.[105] Through the "peoplehood lens" Carpenter, Kaytal and Riley stress that,

> certain lands, resources, and expressions are entitled to heightened legal protection because they are property that is integral to the group identity and cultural survival of indigenous peoples.[106]

The authors also introduce a new model for conceiving cultural property, that being a stewardship model which brings to light the dynamic pluralism of group-oriented interests in the absence of ownership claims in terms of fiduciary obligations towards cultural resources and which may also include the duty of loyalty to something that one does not own.[107] This stewardship model put forth in the absence of title is not limited to indigenous peoples. The authors state that a wealth of literature has analyzed similar intricacies in the context of the modern corporation.[108]

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[103] *Ibid.* at 1026-27.
[104] *Margaret Jane Radin, "Market-Inalienability" (1987) 100 Harv.L.Rev. 1849 cited by Carpenter et al.*
[105] *Ibid. at 1027.*
[106] *Ibid.*
[107] *Ibid.*
[108] *See* Peter Block, *Stewardship: Choosing Service over Self-Interest* (San Francisco: Berrett-Koehler Publishers, 1993) as cited in Carpenter et al, *supra* note 101 at footnote 217.

With regard to property and the sustainability agenda, there are varying schools of thought. For example, Circo[109] asserts that,

> [b]y demanding stewardship of natural capital over exploitation, sustainability envisions a property regime less committed to individual property rights than are the traditional and economic theories of property.[110]

Circo concludes that absent an unlikely theoretical revolution in the current property paradigm, "the sustainability agenda cannot succeed at the level required by the international community."[111]

On the other hand, Zellmer and Harder assert that the quest for sustainable water management creates a need for greater recognition of private property rights in order to attain efficient use and allocation of water.[112] Absent legally recognized property rights, water markets are unlikely to thrive.[113] Further, analysis of the situation from an American law perspective shows that "judicial treatment of water is all over the map."[114] This is due in part to the variation in water law found across the country and closely parallels the legal experiences found in Canada.[115] For example, Brandes and Nowlan focus upon the greater use of markets to allocate water as one policy response to water

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[109] Carl J. Circo, "Does Sustainability Require a New Theory of Property Rights?" (2009) 59 Kan. L. Rev. 1 (forthcoming); online: *Social Science Research Network* <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1343228> at 2 (last modified May 6, 2009) (last accessed March 12, 2010) [***Circo***].

[110] *Ibid*. at 2.

[111] *Ibid*.

[112] Sandra B. Zellmer and Jessica Harder, "Unbundling Property in Water" (2007) 59 Ala. L. Rev 679-745 [***Zellmer and Harder***].

[113] *Ibid*. at 680.

[114] *Ibid*.

[115] This is the subject of Chapter Two, i*nfra*.

scarcity, albeit a system that is more suited to the western regions of Canada (where freshwater is more scarce) than to Ontario.[116]

1.4 Going Beyond the Existing Literature

This thesis makes the case that First Nation perspectives do have validity in present day society as one of many important views that add to the sustainability agenda. From a property law perspective, the law has evolved to view water as a thing, albeit a thing that is statutorily regulated and maintained by many governments today. What is missing from the current property theory is the view that water is more than just a thing—the living element and lifeblood that First Nations hold it to be. Whether a First Nation perspective is essential for a sustainability agenda to thrive remains debatable; however, allowing First Nations to have a determinative voice in the maintenance of water management may be a step towards implementing such a reality. On the other hand, adding to an already complicated and layered water management regime may or may not increase the effectiveness of sustainable water management in Ontario.

1.5 Summary of the Subsequent Thesis Chapters

1.5.1 Chapter Two

Chapter Two will start by presenting a historical perspective of water law in Canada. This begins with water law's common law roots and its adoption throughout Canada. This chapter also begins to explore how water fits within the

[116] Oliver M. Brandes and Linda Nowlan, "Wading into Uncertain Waters: Using Markets to Transfer Water Rights in Canada—Possibilities and Pitfalls" (2009) 19 J. Env. L. Pract. 267 (Westlaw) [***Brandes and Nowlan***].

property law paradigm. History will then give way to the current state of the law and the Great Lakes and St. Lawrence River Basin water regulations. After tracing the treaties and agreements that make up the "Law of the Lakes", this thesis will then survey how the province of Ontario is implementing the latest agreement, the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*, into its current water management regime. Chapter Two will show to what extent water law, management and regulation is fragmented in the province of Ontario and more broadly in Canada.

1.5.2 Chapter Three

Chapter Three begins by briefly examining the legal treatment of Canada's Aboriginal peoples. The chapter will then summarize an Ontario First Nations' study relating to water values. The chapter will also rely on the *Walkerton Inquiry*[117] and the *Royal Commission on Aboriginal Peoples*[118] for further insight into First Nation water values. The chapter will then examine Aboriginal law and claims relating to water in light of existing jurisprudence on Aboriginal rights and title. These values will then be compared with the *Great Lakes Agreement*, to see if the Ontario government paralleled First Nations' values when signing the *Great Lakes Agreement*, and whether subsequent Ontario legislation encompasses these values.

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[117] Chiefs of Ontario, *Drinking Water in Ontario First Nation Communities: Present Challenges and Future Directions for On-Reserve Water Treatment in the Province of Ontario* (March 25, 2001) Part II Submissions to the Walkerton Inquiry, online: <http://walkertoninquiry.com>.

[118] *The Royal Commission on Aboriginal Peoples* (RCAP) (1996) Restructuring the Relationship. Part 2, Volume 2 (Ottawa: Ministry of Supply and Services Canada) in Chiefs of Ontario (2007).

1.5.3 Chapter Four

Chapter Four will examine the status of water within current property law theory. Water is not easily placed within the current property law paradigm like personal property is. Rather, water can change forms depending on its state and the regulation of it as a resource. Chapter Four will attempt to shed light on emerging property theories that may better parallel those First Nation values presented in Chapter Three. The strengths and weaknesses of the modern theories will be discussed. The chapter will then examine the Public Trust Doctrine, its history, development and its limited use in Ontario as another possible doctrine which may better parallel First Nation values.

Chapter Four will then focus on sustainability theory starting at the international level with the United Nation's Brundtland Commission. Discussion will also focus on the recently internationally agreed upon right to water and Canada's position on it. The chapter will end by re-examining the tension between water as a right and water as a good within the property theory realm.

1.5.4 Chapter Five

Chapter Five will summarize the conclusions of this thesis and make suggestions for future related study. In brief, Chapter Five concludes:

1. The traditional property rights paradigm, which is based on the common law that was received in Ontario (and Canada) does not advance a holistic theory of property that parallels Ontario First Nation values.

2. First Nations in Ontario have expressed a desire to have increased involvement in the water management of the Great Lakes and the St. Lawrence River Basin as stewards of these waters from time immemorial. The implementation of the *Great Lakes Agreement* has allowed some Ontario First Nations to participate in a limited advisory role regarding the management of these waters.
3. This thesis cannot definitely conclude that the integration of all of Ontario's First Nations' water values would ensure ecological integrity of use of the Great Lakes and St. Lawrence River Basin. Further research and application is required. Ontario First Nations, however, remain limited in their participation and governance of the entire Great Lakes and St. Lawrence River Basin waters; equal room is not given to indigenous law.
4. Theoretical models of water sustainability are evident in novel legal theory. These theories may be said to generally parallel the cultural values of Ontario First Nations with regards to valuing water more so than the current property paradigm does, however, further study is required to specifically address the values of every First Nation in Ontario.
5. Water governance of the Great Lakes and St. Lawrence River Basin under the *Great Lakes Agreement* and its accompanying legislative modifications currently follows a sustainability model regarding intra- and inter-basin water diversions, yet water export under NAFTA remains an issue in legal flux with potentially serious implications for the future.

6. Water law in the province of Ontario and the country of Canada is fragmented and remains a tangled web of provincial and federal legislation, common law, international treaties, and good-faith agreements; the use of the public trust doctrine in the province of Ontario is limited but offers potential for the future.

CHAPTER TWO:
(MEANDERING THROUGH) THE HISTORY OF WATER LAW FROM COMMON LAW BEGINNINGS TO THE *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*

2.1 Introduction & Overview

The origin and development of water law in Canada is complex, but nonetheless navigable. Examining water law's historical beginning is important because it establishes the foundation for the current state of water regulation and management in the country at both the federal and provincial levels, and ultimately, therefore, for the system of management of the Great Lakes and St. Lawrence River in the province of Ontario. Examining this history also gives substance to the institution of property rights relating to this resource.[1]

It is important to note at this point that reference to the phrase "water law" is a reference to the inherited British common law pertaining to water as well as its origins, acceptance and development in Canada. At the time of European "first-contact" and eventual colonization of what is today the country of Canada, the Indigenous peoples of Canada had in place their own systems of law and beliefs and included an Indigenous view pertaining to water. Therefore, from the outset of European "first-contact", there were indeed two systems of regulation and social order.[2]

The current European-based law of water rights throughout Canada has had a common historical starting point in the riparian rights doctrine.[3] From this

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[1] *See* Chapter Four, *infra*.

[2] The Indigenous system and values relating to water is the subject matter of Chapter Three.

[3] David R. Percy, *The Framework of Water Rights Legislation in Canada* (Calgary: The Canadian Institute of Resources Law, 1988) at 97 [***Percy***].

origin, water law changed dramatically in some areas of Canada to meet people's water demands.[4] In other regions, like Ontario, it did not change as dramatically. Regardless, "[w]ater policy can be analyzed over two interrelated periods—the common law period and the public law period."[5] However, in fact,

> [a]lthough constitutional and statutory laws override common law, many water governance institutions in Canada trace their roots to common law and property rights principles.[6]

This chapter will outline the development of water law from its common law origins. Following this, an overview of Canadian and Ontario statutory law pertaining to water is provided. With this foundation laid, the focus will turn to the Great Lakes. The law pertaining to the Great Lakes will be divided into four subsections: (1) bilateral treaties and compacts, referred to as the "law of the lakes"; (2) the implementation of the most recent Great Lakes legislation; (3) the role of the North American Free Trade Agreement within the Great Lakes, and (4) the effect of the most recent legislation in the province of Ontario.

2.2 The Beginning of Water Law in Canada

The common law is a term "used to denote the rules established in English-speaking countries based on decisions that have been passed down through history by the courts," and "many of the components (or rules) of common law remain unwritten, or are recorded in the form of judgments of courts

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[4] *Ibid.*
[5] Mark Sproule-Jones, Carolyn Johns & B. Timothy Heinmiller, *eds.*, *Canadian Water Politics: Conflicts and Institutions* (Montreal: McGill-Queen's University Press, 2008) at 60 [***Sproule-Jones***].
[6] *Ibid.*

in systems based on English law...[inherited]...from Great Britain."[7] The received common law in Canada is best described by La Forest:

> The common law, as applicable together with British statutes modifying it, therefore, were the legal materials used by the early courts in the colonies as a guide in settling disputes between litigants. In each of these colonies, legislatures were established, and these too enacted legislation adding to, modifying or abolishing the previous law, or introducing wholly new law. This was the background against which the *British North America Act,* 1867, and subsequent constitutional statutes were passed. The Act did not abolish the previous law; in fact, provisions were made to continue it.[8]

2.2.1 Water at Common Law

The history of water law in Canada has its roots in the common law. Water law, like all law, is dynamic and capable of change. The common law of Britain evolved at a time when the country was an agrarian based society (where water was plentiful but land was scarce) when the law itself was unable to meet the demands of the Industrial Revolution in the early 1800s.[9] Britain had its own history of development and specific rationale for its own water law. When water law was received in what is now North America, the law developed and was modified in certain regions because different circumstances associated with the topography of land, regional climate, and water accessibility all acted as

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[7] *Ibid*. at 3.

[8] G. V. La Forest, *Water Law in Canada: The Atlantic Provinces* (Ottawa: Information Canada, 1973) at 3 [***La Forest***].

[9] Scott Hopley and Susan Ross, "Aboriginal Claims to Water Rights Grounded in the Principe Ad Medium Filum Aquae, Riparian Rights and the Winters Doctrine" (2009) 19. J. Env. L. & Prac. 225 at 226 [***Hopley and Ross***]. Of course, the common law was entrenched well before the 1800s. It is at this point in time when real change in water law took place in what is today the country of Canada.

influences on the law's development. Accordingly, the development of the law itself was varied in Canada's eastern and western regions.[10] Furthermore,

> [...] although most of Canada inherited the British system, the common law is not consistent from province to province. Each provincial legislature has made somewhat different statutory modifications of the common law to fit the needs of that province.[11]

At the time of colonial settlement of what is today the country of Canada, the use of water was governed by the law of riparian rights, which was received into the law of Canada, except for Quebec, as part of the existing body of English common law.[12]

The common law envisions water as a common resource not susceptible of private ownership; however, the private property institution was conceivably the most convenient method of making use of, and allocating water resources and thus, water was regulated under the umbrella of property law.[13] The water rights at common law relating to streams, lakes, ground water and other bodies of water may be divided into public rights, riparian rights and rights associated with the ownership of the bed.[14] Each will be discussed in turn.

2.2.1.1 Public Rights Relating to Water

A public right is a right vested in the public.[15] Any member of the public has a right to both enjoy and to use the right. There are three types of public rights at common law relating to water that formed the law in Canada. These

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[10] *Ibid.*
[11] Sproule-Jones, *supra* note 4 at 4.
[12] *Ibid.* at 3.
[13] La Forest, *supra* note 8 at 175.
[14] *Ibid.* at 178.
[15] *Ibid.*

rights are the right of navigation,[16] the right of floatability,[17] and the right of fishing.[18]

2.2.1.2 The Riparian Rights[19]

Riparian rights are the rights of owners of lands on the banks of watercourses, relating to water, its use, ownership of soil under the stream, and accretions. Generally, these rights are: (1) use of water for general purposes, such as bathing and domestic use; (2) to wharf out to navigability; and (3) access to navigable waters."[20] According to Lucas, Canadian water rights law is based on two common law theories, the first being the English riparian doctrine and the second being the American prior appropriation doctrine.[21]

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[16] In Ontario, the public right of navigation existed if waters are *de facto* navigable whether the waters are tidal or non-tidal. *La Forest, supra* note 8 at 179. As La Forest notes, this was not uniform everywhere in Canada and in fact deviated from the rule in England, where the public only has a natural right to navigate in tidal waters but not non-tidal water streams even though they may be *de facto* navigable. As is the case, legislative statutes can alter the common law. Section 1 of the *Beds of Navigable Waters Act*, R.S.O. 1980, c. 40 provides:

> Where land that borders on a navigable body of water or stream, or on which the whole or a part of a navigable body of water or stream is situate, or through which a navigable body of water or stream flows, has been heretofore or is hereafter granted by the Crown, it shall be deemed, in the absence of an express grant of it, that the bed of such body of water was not intended to pass and did not pass to the grantee.

Furthermore, the public right of navigation is a paramount right, meaning that whenever it conflicts with the rights of the owner of a bed or of a riparian owner, the right of navigation will prevail. *Ibid.* at 185.

[17] The public right of floating refers to the right to float logs and other property on navigable and floatable streams and was important for Canada at a time when the right to float logs and timber was an economic necessity. *See La Forest, supra* note 7 at 191-195.

[18] *Ibid.*

[19] The term "riparian" comes from the Latin word "*ripa*" which means a bank (as in a bank of land adjoining water). At the outset of discussion, *Black's Law Dictionary* defines the term "riparian" to mean "belonging or relating to the bank of a river." Henry Campbell Black, *Black's Law Dictionary 4th ed.* (St. Paul: West Publishing Co., 1968) at 1490 [***Black's***]. Furthermore, "Riparian water" is "water which is below the highest line of normal flow of the river or stream as distinguished from flood water." *Black's* at 1491.

[20] *Ibid.* at 1490.

21 According to the Water Encyclopedia,

Within the Riparian rights system, an owner of land that adjoins or is washed by a body of water (e.g. a river, stream, lake or even an ocean/sea), and is not covered by water, is known as a "riparian owner". A riparian land owner holds certain rights respecting that water at common law. A riparian owner holds these rights even if the riparian owner does not own the bed of the water source.[22] In addition to those rights discussed above, riparian rights held by riparian owners at common law include the following rights:

- Right of access to and from the water;[23]
- Right of drainage;[24]
- Rights relating to water flow;[25]
- Right to undiminished quality;[26]

The prior appropriation doctrine is a legal concept that evolved in the American West as a means of establishing the right to use scarce water from rivers and streams. This doctrine can be summed up as "first in time is first in line." The prior appropriation doctrine is distinguished from the riparian doctrine, under which those who own land next to water have rights to use the water.

The historic requirements for a valid water right under the prior appropriation doctrine are the intent to divert water, the actual diversion of water, and the application of that water to beneficial use. As the West has evolved from an economy built on mining and agriculture, the prior appropriation doctrine has begun to address new needs for water.

[22] La Forest, *supra* note 8 at 200.

[23] The right includes access to the water and from the water. Smith v. Grieve (1899), 8 Nfld. L.R. 278 as cited in La Forest, *supra* note 8 at 201. "The right of access is a property right and the owner may maintain an action to obtain an injunction against anyone, even the owner of the bed, or the Crown who interferes with the right." *Ibid.* at 201, citing *Byron v. Stimpson* (1878), 17 N.B.R. 697; *Pickels v. R.* (1912), 14 Ex. C.R. 379; *Merritt v. City of Toronto* (1913), 48 S.C.R. 1.

[24] This right gives the land owner whose land adjoins a natural stream (not man-made) to drain their lands in the stream even though this will affect the downstream flow of water. *See McGillivray v. Township of Lochiel* (1904), 8 O.L.R. 446 as cited in *Ibid.* at 205.

[25] This right relates to how water reaches and leaves a riparian owner's land. The rights relating to flow have been categorized by La Forest as follows: (a) the right to have the water flow in its natural course; (b) rights preventing the permanent extraction of water from the stream; (c) rights preventing the alteration of the flow to property downstream; (d) the right to have the water leave one's land in its accustomed manner. *Ibid.* at 206. For more detail, *see* La Forest at 207-17. *See also John Young & Co. v. Bankier Distillery Co.*, [1893] A.C. 691.

[26] This right refers to the entitlement of a riparian owner to the flow of water in its natural, unpolluted state. *John Young and Co. v. Bankier Distillery Co.*, [1893] A.C. 691, at p. 698. Pollution may result in a claim for damages or an injunction against the polluter. *Van Egmond v. Town of Seaforth* (1884), 6 O.R. 599. *See* La Forest, *supra* note 7 at 218-23.

- Right to use of water;[27] and
- Accretion.[28]

2.2.1.3 Rights Relating to Ownership of the Bed

If a person is the owner of the bed underlying either a lake or stream or other body of water, then the owner generally has the same rights of property and use in it as any other landowner of land not covered by water:

> [the owner] owns everything above or below the land, ***except*** game and fish (which must first be captured) **and water, which at common law does not form the subject of ownership, being a common resource**[29] (emphasis added)

Water at common law is further divided between tidal water and non-tidal water.[30] Thus, the nature of the body of water itself, at common law, gives rise to different rules. As an example of the law relating to non-tidal waters, *Ad medium filum aquae* is a common law rule of general interpretation which states:

> in construing a conveyance where land adjoining an inland river is granted, the *prima facie* presumption is that the parties intend to include in the grant, the bed of the river to the mid stream.[31]

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[27] A riparian owner does not own the water in a running stream, but he may make use of it as it passes his property. *Reg. v. Meyers* (1853), 3 U.C.C.P. 305. A riparian owner's right to use water is subject to the similar rights of other riparian owners. *Dickson v. Carnegie* (1882), 1 O.R. 110. As La Forest notes: "The truth is that the common law is geared to simpler times when there were small sawmills, grist mills and the like, not to the modern technological age." *Ibid.* at 225.

[28] The right to accretion gives the land owner the right to any extension of land on the side of the water arising by accretion. Correspondingly, any gradual erosion of land or encroachment of water upon the land will vest ownership of the land in the owner of the bed. *Throop v. Cobourg and Peterboro Ry.* (1856), 5 U.C.C.P. 509; affirmed: (1857), 2 O.A.R. 212*n*; *Buck v. Cobourg and Peterboro Ry.* (1857), 5 U.C.C.P. 552, cited in LaForest, *supra* note 8 at 225-26. Ownership rights relating to the bed of water will also be discussed in Chapter Three.

[29] La Forest, *supra* note 8 at 234.

[30] Tidal water is water which falls and rises with the ebb and flow of the tide. *Black's, supra* note 1 at 1652. Examples of tidal waters include the sea, tidal rivers, lakes or streams. *Ibid.* at 239.

[31] Hopley and Ross, *supra* note 9 at 227. As noted at 228, the rule of interpretation at common law was abrogated by the *North-West Irrigation Act* of 1894 in respect to future grants in the North-West Territories at that time.

Under the High Water Mark Rule, a grant of land adjoining tidal water *prima facie* extends only to the ordinary high water mark.[32] This rule applies only to tidal waters.[33]

2.2.1.3.1 Water Flowing in Defined Channels

Riparian water rights are correlative rights and subject to restriction. When water withdrawal from the same defined water source (e.g. river or stream) is taken up by numerous riparian owners, each riparian owner must return the water substantially undiminished, and not over use water so that "downstream" riparians are not detrimentally affected in their ability to take up water.[34] Essentially, this rule is meant to prevent man-made water shortages.

As mentioned above, there is no right to ownership of the *corpus* of water while it is in the stream, but only a qualified right in the nature of a beneficial use or usufruct[35] that is limited to use of the flow of the water.[36] This was made clear in the 1851 case of *Embrey v. Owen*.[37] The duties placed on any upstream

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[32] La Forest, *supra* note 8 at 239.

[33] *Ibid*.

[34] Alastair R. Lucas, *Security of Title in Canadian Water Rights* (Calgary: The Canadian Institute of Resources Law, 1990) at 6 [***Lucas***].

[35] In *Smith v. R.* [1983] 1 S.C.R. 554, "usufruct" was noted to be defined in the Shorter Oxford English Dictionary, in the legal sense, as "The right of temporary possession, use, or enjoyment of the advantages of property belonging to another."

[36] *Ibid*. at 7, citing *Chasemore v. Richards* (1859), 7 H.L.C. 349, 11 E.R. 140 among others in footnote 15.

[37] *Embrey v. Owen* (1851), 6 Ex. 353 at 369. Furthermore, the head note of the case reads in part:

> The right to have a stream of water flow in its natural state, without diminution or alteration, is an incident to the property in the land through which it passes; but this is not an absolute and exclusive right to the flow of all the water, but only subject to the right of other riparian proprietors to the reasonable enjoyment of it; and consequently it is only for an unreasonable and unauthorized use of this common benefit that any action will lie.

The word "usufruct" is defined as the right to use and enjoy without diminishing the underlying corpus of property. Joshua Getzler, *A History of Water Rights at Common Law* (Oxford: Oxford University Press, 2004) at 330.

riparian rights holder exclude the granting of the right to any specific quantity of water.[38] However, at common law,

> [n]otwithstanding the basic rule that there is no ownership or right of property in flowing water, when water has been diverted and reduced to possession, it becomes the personal property of the riparian owner.[39]

The specific rights and duties of riparian owners are considered to be associated with real property and part of the bundle of property rights associated with the land.[40] However, the common law riparian doctrine assumes abundance (if not an inexhaustible) water supply, such as existed in eighteenth-century England.[41]

2.2.1.3.2 Percolating Water (Surface Water and Ground Water)

Water that is not surface water is groundwater. This water is also known as percolating water. Percolating water is subject to a separate category of the common law based on the rule of pre-emptive appropriation. This rule is also known as the rule of "capture."[42] The rights associated with groundwater evolved differently from surface water rights even though ground water and surface water are part of the same resource and water cycle.[43]

Percolating water, like water in defined channels, is considered to be a common resource in which no person has a property interest. The rule of pre-emptive appropriation, however, states that a landowner is entitled to withdraw

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[38] Lucas, *supra* note 34 at 6.
[39] *Ibid.* at 7.
[40] *Ibid.*
[41] *Ibid.*
[42] *Ibid.* at 8.
[43] Oliver M. Brandes and Linda Nowlan, "Wading into Uncertain Waters: Using Markets to Transfer Water Rights in Canada—Possibilities and Pitfalls" (2009) 19 J. Env. L. Pract. 267 (Westlaw) at 272 [***Brandes and Nowlan***].

as much percolating water as can be produced and then captured.[44] Depending on either the extraction of water above or the physical placement of the water below the surface,[45] withdrawals of percolating water by one land holder may reduce or eliminate the water supply of adjoining land holders.[46] The order in which water rights to percolating water are established is of no use in property rights. Any holder of a pre-existing percolating water right who is adversely affected by another is without a remedy, "no matter how lengthy [that water right holder's] prior use." [47] As Lucas maintains,

> [t]he landowner's interest in percolating water is akin to a *profit á prendre*—an exclusive right to search for, win, and remove percolating water.[48]

As such, percolating water rights were extremely insecure and the water resulting there from only became personal property once it was captured.[49]

2.2.2 Summary

Importantly, as noted by Hopley and Ross, although the above mentioned rights at common law were incidental to ownership or possession of land that adjoined water, the nature of these rights was not a property right in the water

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[44] Lucas, *supra* note 34 at 8.
[45] For more information, *see* Environment Canada, "Water-Underground" online: <http://www.ec.gc.ca/eau-water/default.asp?lang=en&n=FCE12AD9-1>.
[46] *Ibid*.
[47] *Ibid*.
[48] *Ibid*. at 9. A *profit á pendre*, also called a "right of common," is defined as a right exercised by one man in the soil of another, accompanied with participation in the profits of the soil thereof. *Black's, supra* note 18 at 1376.
[49] Lucas, *supra* note 34 at 10.

itself. As such, it did not result in excluding others from possessing the water.[50] Instead, riparian rights are usurfactory rights in water,

> [and] the legal right to use property that belongs to another with the obligation to preserve it. Water was understood to be *public juris*, a thing the property of which belong to no person, but the use to all.[51]

2.3 Water Law in Canada: Federalism Issues

2.3.1 An Overview of the Provincial and Federal Jurisdiction as it Relates to Water

The Riparian doctrine and riparian law, inherited from England, was the system of law in Ontario in colonial times.[52] For areas outside of the province of Ontario, riparian law was received at various times.[53] Although the initial system of water put in place was consistent, it soon became necessary for the law to change and adapt to the times. For example, the water needs of miners in the West during the Fraser River Gold Rush[54] were greater than the riparian doctrine allowed. Therefore, various Canadian jurisdictions enacted statutes with the intent of abolishing the inherited English doctrine.[55]

Water management and regulation is shared between the federal government of Canada and the provinces. Under the constitution, the *British*

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[50] Hopley and Ross, *supra* note 9 at 233.
[51] *Ibid.* at 234.
[52] Lucas, *supra* note 34 at 4. The Province of Ontario was created during Canadian Confederation in 1867. The territory was previously the French colony of Canada from 1608 to 1763, and the British colony of Québec (1763-91), Upper Canada (1791-1841) and Canada West (1841-67). Char Miller, ed., *The Atlas of U.S. and Canadian Environmental History* (New York: Routledge, 2003) at 28.
[53] The province of British Columbia as of November 19, 1858; the provinces of Manitoba, Saskatchewan, Alberta and the Northwest Territories received riparian law on July 15, 1870.
[54] For more information, *see* The Canadian Encyclopedia, *Fraser River Gold Rush*, online: <http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1ARTA0010032> (last accessed January 20, 2011).
[55] *Ibid.*

North America Act, 1867,[56] divides between the two levels of government, federal and provincial,[57] the power to make, alter and amend laws as well as to create new legislative schemes.[58] Jurisdiction between the federal government and the provinces may overlap on certain subjects, however, when conflict occurs, the federal law prevails.[59] Under the doctrine of federal paramountcy, "where there are inconsistent (or conflicting) federal and provincial laws, it is the federal law which prevails."[60] If either the federal or provincial governments pass a law outside their given area of jurisdiction, then it will be declared *ultra vires* on being questioned before the courts.[61] Furthermore, only where an express contradiction between a federal and provincial law exists will it invoke the paramountcy doctrine, and any provincial law that duplicates or supplements a federal law will not be deemed inconsistent with the federal law.[62]

2.3.2 Provincial Jurisdiction

Provincial jurisdiction over water begins with s. 109 of the *Constitution Act, 1867*. This section grants ownership, with limited exceptions, of all publicly owned "lands, mines, minerals and royalties" to the original provinces of

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[56] *Constitution Act, 1867* (U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, App. II, No. 5.

[57] Carolyn Johns and Ken Rasmussen, "Institutions for Water Resource Management in Canada" in *Canadian Water Politics: Conflicts and Institutions* (Montreal: McGill-Queens University Press, 2008) at 60 [***Johns & Rasmussen***].

[58] La Forest, *supra* note 8 at 3.

[59] *Ibid*.

[60] Peter W. Hogg, *Constitutional Law of Canada: 2009 Student Edition* (Toronto: Thomson Reuters Canada Limited, 2009) at 426 [***Hogg***].

[61] La Forest, *supra* note 8 at 3-4. *Ultra Vires* refers to acts that are beyond the scope of assigned powers.

[62] Hogg, *supra* note 60 at 434. According to Hogg, since Canadian courts construe the doctrine narrowly, and the courts have rejected a negative implication test of inconsistency. This test is used in the United States and Australia. *Ibid*. at 434.

Canada.[63] According to Kennet, water is not explicitly mentioned in s. 109 because of the common law principle that resources, including water and fish, cannot be owned in their natural state, rather, proprietary rights arise only with possession.[64]

Provincial ownership of public lands, according to Kennet, included "plenary Crown rights in the water upon those lands, and the fish therein."[65] The sections within the *Constitution Act, 1867,* that give provinces jurisdiction over water include the following:

- s. 92(5) which grants authority over "the management and sale of the public lands belonging to the province";
- s. 92(13) which deals with property and civil rights in the province;
- s. 92(16) which deals generally with all matters of a merely local or private nature in the province;
- s. 92(10) which deals with local works and undertakings;
- s. 92(8) which gives jurisdiction over "municipal institutions in the province"
- s. 95 which deals with concurrent power over agriculture and may support provincial legislation pertaining to water;
- s. 92A, known as the "Resources Amendment," which gives to the provinces the exclusive right to legislate regarding the "development, conservation and management of sites and facilities in the province for the generation and production of electrical energy."[66]

Although these provisions of the *Constitution Act, 1867* give provinces authority over water within their territorial boundaries, there are constraints on the

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[63] The *Natural Resources Transfer Agreements* granted the same rights to the prairie provinces in 1930 in the *Constitution Act*, 1930, 20-21 Geo. V, c.26 [U.K.].
[64] Steven A. Kennet, *Managing Interjurisdictional Waters in Canada: A Constitutional Analysis* (Calgary: Canadian Institute of Resources Law, 1991) at 24 [***Kennet***].
[65] *Ibid*. at 24-25.
[66] *Ibid*. at 25.

provincial powers. These include Indian land trusts,[67] public rights (discussed *supra*), as well as specific federal heads of power, *infra*, that may limit provincial authority.[68] Section117 states that:

> [t]he provinces shall retain their public property not otherwise disposed of by this Act subject to the right of Canada to assume any property required for the defence of the country.[69]

Furthermore, under s. 92(8) and s. 92(11) of the *Constitution Act, 1867*, the provinces are given the power to establish cities and municipalities which in turn have, as one of their functions, the control of water delivery and infrastructure within city limits. One example is the City of Toronto, Ontario, a corporation, with the power to regulate water delivery to its residents as well as to tax for this service.

2.3.3 Federal Jurisdiction

While the federal government maintains proprietary interests in water, these interests are more limited when compared to those of the provinces.[70] Federal lands include national parks, "Indian reserves", and interests obtained through s. 108 that relate to water.[71] Under s. 91(1A), federal legislative jurisdiction over "the public debt and property" supplements federal ownership

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[67] *See* Chapter Three, *infra*.
[68] Kennet, *supra* note 64 at 25-26.
[69] *Constitution Act, 1867* (U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, App. II, No. 5.
[70] Kennet, *supra* note 64 at 26.
[71] Under s.108, the public works and property of each province, enumerated in the Third Schedule to this Act, shall be the property of Canada (includes: canals, with lands and water power connected therewith; public harbors; lighthouses and piers; steamboats, dredges, and public vessels; rivers and lake improvements; lands sets aside for general public purposes).

rights.[72] Federal power over "navigation and shipping" is found in s. 91(10) and has been widely construed to include waters that are navigable or can be made navigable[73] but does not include implementation of a general scheme of water management.[74] Federal power is also found in s. 91(12) over "sea coast and inland fisheries." Additional federal powers that support water-related legislation at the Federal level of government include:

- s.91(27) which is the criminal law power;
- s.91(24) which is the administration of Indian lands;
- s.91(29) & s.92(10) which declare interprovincial works and undertakings under federal authority;
- s.95 which permits federal regulation of irrigation under the federal government's concurrent jurisdiction with the provinces over agriculture;
- s.91(29) & s.92(10) which are the federal declaratory power, and which has the potential to bring water development projects under federal control;
- The Federal Spending Power, which although not explicit in the *Constitution Act, 1867*, gives federal authority to spend money in areas outside federal legislative authority and is based on s.91(3) (power to tax), s.91(1A) (power over public property) and s.106 (power to appropriate federal funds);
- Introductory words in s.91 under "peace, order and good government" power.[75]

Kempton[76] notes the following related sections:

- s.91(2) which is the regulation of trade and commerce;

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[72] Kennet, *supra* note 64 at 26.

[73] Navigability is a question of fact, and in Ontario, the rule is that if waters are de facto navigable, the public right of navigation exists there. *See Parker v. Elliot* (1852), 1 U.C.C.P. 470 as citing in La Forest, *supra* note 7 at 178. For detailed discussion on the public right of navigation, *see Ibid.* at 178-91.

[74] Kennet, *supra* note 64 at 27.

[75] *Ibid.* at 28.

[76] Kate Kempton, *Bridge over Troubled Waters: Canadian Law on Aboriginal and Treaty Water Rights, and the Great Lakes Annex*, (Toronto: Walter and Duncan Gordon Foundation, 2005) at 94 [***Kempton***].

- s.91(9) which deals with beacons, buoys, and lighthouses; and
- s.91(13) which pertains to ferries between a province and any British or foreign country or between two provinces

Under the *Constitution Act, 1867*, the provinces possess proprietary rights over water resources found within their provincial jurisdictions (*see* s. 109 and s. 92(13)). The federal government has legislative jurisdiction over boundary waters by way of its treaty-making powers in s. 132 and jurisdiction over waters that cross provincial and national boundaries.[77]

While the above may appear to be a tidy division of authority and responsibility stemming from the Canadian constitution, the reality is in fact a complex layering of legislation, authorities, and agreements that exists today for water resource management in Canada. Part of the complexity is related to the physical nature of water, the multi-jurisdictional scale as well as the transitory nature of water and its many interrelated uses that make it difficult to fit within well-defined categories of property law.[78]

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[77] John K. Grant, "Against the Flow: Institutions and Canada's Water-Export Debate" in Mark Sproule-Jones, Carolyn Johns & B. Timothy Heinmiller, *eds.*, *Canadian Water Politics: Conflicts and Institutions* (Montreal: McGill-Queen's University Press, 2008) at 166-69 [***Grant***].

[78] Johns and Rasmussen, *supra* note 57 at 61.

2.4 CANADIAN WATER LAW DEVELOPMENT

2.4.1 Overview

There is a large variety of provincial and territorial legislation which springs out from the four major systems of water law identified in the country:

1. The Northern scheme of Authority Management;
2. The civil law approach in the Province of Quebec;
3. The Western system of prior allocation; and
4. The Riparian systems of the Atlantic Provinces and the province of Ontario.[79]

An overview of each system follows, leading up to a detailed explanation of the current situation of water law management in the province of Ontario.

The table below outlines the basis for provincial and territorial jurisdictions of water rights law in Canada today:

Northern Scheme of Authority Management	Civil Law Approach	Prior Allocation (western system)	Riparian System
• The Yukon Territories • The Northwest Territories • Nunavut	• Quebec	• British Columbia • Alberta • Saskatchewan • Manitoba	• Ontario • Newfoundland • Nova Scotia • New Brunswick • Prince Edward Island

Table 2: Canadian Water Law Approaches

[79] Percy, *supra* note 3 at 1. Although Percy only outlines four major water law systems, there is also the issue of Indigenous and Aboriginal water rights, and how it factors within the other systems. This will be taken up in Chapter Three.

2.4.2 Northern Canada

Northern Canada has adopted a newer system of water law then any of the provinces.[80] The federal Crown has ownership of the water resources in the Northwest Territories, the Yukon Territories and Nunavut, and has given the mandate to manage them to the Department of Indian and Northern Affairs Canada.[81] This system is referred to as "public authority management" or "authority management." In the Northwest Territories and Nunavut, all decisions regarding water use is made by a Public Authority. These decisions are then implemented by local water boards. A permit is required for all uses of water, except domestic and emergency uses. Furthermore, water licenses may be transferred.[82]

2.4.3 Quebec and the Civil Code

Quebec's water regime is based upon principles of civil law, but is similar to the riparian system. Quebec's law originates from the Napoleonic code of France and evolved differently from the legal systems of English-speaking countries.[83] In Quebec's civil code, water is a resource "common to all" and "the

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[80] Percy, *supra* note 3 at 1.

[81] Federal Policy & Legislation, online: *Environment Canada* <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=E05A7F81-1> at Nunavut and the Northwest Territories (last modified 6 January 2010) (last accessed 20 February 2010).

[82] *Fact Sheets: Water Rights Across Canada*, online: Program on Water Governance <http://www.watergovernance.ca/factsheets/pdf/FS_Water_Rights.pdf> at 2 (last accessed January 20, 2011) [***Fact Sheets***].

[83] Harriet I. Rueggeberg and Andrew R. Thompson, *Water Law and Policy Issues in Canada: Report on a Workshop for the Inquiry on Federal Water Policy* (Vancouver: Westwater Research Centre, 1984) at 3 [***Rueggeberg & Thompson***]. The authors note an essential difference in the French civil law at 5:

> A fundamental difference lies in how each system of law defines the ownership of the banks and beds of a river or lake. Under the common law, a landowner owns the banks and beds of bodies of water found on his land unless the deed conveying the land to his

government holds responsibility for allocation, regulation, and establishing priority use in the public interest."[84] This includes both ground water and surface water.[85] Water rights transfers, however, are prohibited.[86]

2.4.4 Prior Allocation: The Western System's Development

Water law in the four western provinces is derived from a common historical root, and water rights are granted under a system of prior allocation. The common law was imported into western Canada through the *North-West Territories Act*[87] and imported British law as it related to property and civil rights as it was in 1870.[88]

Similar to the experiences and the underlying principle for the doctrine of prior appropriation in the west of the United States, the need for water in areas of arid Western provinces created a real need to deviate and change from riparian law, especially when drought conditions commenced in 1887.[89] The Crown in Western Canada secured control of water through legislative declaration of

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> ownership states otherwise. If a body of water borders two or more properties, the common law rule applies whereby each landowner owns the banks and beds to the middle of the lake or stream.
>
> ...
>
> Under civil law, however, ownership of beds and banks is established by navigability. If a water body is deemed navigable, riparian ownership stops at the high water mark, and the bank and the bed is vested in the Crown (i.e. owned by the state and managed by the government). If the water body is non-navigable, the land owner has rights similar to the riparian rights of the common law.

[84] Carey Hill, et al., "A Survey of Water Governance Legislation and Policies in the Provinces and Territories", in Karen Baker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 384 ***[Hill et al.]***.

[85] Fact Sheets, *supra* note 78 at 2.

[86] *Ibid.*

[87] *North-West Territories Act,* S.S. 1886, c. 50.

[88] Hopley and Ross, *supra* note 9 at 240.

[89] *Ibid.*

Crown ownership over water.[90] This was followed by the mechanism of prior allocation for Crown distribution of its ownership rights in water to others.[91]

The legislation declared that "the right to the use" of all water was vested in the Crown.[92] The legislation was supplemented in 1895 for the provinces of Alberta, Saskatchewan and Manitoba and in 1925 for British Columbia by amendments.[93] These amendments provided that the ownership of all water, as well as the right to its use, was vested in the Crown.[94] As Lucas notes[95] and Percy states:

> Once the Crown secured control of water, it granted water rights to other on a basis of **first-come, first-served**, which constitutes the principle of prior allocation. Rights to specific quantities of water were granted to those who applied to the Crown for a licence and applicants obtained priority among themselves according to the date of their application. In principle, this statutory scheme differed from the American doctrine of prior appropriation because water rights depended upon the grant of a licence by the Crown, whereas under prior appropriation both water rights and their property were determined without state control by the date at which water was first put to beneficial use. In practice, these differences were superficial, because Crown control over the granting of licences was lightly exercised.[96] (emphasis added)

2.4.4 The Atlantic Provinces

Water supplies east of Manitoba were plentiful and thus the same pressures on the western provinces to modify the common law system of water

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[90] *North-West Irrigation Act*, S.C., ch. 30 (1894) (Can.).

[91] Percy, *supra* note 3 at 12. For further explanation, see David R. Percy, "Responding to Water Scarcity in Western Canada" (2005) 83 Tex. L. Rev 2091 (Westlaw).

[92] *The North-west Irrigation Act*, S.C. 1894, c.30, s.4; *Water Privileges Act, 1892*, S.B.C. 1892, c.47, s.2, cited in Percy, *supra* note 3 at 12.

[93] According to Percy, these amendments were *An Act to amend the North-west Irrigation Act*, S.C. 1895, c.33, s.2, and *Water Act Amendment Act*, 1925, S.B.C. 1925, c. 61, s.3.

[94] Percy, *supra* note 3 at 12-13.

[95] Lucas, *supra* note 34 at 16-17.

[96] Percy, *supra* note 3 at 13-14.

allocation did not exist in the provinces of Ontario, Quebec and the Atlantic provinces.[97]

Though all of the Atlantic provinces historically recognize and thus follow the riparian rights approach to water rights,[98] Crown land grants in the province of Newfoundland and Labrador since the *Lands Act*[99] contain very few grants that include riparian rights.[100] According to Hill et al., under that Act, the Crown reserved a minimum of thirty three feet of land from the water and the reservation "had the effect of preventing riparian ownership. Therefore, most bodies of water are 100 percent owned by the Crown."[101] Where riparian rights do exist in Newfoundland and Labrador, these rights are restricted by Newfoundland and Labrador's *Water Resources Act*.[102]

2.4.5 The Province of Ontario

The province of Ontario has maintained the riparian doctrine as the foundation of its water law. With time, however, an increase in the demand for water and its use necessitated statutory modification to the common law.[103] Statutory modification of the common law allowed water to be used in a volume

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[97] *Ibid*. at 72.
[98] Hill et al., *supra* note 84 at 383.
[99] *Lands Act*, S.N.L. 1991, c. 36
[100] Hill et al., *supra* note 84 at 383.
[101] *Ibid*.
[102] Water Resources Act, S.N.L. 2002, c. W-4.01, amended 2004 cL-3.1 s. 66; 2008 c. 47 s. 20; 2008 cE-9.1 s. 28. This Act grants the authority of the Crown to manage surface water, ground water, and other related resources, focusing mainly on water quality monitoring, comprehensive water use allocation. *See* Newfoundland and Labrador Water Policy Data, online: <www.waterpolicy.ca/download.php?id=45> (last updated 28 March 2010).
[103] Percy, *supra* note 3 at 73.

and locations that would not have been permitted under the common law because of the common law's restrictions.[104]

> Ontario water law developed in a pattern that owed more to its American neighbours than to western Canada. Ontario [...] shares a riparian system with the majority of American jurisdictions which are situated east of a line from North Dakota to Texas. The water law of the western provinces [...] is similar in principle to that of the states lying to the west of the same line.[105]

In Ontario, the common law riparian doctrine remains relevant to the extent that it has not been clearly modified or abolished by statute.[106] Water rights in the province of Ontario are different than the water rights of western Canada and of Newfoundland and Labrador. In Ontario,

> [t]here is no statutory vesting of the property, or of the right to diversion and use of water, in the Crown. Riparian laws therefore continue to govern the legal character of water rights.[107]

Riparian rights in the province of Ontario do not emanate from ownership of the bed of the body of water, a distinction that was made by Lord Selborne in 1875:[108]

> With respect to the ownership of the bed of the river, this cannot be the natural foundation of riparian rights properly so called, because the word 'riparian' is relative to the bank, and not the bed, of the stream; and the connection, when it exists, of property on the bank with property in the bed of the stream depends, not upon nature, but on grant or presumption of law.[109]

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[104] *Ibid*.
[105] *Ibid*. at 72-73.
[106] Lucas, *supra* note 34 at 17.
[107] *Ibid*. at 20, citing *McKie v. K.V.P. Co*., [1949] 4 D.L.R. 497 (S.C.C.), aff'g with a variation [1948] O.R. 398 (H.C.).
[108] Steven R. Willard, "Navigating the Murky Waters of Riparian Rights" (2001) 38 R.P.R. (3d) 55 at ¶ 2 (Westlaw) [***Willard***].
[109] *Lyon v. Fishmongers' Co* (1876), 1 App. Cas. 662 (U,K. H.L) at 683.

As discussed above, although originating from a common historical beginning (except in Quebec), there is variation in the water law among the provinces and territories of Canada. History shows that the modification and reinterpretation of the law by the courts took place in order to adapt the common law to the changing needs of society.[110] The dynamism in the law grew out of a notion that freshwater was plentiful. Federal legislation has changed and altered some of the foundations of water law.[111] This is perhaps most true in the province of Ontario, being situated among the Great Lakes:

> The riparian doctrine and early Canadian water law rested on the assumption that water supplies were abundant. It is now widely accepted that abundance in Canada is largely a myth. As a consequence, water rights law, whose function was once to grant rights to a plentiful natural supply, must now be primarily concerned with reconciling conflicting demands to a scarce resource.[112]

There are, today, four approaches to water rights in Canada: the Riparian system, Prior Allocation, the Northern Scheme of Authority Management and the Civil Law approach. These four legal approaches to water use may be subject to claims of Aboriginal rights and treaty rights, the subject of the Chapter Three. In fact, "Aboriginal customs governed the use of water prior to European settlement" of what is today the country of Canada.[113]

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[110] La Forest, *supra* note 8 at 4.
[111] Hill et al., *supra* note 84 at 382-384.
[112] Percy, *supra* note 3 at 100.
[113] Randy Christensen and Anastasia M. Litner, "Trading Our Common Heritage? The Debate over Water Rights Transfers in Canada" in K. Bakker, *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 225.

According to Percy,[114] the survival of the riparian doctrine in Ontario has been prolonged for four reasons. The first reason is the natural occurrence of a great quantity of water in Ontario. Second, Crown grants of land in northern Ontario have precluded the creation of riparian rights by the imposition of a road allowance sixty-six feet in width between the land and adjacent water.[115] Third, although some riparian rights exist, these rights are rarely enforced.[116] Fourth,

> [...] managers of the system under which major users obtain their water rights both minimize the risk of harm to riparians in granting permits to use water and use their discretionary powers to forestall litigation between water users.[117]

A discussion of the "managers of the system" is discussed below.

2.4.6 Ontario's Permitting System Explored

In 1961, the province of Ontario supplemented the riparian doctrine with a permit system. The permit system is governed by the *Ontario Water Resources Act*[118] and the *Ontario Water Taking and Transfer Regulation*.[119] The Acts combined have as their main purposes the monitor and control of all major uses

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[114] Percy, *supra* note 3 at 75. *See also* Canadian Environmental Law Research Foundation, "An Overview of Canadian Law and Policy Governing Great Lakes Water Quantity Management" (1986) 18 Case W.Res. J. Intl. L. 109.

[115] According to Percy, "[t]his practice means that few recent grantees of Crown lands have become riparian owners and it also limits the number of potential complainants in an area where a number of major water projects are found." Percy, *supra* note 3 at 75.

[116] Percy illustrates possible reasons for the lack of enforcement. These include: legal costs; a lack of a precise definition of riparian owner entitlement; courts unwilling to frustrate projects because of minor violations of common law rights.

[117] Percy, *supra* note 3 at 79 citing to Richard S. Campell et al., "Water Management in Ontario—An Economic Evaluation of Public Policy" (1974) 12 Osgoode Hall L.J. 475 at 500, and the discussion in the section entitled "The Resolution of Conflicts in Water Use."

[118] *Ontario Water Resources Act*, R.S.O. 1990, c. 0.40.

[119] *Ontario Water Taking Regulation*, O. Reg. 387/04.

of water instituted after their passage.[120] Surface water and groundwater are protected in both quality and quantity.[121]

Today, Ontario's system for water rights allocation can best be described as a hybrid system, combining a permitting system with common law rights. Yet,

> [w]hile this system has worked reasonably well without much conflict over the last 40 years, it may be reaching its limits given changing environmental conditions, increasing demands for water and diminishing supplies in southern parts of the province.[122]

Section 34 of the *Water Resources Act* requires anyone taking more than a total of 50,000 litres of water per day, with some exceptions, to obtain a "Permit To Take Water."[123] This applies to both groundwater and surface water withdrawal.[124] This system is not without criticism, however:

> From a policy viewpoint, the administrative resolution of water problems has had the advantage of ensuring strong governmental control of [water]. However, the exercise of discretionary power is probably too pervasive in Canadian water management and it is frequently based on policies that escape public scrutiny because they are buried in a rarely explored area of law and administration.[125]

Domestic water use in Ontario is given priority over commercial, industrial, agricultural and irrigation use.[126] Under the Permit to Take Water Program, which applies to all water use sectors, exemptions include water takings for

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[120] *Ontario Water Resources Commission Amendment Act*, 1960-61, S.O. 1960-61, c. 71, s.3.

[121] *Ontario Water Resources Act*, R.S.O. 1990, c. 0.40.

[122] Marcia Valiante, "The Future of Common Law Water Rights in Ontario" (2004) J. Envtl. L. & Prac. 293 at 294 (Westlaw) [***Valiante***].

[123] Permits to Take Water, online: *Ontario Ministry of the Environment* <http://www.ene.gov.on.ca/envision/water/pttw.htm> (last modified 21 October 2007) (last accessed 17 January 2010).

[124] Randy Christensen and Anastasia M. Lintner, "Trading Our Common Heritage? The Debate over Water Rights Transfers in Canada" in Karen Baker, ed., *Eau Canada: The Future of Canada's Water*, (Vancouver: UBC Press, 2007) at 224.

[125] Percy, *supra* note 3 at 99.

[126] Hill et al., *supra* note 84 at 383 .

ordinary household purposes, the direct watering of livestock or poultry and water used for firefighting purposes.[127]

According to Hill et al.,[128] the riparian doctrine in the province of Ontario has been modified by the following legislation:

- *Ontario Clean Water Act*[129]
- *Ontario Water Resources Act*[130]
- *Municipal Water and Sewage Transfer Act*[131]
- *Safe Drinking Water Act*[132]
- *Sustainable Water and Sewage System Act*[133]
- *Nutrient Management Act*[134]
- *Drainage Act*[135]
- *Lakes and Rivers Improvement Act*[136]
- *Environmental Bill of Rights*[137]
- *Beds of Navigable Waters Act*[138]

The statutes listed above makes evident the multiple layers of complexity involved in managing Ontario's water. Furthermore, as a result of the 2001 *Great Lakes Charter Annex Agreement*, Ontario is reforming all of its laws and regulations to meet its obligations under the subsequent *Great Lakes-St.*

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[127] The *Safeguarding and Sustaining Ontario's Water Act, 2007* amended the *Ontario Water Resources Act* to eliminate the livestock watering exemption for withdrawals 379 000 litres per day or more in order to ensure consistency with the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*.

[128] Hill et al., *supra* note 84 at 372.

[129] *Ontario Clean Water Act*, S.O. 2006, c. 22

[130] R.S.O. 1990, c. O.40

[131] S.O. 1997, c. 6 Schedule A

[132] S.O. 2002, c. 32

[133] S.O. 2002, c. 29 (but not in force yet)

[134] S.O. 2002, c. 4; amended 2009, c. 33, Sched. 15, s. 7.

[135] R.S.O. 1990, c. D.17.

[136] R.S.O. 1990, c. L.3.

[137] S.O. 1993, c. 28.

[138] *Beds of Navigable Waters Act*, R.S.O. 1990, c. B.4, as amended by R.S.O. 2002, c.18, Sched.L, s.2.

Lawrence River Basin Sustainable Water Resources Agreement.[139] The next section examines the important agreements affecting Ontario and the Great Lakes up to the present day.

2.5 The Great Lakes: Bi-Lateral Agreements & Treaties Between Canada & the U.S. Respecting the Great Lakes Basin Waters

The response to freshwater sources that meander across the borders of the two countries has been a movement towards neighbourly conformity in the form of agreements between the Great Lakes provinces and states. Historically, the upstream nation has sought control of waters that originated in their country and then flowed into another.[140] Nonetheless, Canada and the U.S. have many bilateral agreements concerning the Great Lakes and other freshwater resources that flow across the border between the two countries.[141]

Cooperation between the countries of Canada and the United States regarding the Great Lakes basin waters has been evident for over one hundred years. The 1909 *International Boundary Waters Treaty* ("Boundary Waters Treaty")[142] started the beginning of long and continuous cooperation between the countries.[143] The treaty does several things.[144] It establishes the International

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[139] *Great Lakes-St. Lawrence River Basin Water Resources Agreement*, Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Quebec, Wisconsin, 13 December 2005 [***Great Lakes Agreement***].

[140] David H. Getches, Water Law in a Nutshell, 2nd ed. (St. Paul, Minn: West Publishing Co., 1990) at 422.

[141] Johns and Rasmussen, *supra* note 57 at 61.

[142] *Treaty relating to Boundary Waters and Questions Arising with Canada*, United States and United Kingdom, 11 January 1909, 36 U.S. Stat. 2448, U.K.T.S. 1910 No. 23.

[143] Peter Bowal, "Canadian Water: Constitution, Policy, and Trade" (2006) 2006 Mich. St. L. Rev. 1141at 1155 [***Bowal***].

[144] Treaties and Agreements, online: *International Joint Commission* <http://www.ijc.org/rel/agree/water.html#text> (last update 14 December 2009) (last accessed 17 February 2010).

Joint Commission ("IJC") and sets out basic principles in order to guide boundary water relations between Canada and the United States.[145] The treaty was also the first between Canada and the U.S. to create an institution designed to deal with the issue of large-scale diversion or export.[146] According to Bowal, the evolution of this legal collaboration over time, put in place by both countries, has encompassed,

> the Great Lakes Compact and Commission (1968), state and provincial water management and environmental protections law, the Great Lakes Water Quality Agreement (1972, renewed in 1978), the Great Lakes Charter (1985), the Great Lakes Sustainability Fund (2000), the Great Lakes Annex (2001), the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (2005), and the Great Lakes-St. Lawrence River Basin Water Resources Compact (2005).[147]

This mix of treaties, agreements and other relevant legal documents pertaining to the Great Lakes Basin waters has been given the aptly named term "Law of the Lakes" which can be diagrammed using the shape of a pyramid. According to Klein,

> [t]he foundational document is the 1909 Boundary Waters Treaty. The pyramid's pointed top features the water codes of individual states and provinces, each drawing inspiration from the underlying international and interstate enactments.[148]

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[145] Johns and Rasmussen, *supra* note 57 at 65.

[146] John K. Grant, "Against the Flow: Institutions and Canada's Water-Export Debate" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) at 162 [***Grant***].

[147] Bowal, *supra* note 143 at 1155-56.

[148] Christine A. Klein, "The Law of the Lakes: From Protectionism to Sustainability" (2006) Mich. St. L. Rev. 1259 at 1266-67 [***Klein***].

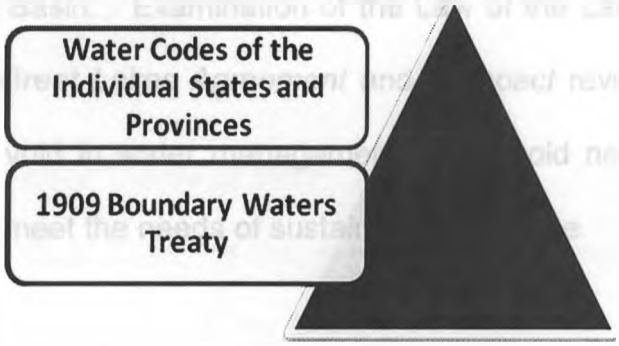

Figure 3: The Great Lakes Water Law Pyramid

Today, most decisions regarding water allocation are made under domestic law in both countries at the provincial or state level.[149] In Canada, the federal and Ontario governments coordinate their respective Great Lakes programs through an intergovernmental agreement known as the *Canada-Ontario Agreement*.[150] More generally, the 1970 *Canada Water Act*[151] establishes joint federal-provincial management of Canada's water resources, but does little to clarify jurisdictional divisions.

What follows is a brief description of the Law of the Lakes to the present, and how the Province of Ontario now deals with water diversion and allocation

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[149] Marcia Valiante, "Management of the North American Great Lakes" in O. Varis, C. Tortajada and A.K. Biswas, eds., *Management of Transboundary Rivers and Lakes* (Berlin: Springer, 2008) at 255 [***Valiante 2***].

[150] Marcia Valiante, "The Law of the Ecosystem: Evolution of Governance in the Great Lakes – St. Lawrence River Basin" (2007) 12 Lex Electronica 2 at 13 [***Valiante 3***], citing the *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, 2002, revised 2007*. According to Environment Canada (online at <http://www.ec.gc.ca/grandslacs-greatlakes/default.asp?lang=En&n=B903EE0D-1>):

> The *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem* is the federal-provincial agreement that supports the restoration and protection of the Great Lakes basin ecosystem. The Agreement outlines how the governments of Canada and Ontario will cooperate and coordinate their efforts to restore, protect and conserve the Great Lakes basin ecosystem. It is the means by which the federal partners of the Canadian Federal Great Lakes Program interact with the provincial ministries to help meet Canada's obligations under the Canada-US Great Lakes Water Quality Agreement (GLWQA).

[151] *Canada Water Act*, R.S. 1985, c. C-11. *See* Part I, s. 4, which provides for the establishment of federal-provincial consultative arrangements for water.

within the Great Lakes Basin. Examination of the Law of the Lakes before the implementation of the *Great Lakes Agreement* and *Compact* reveals that there was, from the start, a void in water management. This void necessitated the evolution of the laws to meet the needs of sustainable water use.

2.5.1 The Law of the Lakes: Evolution and Explanation

According to Klein, and for the purposes of this thesis, the following encompasses the "Law of the Lakes":

1) *Boundary Waters Treaty of 1909* between Canada and the United;[152]
2) *Great Lakes Basin Compact* of 1968 among the Great Lakes states (US law);[153]
3) *Great Lakes Charter* of 1985 among the 8 Great Lakes states and Ontario and Quebec;[154]
4) *Great Lakes Charter Annex* of 2001also among the 8 Great Lake states and two provinces;[155]
5) *Great Lakes-St. Lawrence River Basin Water Resources Compact* of 2005 among the eight states (US law);[156]
6) *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement* of 2005 among the eight states and the two provinces.[157]

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[152] The Treaty appears as a schedule to the *International Boundary Waters Treaty Act*, R.S.C. 1985, c. 1-17 as amended. Boundary Waters Treaty, Jan. 11, 1909, United States-Great Britain (for Canada), 36 Stat. 2249 (1909).

[153] Great Lakes Basin Compact, Pub. L. No. 90-419, 82 Stat. 414 (1968).

[154] *The Great Lakes Charter: Principles for the Management of Great Lakes Water Resources* , 11 February 1985

[155] *Annex to the Great Lakes Charter*, June 18, 2001, available at http://www.cglg.org/projects/water/docs/GreatLakesCharterAnnex.pdf (last visited 18 May 2010).

[156] *Great Lakes-St. Lawrence River Basin Water Resources Compact* (Dec. 13, 2005).

[157] *Great Lakes-St. Lawrence River Basin Water Resources Agreement*, between the states and provinces of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Quebec, Wisconsin, signed 13 December 2005, online: <http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@water/documents/document/200040.pdf>.

Only the 1909 Treaty and the 2 U.S. laws (of 1968 and 2005) are actually legal instruments.

2.5.2 The Boundary Waters Treaty of 1909

The Boundary Waters Treaty is the main legal instrument dealing with boundary and transboundary waters of the Great Lakes Basin.[158] It is a bilateral treaty[159] that grew out of the need to address the problems of shared waters between Canada and the United States coupled with the increase in population and industrial development at the turn of the 20th century.[160] The Boundary Waters Treaty, in part, establishes an institutional structure as well as the International Joint Commission ("IJC").[161] The IJC is a binational body which serves two main functions. First, the IJC controls water movement in the Great Lakes.[162] Any proposed diversion that alters the natural flow or levels of the boundary waters requires approval from both Canada and the U.S.[163] Second, the IJC investigates and reports on questions submitted to it by the Canadian and American governments.[164] Included in this is the arbitration of disputes between Canada and the United States regarding boundary water management

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[158] Grant, *supra* note 146 at 173.

[159] A bilateral agreement is an agreement that affects or obligates both parties to the agreement.

[160] Valiante 3, *supra* note 150 at 5.

[161] *Ibid*. *See also* Marcia Valiante, "Management of the North American Great Lakes" in O. Varis, C. Tortajada and A.K. Biswas, eds., *Management of Transboundary Rivers and Lakes* (Berlin: Springer, 2008) at 248:

> The IJC is a six-member commission with equal representation from each country. Members are appointed by the President of the US and by the Governor in Council in Canada. The IJC has offices in Ottawa and Washington, and a Great Lakes Regional Office in Windsor, Ontario.

[162] Grant, *supra* note 146 at 174.

[163] *Ibid*.

[164] *Ibid*.

especially pertaining to the Great Lakes.[165] Under the Treaty, "boundary waters" are defined as:

> the waters from main shore to main shore of the lakes and rivers and connecting waterways...along which the international boundary between the United States...and Canada passes, including all bays, arms, and inlets thereof, not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary.[166]

According to Muldoon and McClenaghan,

> The [Boundary Waters Treaty] protects the continued free and open navigation of all navigable waters, extending to Lake Michigan. Each of the countries retains jurisdiction over the use and diversion of waters on its own side of the international line, preserving the right to make claims in case of injury and to object to a use or diversion that interferes with navigation. Any new uses, diversions, or obstructions that interfere with natural levels or flows require the approval of the International Joint Commission...The BWT also provides that the boundary waters and waters flowing across the boundary will not be polluted to the detriment of the natural waters on the other side of the boundary. It provides for an order of precedence for uses, with domestic and sanitary uses being first, navigation second, and power and irrigation third.[167]

Apart from the IJC's investigative and quasi-judicial authority, the commission is limited in its control over the Great Lakes and other transboundary waters because it does not possess any legal powers of enforcement nor can it make any of its recommendations binding.[168]

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[165] Frederic Lasserre, "Drawers of Water: Water Diversions in Canada and Beyond" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Toronto: UBC Press, 2007) at 158.

[166] Noah D. Hall, "Toward a New Horizontal Federalism: Interstate Water Management in the Great Lakes Region" (2006) 77 U. Colo. L. Rev. 405 at 416, citing *Boundary Waters Treaty*, Jan. 11, 1909, United States-Great Britain (for Canada), Preliminary Article, 36 Stat. at 2448-49 [***Hall***].

[167] Paul Muldoon and Theresa McClenaghan, "A Tangled Web: Reworking Canada's Water Laws" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Toronto: UBC Press, 2007) at 246-47.

[168] Grant, supra note 146 at 174.

Regarding the quantity of water within the Great Lakes, Valiante states that two principles guide the right to use Great Lakes Basin waters.[169] First, regarding boundary waters, each country has an equal right to use these waters. Second, each country has exclusive right to use waters that exist on one side of the border but will flow across "subject to an obligation to provide access to legal remedies if injury occurs in the other country."[170]

Hall recognizes weaknesses in the Boundary Waters Treaty. First, the Treaty is limited in scope and coverage. This is based on its definition of "boundary waters." The Treaty does not include Lake Michigan, which is situated entirely within the boundaries of the United States but is nonetheless part of the Great Lakes basin water system.[171] Second, hundreds of tributary rivers and streams as well as tributary ground water are also excluded under the definition above mentioned definition.[172] Grant also notes that the treaty does not deal with all basin waters in a similar manner. According to Grant, tributaries of boundary waters and transboundary rivers remain under national jurisdiction and control, specifically with respect to use and diversion.[173] These sources of water are important to maintaining the levels of the Great Lakes and St. Lawrence River waters.

Furthermore, the treaty provides that no action can be taken which affects the levels or flows of waters, except under prescribed procedures for

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[169] Valiante 2, *supra* note 149 at 255 (Management of the NA Great Lakes).
[170] *Ibid*.
[171] Noah D. Hall, "Toward a New Horizontal Federalism: Interstate Water Management in the Great Lakes Region" (2006) 77 U. Colo. L. Rev. 405 (Westlaw) at 417 [***Hall***].
[172] *Ibid*.
[173] Grant, *supra* note 146 at 173.

coordination and agreement between Canada and the U.S.[174] Under the Treaty, neither party may use or divert boundary waters that affect the natural level or flow of boundary waters on the other side of the borderline without authority from the IJC.[175] The adjudicative power of the IJC is also limited. A reference is required by both countries for a dispute to be submitted to the IJC for a binding arbitration decision.[176] The consent of the U.S. Senate is required for such an action to take place, but to this day, it has never consented to refer such a matter for a binding decision.[177]

According to Hall, however, the most important difficulty with the standard used relates to the size and scale of the Great Lakes:

> The vast majority of the water uses and diversions from the boundary Great Lakes have no measurable affect on Great Lakes levels and flows, at least individually.[178]

The Treaty also makes no explicit reference to groundwater, a source of recharge for the Great Lakes Basin waters.[179]

2.5.3 The Great Lakes Basin Compact

The Great Lakes Basin Compact[180] is an interstate compact between the eight Great Lakes states. The compact creates the Great Lakes Commission, a

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[174] *Ibid.*

[175] Hall *supra* note 171 at 417. *Boundary Waters Treaty*, art. III, 36 Stat. at 2449-50.

[176] *Ibid.* at 418 citing *Boundary Waters Treaty*, art. X, 36 Stat. at 2452-53

[177] *Ibid.* The consent of the U.S. Senate would require a two-thirds majority vote under the U.S. Const. art. II § 2, cl. 2. If the IJC is unable to decide the matter with a majority vote, then an umpire is chosen in accordance with the provisions of the Hague Convention of 1907. *Ibid.* at 418, n. 70. *See also Boundary Waters Treaty*, art. X, 36 Stat. at 2452-53.

[178] Hall, *supra* note 171 at 417. Following, Canada enacted bans on all water diversions and implemented a comprehensive water management program under the *International Boundary Waters Treaty Act*.

[179] Grant, *supra* note 146 at 173.

[180] *The Great Lakes Basin Compact*, Pub. L. No. 90-419, 90 Stat. 660 (1968) online: <http://www.glc.org/about/glbc.html>.

public agency in the United States. The provinces of Ontario and Quebec are only associate members to this compact, having signed a "Declaration of Partnership" in 1999.[181] This declaration forms a "binational" partnership between the eight states, the U.S. federal government (which was required to give federal assent to the *Great Lakes Basin Compact*) and the provinces. It allows both provinces to have a delegate of representatives to the Great Lakes Commission as Associate Commissioners, "for the purpose of participating in meeting and activities as provided for in the Great Lakes Basin Compact."[182] Prior to this signing, the two provinces were only "Observers."[183] Furthermore, under the Declaration of Partnership, the Great Lakes states view Associate Member status as "an important step toward the goal of a stronger partnership as provided for in the Great Lakes Basin Compact [...]."[184]

This compact establishes five general areas of responsibility for the Great Lakes Commission.[185] These five areas are listed in Article I of the compact.[186]

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[181] The Declaration of Partnership is a series of resolutions signed by the eight states and two provinces. Note that this Declaration of Partnership was signed after the Great Lakes Charter of 1985, *infra*.

[182] The Declaration of Partnership is available online: <http://www.glc.org/docs/declarations.pdf>

[183] Current observers include: the Canadian Federal Government, numerous U.S. Federal Agencies, including the U.S. Environmental Protection Agency, the IJC, the Council of Great Lakes Governors and non-government organizations. For a complete list, see Observers, online: Great Lakes Commission <http://www.glc.org/about/observers.html> (last modified 15 June 2010) (last viewed 14 September 2010).

[184] *Supra* note 182.

[185] The purpose of the Commission is to carry out the terms and requirements of the Great Lakes Basin Compact. *See* online: <http://www.glc.org/about/strategy/index.html>.

[186] As stated under Article I,

> The purposes of this compact are, through means of joint or cooperative action:
>
> 1. To promote the orderly, integrated, and comprehensive development, use, and conservation of the water resources of the Great Lakes Basin (hereinafter called the Basin).
> 2. To plan for the welfare and development of the water resources of the Basin as a whole as well as for those portions of the Basin which may have problems of special concern.

The Guiding Principles, as set by the Great Lakes Commission, are intended to be reflected in all of the Commission's operations.[187] The principles are as follows:

- Great Lakes Commission initiatives are defined by our Member jurisdictions and add value by bringing a regional perspective to state and provincial Great Lakes-St. Lawrence River programs, projects and priorities.
- Great Lakes Commissioners are ambassadors for the Great Lakes-St. Lawrence River region and serve as liaisons between their jurisdictions and the Commission. Commissioners bring their individual expertise to bear on regional issues, building collective solutions with their fellow Commissioners.
- The Board of Directors convenes, engages and coordinates its state/provincial delegation on Commission priorities, projects and operations in accordance with the Great Lakes Basin Compact and the Commission's Strategic Plan.
- The Commission is transparent about its various roles, which include convener, facilitator, advocate and information broker.
- The Commission provides information that integrates relevant scientific, economic and policy components to guide decision-making.

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3. To make it possible for the states of the Basin and their people to derive the maximum benefit from utilization of public works, in the form of navigational aids or otherwise, which may exist or which may be constructed from time to time.
4. To advise in securing and maintaining a proper balance among industrial, commercial, agricultural, water supply, residential, recreational, and other legitimate uses of the water resources of the Basin.
5. To establish and maintain an intergovernmental agency the end that the purposes of this compact may be accomplished more effectively.

[187] *Guiding Principles*, online: Great Lakes Commission <http://www.glc.org/about/strategy/sp_gp.html> (last modified 18 May 2007) (last viewed 14 September 2010).

- The Commission values inclusiveness in its projects, partnerships and decision-making; diverse views are welcomed and considered.
- The Commission respects the roles of other regional institutions and partners with them to build on respective strengths to achieve common goals.[188]
- The Commission supports sustainable development principles and reflects this commitment in all its operations.

Regarding water conservation and efficiency, in the *Great Lakes Commission Work Plan 2008-2010,*[189] the Great Lakes Commission identifies water resource management as being at the forefront of state and provincial priorities for the Great Lakes and St. Lawrence River Basin,[190] which also mirrors regional present-day consensus. Under this section, the stated goal is

> [a] Great Lakes region that is viewed as a model for water conservation and efficiency through effective and innovative public policies that enable users of Great Lakes-St. Lawrence River water to become leaders in efficiency, stewardship and conservation practices.[191]

This is also found as an agreed to ideal for the GLC as it includes making the Great Lakes region a model (both domestically and internationally) for sustainable development through commitment to stewardship of its water

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[188] *Ibid.*
[189] *Great Lakes Commission Work Plan 2008-2010* (18 April 2008), online: Great Lakes Commission <http://www.glc.org/about/strategy/docs/GLC%20Biennial%20Workplan%20%202008-2010_FINAL%204-08.pdf>.
[190] *Ibid.* at 16.
[191] *Ibid.*

resources.[192] Indigenous peoples are referred to in the Work Plan, albeit only under the heading of "Tourism and Recreation."[193]

2.5.4 The Great Lakes Charter

In order to strengthen the ability of the eight states and two provinces surrounding the Great Lakes to protect these shared water resources, a non-binding agreement, the *Great Lakes Charter* ("GLC"), was signed into force on February 11, 1985.[194] The year 1985, for some, also represents the start of the sustainable development era in which both legislative and program initiatives become more integrative, anticipatory, and preventative.[195] This era began with the work of the United Nation's Brundtland Commission, which defined the concept of sustainable development (in part) as

> [the] development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
>
> the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and
> the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.[196]

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[192] Strategic Plan for the Great Lakes Commission, online: *Great Lakes Commission*, <http://www.glc.org/about/strategy/docs/GLC_Strategic_Plan.pdf> (last viewed December 28, 2010).

[193] *Ibid.* at 11.

[194] *The Great Lakes Charter, Principles for the Management of Great Lakes Water Resources*, Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Quebec, Wisconsin, 11 February 1985, online: <http://www.cglg.org/projects/water/docs/GreatLakesCharter.pdf> [***Great Lakes Charter***].

[195] Ralph Pentland and Adele Hurley, "Thirsty Neighbours: A Century of Canada-US Transboundary Water Governance" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 174 [***Pentland & Hurley***]. The sustainability era is still ongoing and is reflected in the way Canada-U.S. water management is viewed. *Ibid.*

[196] *Our Common Future: Report of the World Commission on Environment and Development*, Chapter 2: Towards Sustainable Development, A/42/427 (UN). The Brundtland Commission will be discussed in more detail in Chapter Four, *infra*.

The GLC has as its aim the protection of the shared water resources within the Great Lakes Basin. The stated purpose of the GLC is:

> [...] to conserve the levels and flows of the Great Lakes and their tributaries and connecting waters; to protect and conserve the environmental balance of the Great Lakes Basin ecosystem; to provide for cooperative programs and management of the water resources of the Great Lakes Basin by the signatory States and Provinces; to make secure and protect present developments within the region; and to provide a secure foundation for future investment and development within the region.[197]

The GLC contains five principles[198] and their necessary implementation procedures.[199] Outside of protecting the water levels and flows of the Great Lakes, their tributaries and connecting waters, the GLC provides for data collection on the consumption and diversion of water of water greater than 380 000 litres per day averaged over a thirty day period.[200]

Furthermore, as Principle IV makes clear, there is a Prior Notice and Consultation Procedure under the GLC. Any province or state that considers issuing a permit or granting the approval to take in excess of 19 million litres per day, averaged over a thirty-day period, must give notice to the other states and provinces.[201] The IJC must also be notified "where appropriate", a term that is not defined. Any objection(s) voiced to an approval requires the permitting state

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[197] *Great Lakes Charter*, *supra* note 194.

[198] The five principles include the following:

- Principle I: Integrity of the Great Lakes Basin
- Principle II: Cooperation Among Jurisdictions
- Principle III: Protection of the Water Resources of the Great Lakes
- Principle IV: Prior Notice and Consultation
- Principle V: Cooperative Programs and Practices

[199] *See* "Implementation of Procedures" *supra* at 3-5.

[200] "Progress Toward Implementation" at 5, *ibid.*, cited in Grant, *supra* note 146 at 174.

[201] "Consultation Procedures" at 4, *ibid.*, cited in Grant, *supra* note 146 at 174.

to seek input and to develop an "agreeable resolution."[202] There is no mention of Indigenous peoples in the GLC in any way.

2.5.5 The Great Lakes Charter Annex of 2001[203]

After the Nova proposal to sell water in bulk to Asia,[204] change in thought and the legal mechanism dealing with the Great Lakes Basin waters of both Canada and the U.S. continued to take place.[205] Focusing on the Canadian experience, the Canadian government developed a four-part bulk water strategy in response to Nova.[206] First, recommendations of amendments to the International Boundary Waters Treaty Act of 1909 were made in order to provide mechanisms in order "to help prevent and resolve disputes, and which primarily concern water quantity and quality along the Canada-U.S. boundary."[207] Second, the Canadian government would encourage the IJC to investigate what approach to water consumption and diversions in the Great Lakes Basin should be taken in order to ensure consistency between the two nations.[208] Third, the government of Canada recommended a nation-wide approach to prohibit bulk water removals. This included water export.[209] Fourth, a sustainable global water management recommendation was put forth whereby the federal government would promote, among other things, Canadian expertise and

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[202] "Consultation Procedures" at 4, *ibid.*, cited in Grant, *supra* note 146 at 174.
[203] The *Annex* is an attachment to the *Great Lakes Charter*.
[204] As discussed in Chapter One at 1.
[205] Valiante 2, *supra* note 149 at 256.
[206] Bowal, *supra* note 143 at 1152.
[207] *Ibid.*
[208] *Ibid.*
[209] *Ibid.*

technology abroad in an aim at reducing the global demand for freshwater.[210] This process included the negotiation of a new state-provincial arrangement known as "Annex 2001."[211] As Grant states:

> The 2001 Annex to the Charter and Implementing Agreements reaffirmed the commitment of the Great Lakes governors and premiers to the broad principles originally set out. More importantly, the annex put forward several directives aimed at creating a set of basin-wide binding agreements. The purpose of such agreements is to "retain authority over the management of the Waters of the Great Lakes Basin and enhance and build upon the existing structure and collective management efforts of various governmental organizations within the Great Lakes Basin."[212]

2.5.6 The Great Lakes Agreement and Great Lakes Compact

In December of 2005, in order to meet the objectives outlined under Annex 2001, the eight states and two provinces signed the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement* ("Great Lakes Agreement")[213] and the eight states signed the *Great Lakes Basin Water Resources Compact* ("Great Lakes Compact")[214] Valiante views the events leading up to both the agreement and compact as the first steps in the development of a geographically defined governance regime at the sub-national level.[215] According to Grant, the Great Lakes Agreement and Compact enhance

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[210] *Ibid.* at 1153.
[211] Valiante 2 *supra* note 149 at 256.
[212] Grant, *supra* note 146 at 174-75, citing in part to *Annex 2001*, *at* "Directive #1"
[213] Great Lakes Agreement, *supra* note 157.
[214] *Great-Lakes-St. Lawrence River Basin Water Resources Compact*, Pub. L. No. 110-342, 122 Stat. 3739 (2008) [***Great Lakes Compact***].
[215] Marcia Valiante, *The Great Lakes Charter Annex 2001: Legal Dimensions of Provincial Participation* (2003) 13 J. Envtl. L. & Prac. 47 at 53.

the existing protections by establishing a "virtual ban"[216] on diversions, a basin-wide environmental standard for water uses, better conservation measures, and an increased role for science in decision making.[217] Significantly, both the Great Lakes Agreement and the Great Lakes Compact contain procedures set out for public participation. Of great importance and for the first time in any of the bi-national agreements is the requirement of consultation with First Nations in Canada[218] and the federally recognized tribes in the U.S. with respect to "regionally significant proposals involving new or increased withdrawals, diversions, or consumptive uses of water."[219]

The Great Lakes Agreement is a "good-faith agreement"[220] between the Great Lakes states and two provinces. The Great Lakes Compact, however, is a binding agreement between the eight states alone, much like the *Great Lakes Basin Compact*, *supra*. The Great Lakes Compact is necessary in order to make the entire arrangement binding under the U.S. legal structure.[221] The Great Lakes Compact also creates the Great Lakes Basin Water Resources Council which reviews new out-of-basin diversions and transfers between lakes, and also

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[216] This is only a "virtual ban" because there are limited exceptions. These exceptions are discussed *infra*.
[217] Grant, *supra* note 146 at 175.
[218] This is discussed in more detail in Chapter Three.
[219] Grant, *supra* note 146 at 175.
[220] It is a good faith agreement because the Provinces in Canada and individual states by themselves are unable to sign treaties across international boundaries. *See* Hogg, *supra* note 60 at s. 11.1-11.6.
[221] Valiante 2, *supra* note 149 at 257. "In order to be recognized in U.S. federal law, the Compact had to be approved by the legislatures of all eight states and by the U.S. Congress. Michigan was the last state to sign in July, 2008. The Compact was approved by the U.S. Congress and then was signed into law by then U.S. President George Bush in December 2008." Background to Great Lakes-St. Lawrence River Basin Compact, online: *The Council of Canadians* <http://www.canadians.org/water/issues/Great_Lakes/index.html> (last modified 12 December 2008) (last viewed 14 September 2010).

oversees the implementation of the Compact by the eight Great Lakes states.[222]

This arrangement is not without its complexity. According to Bowal,

> [a] regional body of Great Lakes premiers and governors reviews and renders "findings" to jurisdictions concerning diversions and withdrawals involving consumptive uses greater than five mgd (million gallons per day). Inter-basin diversions are prohibited; intra–basin withdrawals are regulated by explicit standards. The model facilitates the states and provinces working together to address common concerns in the Basin and ensure compliance with the Agreement, to review proposals, to facilitate consensus and dispute resolution, and to monitor implementation.[223]

The management of the Great Lakes basin waters is stated as being an exercise in cooperation "among multiple jurisdictions and levels of government, with numerous and potentially overlapping legal regimes."[224]

The Great Lakes Agreement and Compact establish a near ban on water diversions, a basin-wide environmental standard for water use, and an increased conservation measures.[225] The ban on new or increased water diversions to areas both inside and outside of the Great Lakes-St. Lawrence River Basin comes with narrow exceptions.[226] The exceptions relate directly to areas labeled under the Agreement and Compact as (1) Straddling Communities,[227] (2) Intra-

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[222] Bowal, *supra* note 143 at 1158.
[223] *Ibid.* at 1157.
[224] Hall, *supra* note 171 at 415.
[225] Great Lakes Agreement, *supra* note 157 at art. 100; Great Lakes Compact, *supra* note 214 at §1.3.
[226] Great Lakes Agreement, *supra* note 157, at art. 201; Great Lakes Compact, *supra* note 214 at Art. 4, § 4.9 (listing exceptions to prohibited diversions) and §4.8 ("All New or Increased Diversions are prohibited, except as provided for in [the Compact]; *see also* Austen L. Parrish, "Mixed Blessings: The Great Lakes Compact and Agreement, The IJC, and International Dispute Resolution" (2006) 2006 Mich. St. L. Rev. 1299 at 1303.
[227] "Straddling Community" means "any incorporated city, town or the equivalent thereof, that is either wholly within any County that lies partly or completely within the Basin or partly in two Great Lakes watersheds but entirely within the Basin, whose corporate boundary existing as of the date set forth in paragraph 2 of Article 709, is partly within the Basin or partly within two Great Lakes watersheds." Great Lakes Agreement, *supra* note 157 at art. 103 "General Definitions".

Basin Transfers,[228] and (3) Straddling Counties.[229] In finding an exception, the relevant standard to be applied is the "Exception Standard":

Exception Standard

4. The following criteria constitute the Exception Standard:

a) The need for all or part of the Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies;
b) The Exception shall be limited to quantities that are considered reasonable for the purposes for which it is proposed;
c) All Water Withdrawn shall be returned, either naturally or after use, to the Source Watershed less an allowance for Consumptive Use. No surface water or groundwater from outside the Basin may be used to satisfy any portion of this criterion except if it:
    i. Is part of a water supply or wastewater treatment system that combines water from inside and outside of the Basin;
    ii. Is treated to meet applicable water quality discharge standards and to prevent the introduction of invasive species into the Basin;
d) The Exception shall be implemented so as to ensure that it shall result in no significant individual or cumulative adverse impacts to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin with consideration given to the potential Cumulative Impacts of any precedent-setting consequences associated with the Proposal;
e) The Exception shall be implemented so as to incorporate Environmentally Sound and Economically Feasible Water Conservation Measures to minimize Water Withdrawals or Consumptive Use;
f) The Exception shall be implemented so as to ensure that it is in compliance with all applicable municipal, State, Provincial and federal laws as well as regional interstate, inter-provincial and international agreements, including the Boundary Waters Treaty of 1909;
g) All applicable criteria in this Article have also been met.

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[228] "Intra-Basin Transfer" means "the transfer of Water from the watershed of one of the Great Lakes into the watershed of another Great Lake." *Ibid.*

[229] "Community within a Straddling County" means "any incorporated city, town or the equivalent thereof, that is located outside the Basin but wholly within a County that lies partly within the Basin and that is not a Straddling Community." *Ibid.*

2.5.7 Relevant Weakness of the Great Lakes Agreement

According to Grant, not everyone agrees that the Great Lakes Agreement is an affirmative step in the direction of the complete protection of Great Lakes basin waters.[230] One problem is that the Great Lakes Agreement allows for access to basin waters by U.S. communities that lie within "straddling counties."[231] Grant points out that the "straddling counties" provision may raise the likelihood of a trade challenge under NAFTA by corporate water investors within the straddling counties.[232] Some believe that the Agreement and Compact undermines Canada's ability to protect the watershed:

> The Great Lakes [Agreement and] Compact sets up a regional authority to regulate water takings in the Great Lakes Basin. A body comprised of two provinces and eight Great Lakes states puts Canada at a disadvantage in negotiating water disputes.[233]

Furthermore, the agreement does nothing to clarify the issue of bottled water export.

2.5.7.1 The Issue of Bottled Water

In Canada, bottled water is a huge industry. Canadian exporters of bottled water, through permits and licenses, (but not in containers over 20 litres at a time so as to not violate the Great Lakes Agreement and Compact) extract over 30

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[230] Grant, *supra* note 146 at 175.

[231] *Ibid*. The definition of a "straddling community" under the Great Lakes Agreement, "means any incorporated city, town or the equivalent thereof, that is either wholly within any County that lies partly or completely within the Basin or partly in two Great Lakes watersheds but entirely within the Basin, whose corporate boundary existing as of the date set forth in paragraph 2 of Article 709, is partly within the Basin or partly within two Great Lakes watersheds."

[232] *Ibid*. at 175. Grant refers to other problems, including the export of bottled water. *Ibid*.

[233] Water – Great Lakes-St.Lawrence River Basin Compact, online: The Council of Canadians <http://www.canadians.org/water/issues/Great_Lakes/index.html> (last updated 14 October 2010) (last viewed 30 December 2010).

billion litres of water for bottling per year.[234] In terms of trade, bottled water is considered a food product under the federal *Food and Drugs Act*.[235] The issue of bottled water and export further adds to the institutional complexion of Great Lakes basin water management. Bottled water and its relation to the NAFTA remain contentious issues because the Great Lakes Agreement and Compact exempt bottled water under the right circumstances.

2.5.7.2 NAFTA As It Relates To Water

The North American Free Trade Agreement (the "NAFTA") between Canada, the United States and Mexico entered into force on January 1, 1994.[236] Its purpose as a regional international agreement is to implement a free trade area between all three countries.[237] In 1993, the governments of Canada, Mexico and the United States issued a joint statement regarding water under the North American Free Trade Agreement.[238] Within this statement, it was noted

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[234] C. Johns et al., "Water as a Multiple-Use Resource" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) at 47.

[235] *Ibid*. at 48. *Food and Drugs Act*, R.S., 1985, c. F-27.

[236] *North American Free Trade Agreement Between the Government of Canada, the Government of Mexico and the Government of the United States*, 17 December 1992, Can. T.S. 1994 No. 2, 32 I.L.M. 289 (entered into force 1 January 1994) [***NAFTA***].

[237] *Ibid*. *See* Article 102 for all objectives of the NAFTA.

[238] The 1993 joint statement reads as follows:

- The NAFTA creates no rights to the natural water resources of any Party to the Agreement.
- Unless water, in any form, has entered into commerce and become 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 has never been subject to the terms of any trade agreement.
- International rights and obligations respecting water in its natural state are contained in separate treaties and agreements negotiated for that purpose. Examples are the United States-Canada

that water must enter into commerce and become a good or product in order to be covered by the provisions of NAFTA.[239] Although water resources in a "natural state" are not subject to NAFTA, water may be taken from its natural state and made into a good.[240] With the *Federal Water Policy: Report No. 2* of 1994, which identified the quality and availability of fresh water as a major global issue, Grants states that the Federal government began the process of framing future water-export policy as an issue of environmental sustainability as opposed to international trade.[241] According to Grant,

> [t]he report urged the wise use of water consistent with socio-economic and environmental needs, although these needs were never clearly delineated. A key recommendation was the prohibition of interbasin water export; however, any relevant trade issue were deftly avoided by stating that NAFTA applied only to water packaged as a beverage in tanks.[242]

In 1999, the federal government of Canada released a paper to address its strategy concerning large-scale water exports.[243] In it, the government concluded that "the debate concerning water exports and NAFTA continues."[244] This was followed in 2001 by an updated government paper which concluded the

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Boundary Waters Treaty of 1909 and the 1944 Boundary Waters Treaty between Mexico and the United States.

[239] Johns and Rasmussen, *supra* note 57 at 68.

[240] *Ibid.* at 69.

[241] Grant, *supra* note 146 at 164-65.

[242] *Ibid.* at 165.

[243] Government of Canada, *Water Exports and the NAFTA* by David Johansen (Ottawa: Law and Government Division, 8 March 1999) online: <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/EB/prb995-e.htm> (last modified 2 October 2002) (last viewed 15 September 2010).

[244] *Ibid.*

same as the previous paper but also reasserted the 1993 joint statement that NAFTA does not apply to water in its natural state.[245]

According to Johansen,[246] there still remain three separate yet related issues that arise from international trade agreements, including NAFTA, relating to water. The first still concerns whether or not water in its natural state is treated as a good.[247] The second involves whether allowing water to be extracted from lakes and other bodies of water and then sold as a good creates a precedent whereby other requests for the same treatment then become automatic.[248] The third concern deals with Chapter 11 of NAFTA regarding the national treatment obligation as it applies to bulk water removal for domestic purposes or export.[249]

Although these issues remain unresolved, by framing bulk water removal as an environmental management issue, the Canadian Department of Foreign Affairs and International Trade hopes to avoid trade challenges.[250] According to some academics, a complete federal ban on water exports is contrary to the trade rules of the General Agreement on Tariffs and Trade[251] and NAFTA.[252]

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[245] Government of Canada, *Bulk Water Removals, Water Exports and the NAFTA* by David Johansen (Ottawa: Law and Government Division, 20 February 2001; Revised 31 January 2002) online: < http://dsp-psd.communication.gc.ca/Pilot/LoPBdP/BP/prb0041-e.htm> (last modified 24 October 2002) (last viewed 15 September 2010).

[246] *Ibid.* cited in Grant, *supra* note 146 at 171.

[247] *Ibid.*

[248] *Ibid.*

[249] *Ibid.*

[250] *Ibid.* at 165. *See also* Farid et al., "The Fate of the Great Lakes: Sustaining or Draining the Sweetwater Seas?" online: Great Lakes United < http://www.glu.org/en/information_centre/fate-great-lakes-sustaining-or-draining-sweetwater-seas > at 11 (accessed 30 December 2010).

[251] *General Agreement on Tariffs and Trade*, 30 October 1947, 58 U.N.T.S. 187, Can T.S. 1947 No. 27 (entered into force 1 January 1948).

[252] Grant, *supra* note 146 at 166.

2.5.7.3 The Federal Government's Recent Action on Canadian Bulk Water Export

Bill C-26, the *Transboundary Waters Protection Act,*[253] was tabled by the Canadian Conservative Federal Government on May 13, 2010. It was an amendment to the *International Boundary Waters Treaty Act*.[254] The legislation was to extend protection, currently bestowed upon waters that straddle the border between Canada and the U.S. (like the Great Lakes), to all rivers and streams in the country.[255] According to the government, the amendment:

> [...] [e]nsures that all waters under a federal jurisdiction are protected from bulk water removals. The provinces have laws, regulations or policies in place to prevent the bulk removal of water from their jurisdictions.[256]

The proposed legislation had its critiques. First, it narrowed the definition of bulk water removals.[257] Doing so excludes the use of water in manufactured products including beverages. It also defined "bulk removals" as being 50,000 litres or more. This has been criticized as a random figure which does not take into consideration the impacts on the local watersheds.[258] Second, the bill did not apply to waters that are not boundary or treaty waters.[259] These waters alone represent eighty percent (80%) of Canada's total surface waters.[260] Third, the bill

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[253] Canada, Bill C-26, *An Act to amend the International Boundary Waters Treat Act and the International River Improvements Act*, 3rd Sess., 40th Parl., 2010 (The Bill has reached first reading as of 13 May 2010), online: < http://www2.parl.gc.ca/HousePublications/Publication.aspx?Docid=4528706&file=4>.

[254] *Ibid.*

[255] Bill Summary (C-26) -The Transboundary Waters Protection Act, online: Government of Canada <http://www.canadainternational.gc.ca/can-am/bilat_can/bill-loi.aspx?lang=eng>.

[256] *Ibid.*

[257] Meera Karunananthan, "Bulk Water Export Bill Has Leaks" online: The Council of Canadians <http://www.canadians.org/publications/CP/2010/autumn/water-exports.pdf> (last viewed 30 December 2010).

[258] *Ibid.*

[259] *Ibid.*

[260] *Ibid.*

did not take into account "the need to exclude water from NAFTA, which would trump federal legislation if a province chose to export water to the U.S."[261]

Bill C-26 died when the Federal Parliament was dissolved ahead of the May 2011 federal election. Had Bill C-26 been become law, this legislation would have added yet another layer to the complexity of water law management and regulation in Canada and the Great Lakes.

2.5.8 Summary of the Great Lakes Material

In summary, the water management institution relating to Great Lakes basin and St. Lawrence River is considerably fragmented.[262] This means that the necessary regulations in any one policy area will still result in incomplete management overall.[263] This is a primary challenge for not only the province of Ontario and the residents of the Great Lakes basin, but throughout Canada too.[264] Klein notes that,

> [t]he hard work of achieving sustainable water use falls to the individual [provinces and states] as they enact legislation to manage the water resources within their jurisdiction.[265]

From its inception and growth with time, the laws that pertain to the Great Lakes Basin have been advanced by issues necessitating change. However,

> [i]f the Law of the Lakes is sincerely aimed at the promotion of sustainability, then [provinces and states] must regulate *all* water withdrawals (emphasis original), regardless of user; amount; the size of container in which water is transported; the jurisdiction that

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[261] *Ibid.*
[262] Grant, *supra* note 146 at 175.
[263] *Ibid.*
[264] *Ibid.*
[265] Klein, *supra* note 148 at 1273.

> reaps economic profits of water use; **and exclusive of politically motivated exemptions for favored actors.**[266] (emphasis added.)

2.6 Ontario's Implementation of the *Great Lakes Agreement*: Looking at the Top of the Pyramid

On December 13, 2005, on the same day that the *Great Lakes Agreement* was signed by Ontario Premier Dalton McGuinty, the government of Ontario released "The Great Lakes Charter Annex Agreements Backgrounder."[267] This document provides detail to the final Great Lakes Charter Annex agreements leading to the Great Lakes Agreement. In part it reads:

> The Ontario government has passed strict laws banning water diversions out of the province's three major water basins – the Great Lakes-St. Lawrence River Basin, the Hudson Bay Basin and the Nelson River Basin
>
> The province also regulates water withdrawals, and has brought in stronger measures to protect natural ecosystems.
>
> As a result, Ontario's laws already meet or exceed most of the requirements of the Charter Annex agreements. In negotiating these agreements, Ontario has sought similar protection by all Great Lakes jurisdictions.[268]

The Province of Ontario is currently in the process of meeting its commitments laid out under the *Great Lakes Agreement*. The government is doing so by enhancing existing water management programs and also by

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[266] *Ibid.* at 1273. Favored actors, according to Klein, include those who would manufacture or produce a product using the resources of the basin and transport it outside of the area. This is a benefit derived from those living outside of the basin, but a detriment affecting those living within it.

[267] The Great Lakes Charter Annex Agreement Backgrounder (13 December 2005), online: Ontario Ministry of Natural Resources <http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@water/documents/document/200042.pdf> (last modified 5 May 2010) (last accessed 13 September 2010).

[268] *See ibid.* at 2, under heading "Ontario Already Protects Great Lakes-St. Lawrence River Basin Waters".

developing a provincial water conservation and efficiency strategy.[269] On December 1, 2009, the Province of Ontario submitted an overview to the Great Lakes Regional Body as was required under Article 300 of the Great Lakes Agreement.[270] The following are the relevant statutes and amendments in accordance with the *Great Lakes Agreement*:

Legislation	**Amendment**[271]
Ontario Water Resources Act, 1990 ("OWRA")[272]	Amended through the *Safeguarding and Sustaining Ontario's Water Act*[273] to incorporate provisions of the Great Lakes Agreement.
Water Taking Regulation (2004)[274] under the OWRA.	Amendments to the regulation are under development to bring Agreement commitments into force, including the ban on intra-basin transfer and regulation exceptions.
Lakes and Rivers Improvement Act, 1990 ("LRIA")[275]	Repeals ss. 18 and 38.
The Clean Water Act, 2006[276]	A key component relates to the preparation of locally developed science based risk assessment report and source protection plans.
Canada-Ontario Agreement	Annex to the 2007 version states that

[269] Letter from Rosalyn Lawrence, Assistant Deputy Minister of Natural Resource Management Division (December 7, 2009) to David Naftzger, Secretary, Great Lakes-St. Lawrence River Water Resources Regional Body c/o Council of Great Lakes Governors [copy with thesis author].

[270] *Great Lakes Agreement*, *supra* at Art. 300, Water Management Program Review.

[271] For the exact sections that were repealed, *see* Appendix One, *infra*.

[272] *Ontario Water Resources Act*, S.O. 1990, c. 0.40. This Act provides for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use. The act provides the authority for the Permit to Take Water Program administered by the Ministry of the Environment.

[273] *Safeguarding and Sustaining Ontario's Water Act*, S.O. 2007, c.12-Bill 198.

[274] *Water Taking Regulation*, Ontario Regulation 387/04. This regulation outlines matters that the Ministry of the Environment must consider when issuing a Permit to Take Water.

[275] *Lakes and Rivers Improvement Act*, R.S.O. 1990, c. L.3. The Act is administered by the Ministry of Natural Resources and provides for the management, preservation and use of Ontario's lakes and rivers and the land under them, the protection of public rights and riparian interest, the management of fish and wildlife dependent on lakes and rivers, protection of natural amenities and the protection of people and property by ensuring that dams and diversions are suitably located, constructed and maintained.

[276] *The Clean Water Act*, 2006, R.S.O. 2006, c. 22. This act is administered by the Ministry of the Environment and protects existing and future sources of Ontario's drinking water.

Respecting the Great Lakes Basin Ecosystem (2007-2011)[277]	Canada and Ontario will "foster sustainable water use and conservation consistent with the intent of the [Great Lakes Agreement]."
The *Provincial Policy Statement*[278] under the authority of Section 3 of the *Planning Act*, relating to land use planning	Provides policy direction on matters relating to land use planning that are of provincial interest including protecting and restoring water quality and quantity and promoting efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality.
Ontario Environmental Assessment Act, 1990[279]	Repeals Part V, Administration, s. 32(1)1

Table 3: Subsequent Changes to Legislation

2.7 Conclusions

This chapter has briefly examined the origin, history and development of the law and management structure of the Great Lakes and St. Lawrence River basin, focusing primarily on the experience of the Province of Ontario into the present day.

According to Grant, the lack of success in providing a structure for water management suggests that the common-law notions of ownership may be insufficient to deal with intricate international water resources transfers.[280] Adding to this difficulty are the legal rights of Canada's Aboriginal peoples:

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[277] *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem,* online: <http://www.ene.gov.on.ca/publications/6263e.pdf>. The purpose of the agreement is: "to restore, protect and conserve the Great Lakes Basin Ecosystem in order to assist in achieving the vision of a healthy, prosperous and sustainable Basin Ecosystem for present and future generations." *Ibid.* at Art. II.

[278] Provincial Policy Statement, online: <http:www.mah.gov.on.ca/Asset1421.aspx>

[279] *Ontario Environmental Assessment Act*, R.S.O. 1990, Chapter E.18. The Act provides for two types of environmental assessment planning and approval processes.

[280] Grant, *supra* note 134 at 169.

> Aboriginal water rights and title contemplate rights of occupation and use, which extend protection for traditional and domestic uses of the resource. The rights to water for traditional uses are determined by priority—that is, "time immemorial"—and the priority of rights for other uses is determined by the date of the establishment of water rights on reserved lands through treaty...An earlier priority limits the water rights of other users, riparian or otherwise.
> ...
> Contemporary Aboriginal title settlements in Canada reflect the growing role of Native peoples in the administration of water resources and the affirmation of rights with respect to those resources.
> ...
> Thus, while First Nations have not been as vocal on the bulk water export issue as many other groups, jurisdictional complexity surrounding the resource can only be exacerbated as Ottawa continues to acknowledge the legitimacy of Native title and rights to the use of water resources.[281]

The next chapter looks at the issues surrounding First Nations and water in the province of Ontario, and how the *Great Lakes Agreement* affects Ontario's First Nations.

[281] Grant, *supra* note 146 at 170.

CHAPTER THREE:
ONTARIO FIRST NATIONS' WATER VALUES, LAW, AND THE GREAT LAKES AND ST. LAWRENCE RIVER BASIN

3.1 Introduction

> In the Great Lakes Basin...we are beginning to look not only at individual issues but also at the cumulative impacts of such issues as climate change, potential diversions, consumptive use, and modifications to the connecting channels. Unfortunately, we are not yet very good at translating cumulative impacts on water levels and flows into environmental quality and ecosystem impacts.[1]

> Indigenous peoples and territories have been subject to colonization as newcomers first came to extract wealth and resources and later stayed to establish settlements and impose foreign laws, governance, and values on indigenous territories (including waters) and peoples. Colonization has disrupted the indigenous peoples' ability to sustain themselves on the land and diminished the ability of [indigenous] territories and waters to sustain life. Indigenous cultures are closely tied to the lands and waters, and when waters are endangered, the very identity and survival of indigenous peoples are endangered.[2]

As the Earth's climate continues to warm, it is predicted that the pressures of climate change will create conditions that may severely impact the Great Lakes.[3] Predicted impacts on the Great Lakes and the St. Lawrence River Basin include harm to fisheries and wildlife, wetlands, Great Lakes and St. Lawrence River shorelines and economic costs to industries (including tourism and shipping).[4] There is also the possibility of increased pressure to divert water from

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[1] Ralph Pentland and Adele Hurley, "Thirsty Neighbours: A Century of Canada-US Transboundary Water Governance" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 174.

[2] Ardith Walkem , "The Land Is Dry: Indigenous Peoples, Water, and Environmental Justice" in *Eau Canada: The Future of Canada's Water*, Karen Bakker, ed. (Vancouver: UBC Press, 2007) at 304 [***Walkem***].

[3] Noah D. Hall and Bret B. Stuntz, "Climate Change and Great Lakes Water Resources: Avoiding Future Conflicts with Conservation" (2008) 31 Hamlin L. Rev. 641at 642 (Westlaw) [***Hall and Stuntz***]

[4] *Ibid.* at 642.

the Great Lakes and St. Lawrence River if other parts of both countries of experience a loss of water due to climate change.[5]

The *Great Lakes Agreement* is a good faith agreement.[6] The guiding principle underlying the *Great Lakes Agreement* is to ban new or increased diversions of water out of and within the Great Lakes and St. Lawrence River Basin with limited and regulated exceptions found within the agreement. Although the *Great Lakes Agreement* addresses and implements a mandate regarding diversion of freshwater from the Great Lakes and St. Lawrence River Basin, some outstanding issues remain. One issue relates directly to a problem rooted in the concept of how society in general and the law in particular have come to view water. Phare comes to the following conclusion regarding this issue:

> The treatment of water in Canadian law is complicated and unresolved. Because our structures of society assume that water is a "resource", our legal and economic systems are perpetually in conflict with scientific and ethical realities of sharing and distributing water among all ecosystems (of which humans are just one)...Ultimately, a more holistic and ecological characterization of water is necessary for our legal and economic systems to be able to "manage water resources" in a truly sustainable fashion.[7]

Some authors point to the conventional approach of water governance as limited because it is hierarchical in its management structure.[8] Accordingly, some

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[5] *Ibid.*

[6] *See* Chapter Two, *supra*.

[7] Merrel-Ann S. Phare, *International Trade Agreements and Aboriginal Water Rights: How the NAFTA Threatens the Honour of the Crown* (LL.M. Thesis, University of Manitoba, 2004) [***Phare***].

[8] Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Toronto: UBC Press, 2007) at 15 [***Bakker***]. The author references the work of Ardith Walkem and Andrew Biro.

academics believe that the hierarchical approach of water management should be replaced with an approach of ecological governance of human-water relationships that includes managing people as well as the environment.[9]

According to Bakker, with this idea of ecological governance in mind, there is a case to be made for the incorporation of Aboriginal water management norms and ethics into Canadian resource management practice.[10] Hunter finds that:

> [t]he original environmentalists are the indigenous peoples, who have thousands of years' worth of traditional knowledge. They are stewards of the environment, the land, animals, and water systems. The First Nations in Canada all seem to share the same fundamental notion that environmental stewardship has belonged to them since time immemorial, as a God-given aboriginal right. There are indigenous laws related to this notion and those laws are legally and constitutionally to be accorded respect, as any other valid law in Canada.[11]

This chapter focuses on how, if at all, integration of First Nations' perspectives (aboriginal knowledge) regarding water has added to a holistic management regime within the framework of the *Great Lakes Agreement*. This chapter is divided into three parts. The first part describes in detail the connection First Nations people have to water and the importance of water within their cultures (sections 3.2-3.5). The second part outlines the Canadian law as it now stands regarding water rights and Aboriginal peoples (sections 3.6-3.8). The third part addresses the *Great Lakes Agreement*, what extent Ontario First Nations are included in its implementation, and whether the knowledge

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[9] Bakker, *supra* note 8 at 15.
[10] *Ibid*.
[11] Troy Hunter, "Aboriginal Stewardship: A Better Way to Save the Mountain Caribou (Special Report on Aboriginal Law and the Environment)" *LawNow* (1 September 2008).

possessed by Ontario First Nations is or is not being utilized by the provincial government within the context of the *Great Lakes Agreement* (section 3.9). Although the participation of some First Nations regarding Great Lakes policy development may take place in the future, this participation appears to be limited. Limited First Nation participation with the government of Ontario coincides with the dominant Euro-Canadian mentality of the environment being separate and apart from humans. Before addressing this problem, a brief introduction of the Ontario First Nations follows.

3.2 Who Are Ontario's Aboriginal Peoples?

Macklem writes that

> [t]he survival of all Aboriginal peoples in Canada has been scarred by injustice. Throughout Canada's history, governments and courts systematically ignored the spirit and intent of treaties between Aboriginal peoples and the Crown, devalued ancient forms of Aboriginal sovereignty, disposed Aboriginal peoples of their ancestral territories, and regarded as inferior the diverse cultures to which Aboriginal people claim allegiance.[12]

At the time of first-contact, in what is today Canada and the United States, by people not indigenous to those lands, it is estimated that there may have been between seven and eighteen million people living in what are now the countries of Canada and the United States.[13] Over the course of European colonization to the present day, the indigenous populations of Canada have seen their peoples decrease substantially in number. The 2006 Canadian census found that

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[12] Patrick Macklem, *Indigenous Difference and the Constitution of Canada* (Toronto: University of Toronto Press, 2002) at 287.

[13] Ronald Wright, *Stolen Continents* (Toronto: Penguin Books Canada Ltd., 1993) [Part I, Chapter 5 after Jesuit Relations 1653].

1,172,790 people in Canada identified themselves as being Aboriginal.[14] In the province of Ontario, with a population of more than twelve million people, one person in every seventy-five is recognized as a "Status Indian" by the federal government.[15] A "Status Indian" is a person who is recognized as a person registered under the *Indian Act*.[16] Under section 35 of the *Constitution Act, 1982*[17], three distinct categories of Aboriginal peoples are recognized and affirmed, whose rights are protected under the *Constitution Act, 1982*.[18] These are First Nations peoples, the Inuit of the North and the Métis peoples.

It is important to note from the outset that the indigenous population in what is today Canada flourished as genuine societies before first contact. Writing in the case of *Tsilhqot'in Nation v. British Columbia*[19], Vickers J.'s preface to the judgment reads as follows:

> Canada's multi-cultural society did not begin when various European nations colonized North America. Rather, multiculturalism on this continent had its genesis thousands of years ago with the receding of the last great ice age. Waves of Aboriginal people swept across North American, establishing themselves in diverse communities across the entire continent. While the lives of Aboriginal people were not without conflict, there are many examples of different Aboriginal cultures living side by side in peace and harmony. Today's modern, multi-cultural

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[14] Statistics Canada, *Aboriginal Peoples Technical Report, 2006 Census, Second Edition* (Ottawa: Minister of Industry, 2010) online: *Statistics Canada* <http://www12.statcan.gc.ca/census-recensement/2006/ref/rp-guides/rp/ap-pa_2/pdf/92-569-X2006001-Part2-eng.pdf> at 8 (last visited 10 April 2010).

[15] Indian and Northern Affairs Canada, *Ontario First Nations: Overview*, online: <http://www.ainc-inac.gc.ca/ai/scr/on/ofn/index-eng.asp> (last visited 10 April 2010) [***OFN***].

[16] *Indian Act*, R.S.C. 1985, c. I-5.

[17] *Constitutional Act*, 1982, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11.

[18] L. A. H. Chartrand, ed., *Who Are Canada's Aboriginal Peoples? Recognition, Definition, and Jurisdiction* (Saskatoon: Purich Publishing Ltd., 2002) at 20. As is further noted, "[i]n contrast, the federal law and policy continues to be based largely upon the nineteenth century Indian Act, which contains a limited definition of "Indian" that has not changed substantially since it was unilaterally drafted by federal officials in 1876." *Ibid*.

[19] *Tsilhqot'in Nation v. British Columbia* [2007] B.C.J. No. 2465 British Columbia Supreme Court, at ¶ 1 [***Tsilhqot'in***].

> communities seldom, if ever, look back at the Aboriginal roots of Canadian diversity.
>
> Aboriginal nations are characterized as such in the same way that French speaking Canadians are viewed as a nation. Nations in this sense are a group of people sharing a common language, culture and historical experience. They are a culturally homogeneous collective of people, larger than a clan, tribe or band. A nation state is a self-governing political entity that has sovereignty and external recognition. First Nations are not nation states; they are nations or culturally homogenous groups of people within the larger nation state of Canada, sharing a common language, traditions, customs and historical experience.[20]

According to Indian and Northern Affairs Canada, the registered Indian population in Ontario is 171,953 people, accounting for 23% of all Aboriginal people in Canada.[21] Furthermore, there are 133 First Nations communities in Ontario recognized by Indian and Northern Affairs Canada whose territories cover northern and southern watersheds.[22] Focusing on the area surrounding the Great Lakes Basin, many Indigenous peoples are found there today. These groups include the Cree, Ojibwe, Ottawa, Potawatomi, Chippewa, Algonquin, Haudenosaunee/Iroquois, Mississauga, Wyandot/Huron as well as other groups that have occupied the areas of the Great Lakes and St. Lawrence River Basin for thousands of years.[23] In 2005, roughly 350,000 aboriginal people lived on reserves within the Basin.[24] In Ontario, there are 206 First Nation reserves and

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[20] *Ibid.* at para. 456.

[21] *OFN, supra* note 15 at "*By the numbers*".

[22] Bryony Halpin, "Of the First Water: The rights and roles of First Nations in source protection and water quality" (July/August 2009) online: *Safe Drinking Water Foundation* <http:safewater.org/PDFS/waternewsmagazines/CWTJulyAug2009.pdf> (last visited 30 December 2010).

[23] Kate Kempton, *Bridge Over Troubled Waters: Canadian Law on Aboriginal and Treaty Water Rights, and the Great Lakes Annex* (Toronto: Walter and Duncan Gordon Foundation, 2005) at 10 [***Kempton***].

[24] *Ibid.*

settlements.[25] Furthermore, about 60% of the reserves are situated along the shorelines and waterways of the Basin.[26] With a general idea of the First Nations surrounding the Great Lakes and St. Lawrence River Basin presented, this chapter now turns to a discussion on the water values of First Nations peoples.

3.3 Land Perspectives and Values of First Nation Peoples

3.3.1 Comparing and Contrasting the "Euro-Canadian" and Indigenous Models of the Environment

The perspective of Aboriginal cultures and Aboriginal worldviews is one of "embeddedness and holistic integration and sharing."[27] Kempton refers to the "indigenous" view of the environment as being rooted within the existence and identity of humans and humans being embedded within the environment. This is contrasted with the "Euro-Canadian" worldview which is linear, hierarchical, and based on dominance and fragmentation.[28] Under the Euro-Canadian view, the environment exists separate and apart from human identity, in turn promoting and provoking subjugation and exploitation of both nature and people.[29] This is further elaborated upon by Borrows:

> Aboriginal peoples traditionally viewed land in a different manner than Europeans. They did not generally regard land as something to be owned, as Europeans did. Rather, they viewed land as something to be used and cared for. **This notion of stewardship was a foreign concept to the Europeans of the 15th and 16th centuries.** Because of the different conceptualizations of land possessed by Aboriginal and European peoples, each group

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[25] Ontario First Nations: Overview, online: *Indian and Northern Affairs Canada* <http://www.ainc-inac.gc.ca/ai/scr/on/ofn/index-eng.asp> (last visited 10 April 2010). *See* Appendix 3, infra at p. 203.
[26] *Ibid.*
[27] Kempton, *supra* note 23 at 20.
[28] *Ibid.*
[29] *Ibid.*

> viewed the other's actions regarding land according to their own conceptions of land use. Thus, when the Aboriginal peoples shared their lands with the Europeans, they did not imagine that what they regarded as sharing would be conceived of by the Europeans as a surrender of their interests.[30] (emphasis added)

Furthermore, Walkem explains the divergent indigenous state of mind relating to land:

> Indigenous traditions reflect a land ethic, or sense of place, that situates people within their territories and infuses indigenous laws with respect for [Indigenous people's] relationship with and mutual dependence upon the other life forms that share the ecosystem. A central feature of this land ethic involves recognition that decisions cannot be made independent of context (based on scientific or economic assessments) but, rather, must be made on the land, with an eye to assessing how all life on that land will be affected by any decisions that might be made regarding its use. And one must recognize that it is human activities that must respond to the environment, not vice versa.[31]

The dominant European-based view of the environment and the resulting process of assimilation into society have been given the term "Eurocentralism". Eurocentralism is defined as:

> [...] the belief that European civilization has some unique quality derived from race, culture, environment, mind, or spirit that makes Europeans permanently superior to all other communities. It is this assumption of superiority that lies at the core of European diffusionism, the belief that it is the destiny of Europeans to impose their civilization on other cultures around the world.[32]

It is apparent that both the Indigenous view and the European view that is devoid of stewardship, *supra*, are fundamentally different in their treatment of the environment. This divergence is further highlighted when looking at the meaning

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[30] John J. Borrows and Leonard I. Rotman, *Aboriginal Legal Issues: Cases, Material & Commentary, 2nd ed.* (Markham: LexisNexis Canada Inc., 2003) at 1.

[31] Walkem, *supra* note 2 at 310-311.

[32] J.M. Blaut, The Colonizer's Model of the World: Geographical Diffusionism and Eurocentric History (New York: Guilford Press, 1993) at 8-12 in James [Sakej] Youngblood Henderson, "Interpreting Sui Generis Treaties" (1997) 36 Alberta L. Rev. 46.

and importance of water to the First Nations. The significance that Aboriginal people place upon water is great. This is no different for First Nations currently living in Ontario, where water is not only part of First Nation cultural life, but is also considered life itself. The *Walkerton Inquiry* concluded that "[w]ater has a significant and unique meaning to First Nations in both historical *and contemporary* times" [emphasis original].[33] In addition,

> Indigenous Peoples' relationship with water demands far more than a simple recognition of a right to use or drink water, and must include respect for [indigenous peoples'] responsibility to make decisions for the preservation of water and its ability to sustain life.[34]

Flowing from the concern and desire for a more holistic view of water put forward by Phare, *supra*, this chapter now turns to the water values of some of Ontario's First Nations.

3.3.2 Relating Water Values of Ontario's First Nations: The Chiefs of Ontario Report as a Rational Starting Point

The *Ontario Chiefs Final Report (2007)* makes clear that indigenous types of knowledge systems are unique to their knowledge holders, and that no one comprehensive body or system of knowledge exists among indigenous peoples.[35] The Chiefs of Ontario, together with Environment Canada,

> [...] embarked on a project to capture some of the First Nations' traditional views on taking care of water, and how [that] knowledge can fit with current government source water protection plans.[36]

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[33] Chiefs of Ontario, *Drinking Water in Ontario First Nation Communities: Present Challenges and Future Directions for On-Reserve Water Treatment in the Province of Ontario* (March 25, 2001) Part II Submissions to the Walkerton Inquiry, online: <http://walkertoninquiry.com> at 6 [***Walkerton Inquiry***].
[34] Ardith Walkem, "Indigenous Peoples Water Rights" in Kempton, *supra* note 23 at 6.
[35] Chiefs of Ontario, *Aboriginal Traditional Knowledge and Source Water Protection: Final Report* (prepared by the Chiefs of Ontario for Environment Canada, August 2007) at 8 [***Chiefs of Ontario (2007)***]
[36] *Ibid*. at 2.

The desire for such a project came from the concern of First Nations regarding their own lack of input in provincial legislation and federal strategies and also the "virtual absence of any cultural reference therein".[37] The collection of aboriginal knowledge, interpretation and implementation into environmental management regimes is, according to the report, to be controlled by the indigenous peoples themselves. This is stated as being necessary because simply integrating traditional knowledge with science may lead to consequences contrary to the objectives of the indigenous communities.[38]

Aboriginal Traditional Knowledge and Source Water Protection: First Nations' views on Taking Care of Water (2006) was created by the Chiefs of Ontario to bring together Elders and knowledge holders from the four main First Nations cultures in Ontario: the Haudenosaunee (Iroquois), the Anishnaabe (Ojibway and Oji-Cree) and the Mushkegowuk (James Bay Cree).[39] Some significant findings from this report include the fact that at the First Nation community level, government and private agencies are involved in making decisions about community water, but Elders, and particularly women, are not included or involved in the process.[40] Moreover,

> [t]he Elders clearly stated that their knowledge is not being incorporated in decision making by the community or by other agents located off of reserve, such as industry and governments. In fact, their input is often ignored until the damage to the environment is done and then they are asked to share their

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[37] *Ibid.*
[38] *Ibid.* at 8.
[39] Chiefs of Ontario, *Aboriginal Traditional Knowledge and Source Water Protection: First Nations' Views on Taking Care of Water* (prepared by Giselle Lavalley for the Chiefs of Ontario and Environment Canada, March 2006) at 2 [***Chiefs of Ontario (2006)***].
[40] *Ibid.* at 20.

> knowledge. Future work needs to take place on integrating technology with the environment responsibly.[41]

A summary of findings based on all of the workshops includes the following general themes and ideas:

- Water is alive, and is life itself
- All waters need to be protected, not just water for drinking
- Women have a special connection to water
- Industry has damaged water extensively
- To date (March 2006), the government has ignored First Nations' views on water
- Treaty rights must be upheld
- Developments affecting water must include consulting First Nations and protecting adequate resources
- Aboriginal Traditional Knowledge should be shared judiciously
- First Nations leadership must listen to their Elders
- First Nations need to educate themselves about taking care of water
- Protocols must be recognized and respected[42]

3.4 "Aboriginal Traditional Knowledge": Definition, Importance and Limitations

The *Royal Commission on Aboriginal People* (1996) express that indigenous knowledge is knowledge stemming from:

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[41] *Ibid* at 22.
[42] *Ibid.* at 39-40.

> [...] oral culture in the form of stories and myths...coded and organized by knowledge systems for interpreting information and guiding action...a dual purpose to manage lands and resources and to affirm and reinforce one's relationship to the earth and its inhabitants.[43]

This knowledge is based within indigenous culture and varies from community to community.[44]

The term "Aboriginal Traditional Knowledge" remains a term of contention for Aboriginal peoples. McGregor has found that Aboriginal peoples object to the term "traditional knowledge" because this term, along with variations including the word "traditional", originate from Western academia.[45] This in turn implies a "false homogeneity of knowledge across the diverse nations and cultures of Aboriginal peoples."[46]

Furthermore, using the term "traditional" falsely indicates that aboriginal knowledge is static and only encompasses information from the past. The reality, however, is that aboriginal knowledge is knowledge that continues to evolve with time, expanding to incorporate innovative information while adapting to current issues and challenges.[47] As a response to the use of this limited term, some alternatives have been suggested. They include the following: "Ethno-Science," "Indigenous Science," "Indigenous Knowledge" and "Naturalized Knowledge Systems."[48]

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[43] *The Royal Commission on Aboriginal Peoples* (RCAP) (1996) Restructuring the Relationship. Part 2, Volume 2 (Ottawa: Ministry of Supply and Services Canada).
[44] *Ibid.*
[45] Deborah McGregor, "Linking Traditional Knowledge and Environmental Practice in Ontario" (2009) 43 J. Can. Stud. 3 at 73 [***McGregor***].
[46] *Ibid.*
[47] *Ibid.*
[48] *Ibid.*

For the purpose of this thesis, the term "Aboriginal knowledge" will be used when referring to the Indigenous knowledge of water because no generally accepted alternative term has been agreed upon to replace the use of "Traditional Knowledge" in Canadian environmental and resource management.[49] McGregor further states that a universally accepted definition of what traditional knowledge means is unlikely to be achieved in the near future. This is due to the fact that the field of traditional knowledge study, from its commencement as a field of study to its use and application has for the most part been controlled by external interests that do not actually include the Aboriginal communities from which the knowledge originates.[50]

Regarding Aboriginal perspectives on water, Aboriginal knowledge cannot be fully communicated and encompassed through writing.[51] Aboriginal knowledge holders, composed mostly of community Elders, are the sources of Aboriginal knowledge.[52] This relates directly to the fundamental fact that Aboriginal knowledge is inseparable from the people who hold it.[53] As Roberts affirms:

> Capturing a single aspect of [aboriginal] knowledge is difficult. Traditional knowledge is holistic and cannot be separated out from the people. It cannot be compartmentalized like western scientific knowledge.[54]

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[49] *Ibid.*
[50] *Ibid.* at 72.
[51] Walkerton Inquiry, *supra* note 33 at 7.
[52] *Ibid.*
[53] McGregor, *supra* note 45 at 75.
[54] Karen Roberts, *Circumpolar Aboriginal People and Co-Management Practice: Current Issues in Co-Management and Environmental Assessment* (Calgary: Arctic Institute of North America with Joint Secretariat-Inuvialut Renewable Resources Committee, 1996) at 115.

McGregor finds three key barriers to the effective use of aboriginal knowledge after summarizing the available relevant literature:

1) Aboriginal peoples are not accorded meaningful participation in studies and other work that should, and in some cases does, attempt to use Aboriginal knowledge. Aboriginal knowledge from an Aboriginal perspective is not separable from the people who hold it. Therefore, meaningful involvement of the people who hold this knowledge should take place.
2) Aboriginal peoples and their knowledge are viewed as objects suitable for study rather than as people for working with.
3) Aboriginal peoples have little control over how the knowledge they share will be used.[55]

3.5 Aboriginal Knowledge Pertaining Directly to Water

The *Report of the Walkerton Commission of Inquiry* ("Walkerton Inquiry") was prepared by O'Connor J. in response to the contamination of the water supply in Walkerton, Ontario in May of 2000, and into the safety of Ontario's drinking water. The report was received by the Attorney General on January 14, 2002.

The report contained an entire chapter dedicated to the First Nations and "Aboriginal Ontario". It was acknowledged in this chapter that

> Aboriginal Ontarians, including First Nations people living on "lands reserved for Indians," are residents of the province and should be entitled to safe drinking water on the same terms as those prevailing in other similarly placed communities.[56]

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[55] McGregor, *supra* note 45 at 77.
[56] Walkerton Inquiry, *supra* note 33 Part 2, Chapter 15 at 486.

As another report has found, contaminated water is "repeatedly identified as a major source of concern and a perennial cause of illness" for Aboriginal communities in Canada.[57] In August 2000, the Chiefs of Ontario applied for standing under Part 2 of the Walkerton Inquiry and subsequently prepared what was described by O'Connor J. as a "very helpful paper for the Inquiry."[58]

According to the *Walkerton Inquiry*,[59] there are nine key features of Aboriginal perspectives relating to water:

1) Aboriginal knowledge regarding water is dynamic and it adapts and evolves to changing circumstances. Although the ancient knowledge is retained by Aboriginal people today in varying degrees, it has significant meaning to those Aboriginal people living today. **Aboriginal knowledge has great potential for resolving environmental crises.**[60] (emphasis added.)
2) Water is a vital and integral part of the environment as a whole and because of this view water cannot be separated out from other environmental components. "All components are interconnected and changes in one affect all the others."[61]
3) Water is crucial to the physical, emotional, cultural and spiritual health of Aboriginal people. This is true at both an individual level and at a cultural level.[62]

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[57] "Drinking Water Safety in Aboriginal Communities in Canada" online: National Aboriginal Health Organization (May 21, 2002) <http://www.naho.ca/english/publications/ReB_water_safety.pdf> at 2.
[58] Walkerton Inquiry, *supra* note 33 Part 2, Chapter 15 at 488.
[59] Walkerton Inquiry, *supra* note 33.
[60] Walkerton Inquiry, *supra* note 33 at 21.
[61] *Ibid.*
[62] *Ibid.* at 22.

4) Many Aboriginal people believe that water is life. This meaning is elaborated to parallel the connection between water in the environment and water within a woman's body for new life. Without water, life will not exist. For these reasons, there is a close association between women and water within Aboriginal culture.[63]
5) Water is considered to be the blood of "Mother Earth" and is a "living" entity as are all other components of the Earth (for example, the rocks and the wind) as well as the Earth itself. Water flows through waterways, the Earth's blood vessels.[64]
6) There is a highly sensitized awareness to changes in water quality among all Aboriginal people and particularly among the vulnerable segment of the Aboriginal population—women, children and the elderly. This sensitivity stems directly from the intimate relationship Aboriginal peoples have with the water and the rest of the environment.[65]
7) Revitalizing water knowledge is a significant part of Aboriginal cultural survival. "Taking steps to learn about and protect the water in a modern context initiates the rebuilding of ancient relationships with water…[strengthening and renewing]…the vitality of Aboriginal culture."[66]
8) All aspects of water's importance lead Aboriginal people to have a profound respect for water that is common to many Aboriginal people.[67]

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[63] *Ibid.*
[64] *Ibid.*
[65] *Ibid.*
[66] *Ibid.* at 23.
[67] *Ibid.*

9) Many Aboriginal people have a willingness to share their knowledge of water, and "[t]he extent to which this occurs will depend upon the degree to which recipients of the knowledge agree to respect both the knowledge and its holders."[68]

O'Connor J. also recommended the following:

> Recommendation 88: Ontario First Nations should be invited to join in the watershed planning process [...].
>
> It is vital that First Nations be at the table when the resources they share with the rest of the community are at issue.[69]

The *Royal Commission on Aboriginal Peoples* finds that the traditional laws (also known as customary laws) of most Aboriginal peoples share specific attributes. These attributes, to an extent, parallel Aboriginal knowledge. Nowlan summarizes these as follows:

- Customary laws are usually unwritten, embodied in maxims, oral traditions and daily observances;
- Customary laws are transmitted from generation to generation through precept and example;
- The laws are not static but continue to evolve;
- **Tribal or band territories were communal property to which every member had unquestioned rights of access** (emphasis added.);
- **In no case were lands or resources considered a commodity that could be alienated to exclusive private possession** (emphasis added.);

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[68] *Ibid.*

[69] Walkerton Inquiry, *supra* note 33 Part 2, Chapter 15 at 494.

- All Aboriginal peoples had systems of land tenure that involved allocation within the group, rules for conveyance of primary rights and obligations between individuals and the prerogative to grant or deny access to non-members, but not outright alienation.[70]

The *Royal Commission on Aboriginal Peoples* provides four principles that are to form the basis of a renewed relationship with indigenous peoples of Canada. While acknowledging these principles, being (1) mutual recognition, (2) mutual respect, (3) sharing and (4) mutual responsibility, Phare posits that a new cross-cultural water ethic must also be developed in order to address the needs and use of water by all Canadians, all Indigenous peoples and the environment itself.[71] According to Phare, none of these three should be relegated to the status of second-class citizen.[72] Walkem has gone so far as to as to state that "environmental racism" has led to and continues to bring about land and water use decisions that obstruct indigenous peoples' abilities to sustain their own existence.[73] Environmental racism is defined as:

> an historic form of racial discrimination [that] has led to and continues to lead to the ruination of indigenous lands, waters and environments by the implementation of unsuitable schemes, such as mining, biopiracy, deforestation, the dumping of contaminated waste, oil and gas drilling and other land use practices that do not respect indigenous ceremonies, spiritual beliefs, traditional medicines and lifeways, the biodiversity of indigenous lands,

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[70] Linda Nowlan, *Customary Water Laws and Practices in Canada*, online: *Food and Agriculture Organization of the United Nations* <http://www.fao.org/Legal/advserv/FAOIUCNcs/Canada.pdf> (last visited 10 April 2010).

[71] Merrel-Ann S. Phare, *Denying the Source: The Crisis of First Nations Water Rights* (Vancouver: Rocky Mountain Books, 2009) at 81-82 [***Phare 2***].

[72] *Ibid.* at 82.

[73] Walkem, *supra* note 2 at 311.

> indigenous economics and means of subsistence, and the right to health.[74]

A new water ethic, therefore, should focus on environmental limits and conservation approaches, among other things, and include the definitions of value placed on water by all peoples.[75] The appropriate questions at this point are whether or not Canadian federal, provincial and territorial legislation incorporate Aboriginal knowledge and if so, how and to what extent?

3.6 Incorporation of Aboriginal Knowledge: Denial or Indifference?

When looking at all of the relevant legislation available, there is a clear distinction between the federal and provincial levels of government when it comes to incorporating Aboriginal knowledge into legislation. Canada is a party to the *Convention on Biological Diversity*.[76] This convention addresses in part the importance of Aboriginal people and traditional knowledge. Article 8(j) states the following:

> [The signatories of the Convention on Biological Diversity]...shall, as far as possible and as appropriate:
>
> Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement

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[74] *See* Declaration 146, *NGO Forum, World Conference Against Racism, Racial Discrimination Xenophobia and Related Intolerance* (WCAR), Durban, South Africa, August 27-Sept 1, 2001, online: <http://academic.udayton.edu/race/06hrights/WCAR2001/NGOFORUM/Indigenous.htm>.

[75] Phare 2, *supra* note 71 at 83.

[76] *Convention on Biological Diversity*, 5 June 1992, 1760 U.N.T.S.30619, (signed by Canada on 11 June 1992; registered ex officio on 29 December 1993). This convention is an international accord that sets out commitments for maintaining the planet's ecosystems. According to McGregor, "the convention reiterates the vital role of Indigenous peoples and their knowledge for achieving sustainable environmental and resource management. McGregor, *supra* note 45 at 70.

> of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from utilization of such knowledge innovations and practices.[77]

Although Canada is a signatory to this international U.N. convention, there are no hard mechanisms in place to prevent noncompliance with it. There are instances where the federal government has made specific mention of the use of aboriginal knowledge, but has not provided detail as to what "aboriginal knowledge" means within the legislation, and further, how it should be used. This is evident in the following four statutes only:

1) *Canadian Environmental Protection Act* ("CEPA")[78]
2) *Species At Risk Act*[79]
3) *Canadian Environmental Assessment Act*[80]
4) *Migratory Birds Convention Act*[81]

Out of these four pieces of federal legislation, only the CEPA appears, on its face, to incorporate traditional knowledge to resolve environmental problems (*see* footnote 78). As has been discussed, however, the province of Ontario is

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[77] National Aboriginal Health Organization, *Handbook and Resource Guide to the Convention on Biological Diversity* (Ottawa: National Aboriginal Health Organization, 2007) at 7.

[78] *Canadian Environmental Protection Act*, S.C. 1999, c. 33, *See* preamble which states that "the Government of Canada recognizes the integral role of science, as well as the role of traditional aboriginal knowledge, in the process of making decisions relating to the protection of the environment and human health and that environmental or health risks and social, economic and technical matters are to be considered in that process;..." and s. 2(1)(i) which reads "apply knowledge, including traditional aboriginal knowledge, science and technology, to identify and resolve environmental problems."

[79] *Species At Risk Act,* C. 29, 51 Elizabeth II. *See* Preamble, which states "the traditional knowledge of the aboriginal peoples of Canada should be considered in the assessment of which species may be at risk and in developing and implementing recovery measures".

[80] *Canadian Environmental Assessment Act,* S.C. 1992, c. 37. *See* section 16.1, which states "Community knowledge and aboriginal traditional knowledge may be considered in conducting an environmental assessment."

[81] *Migratory Birds Convention Act*, S.C. 1994, c. 22. *See* Article II, which reads, in part: "The High Contracting Powers agree that, to ensure the long-term conservation of migratory birds, migratory bird populations shall be managed in accord with the following conservation principles:...Use of aboriginal and indigenous knowledge, institutions and practices."

the signatory on the Law of the Lakes, and, due to the division of powers in the *Constitution Act, 1867*, Ontario has the power to implement legislation over the Great Lakes that falls within its provincial territory.[82] This includes the *Great Lakes Agreement*, as will be discussed further, *infra*.

Furthermore, at the provincial level, the Ontario Ministry of the Environment has made the following statement on environmental values under its *Environmental Bill of Rights*[83]:

> The Ministry of the Environment **recognizes the value that Aboriginal peoples place on the environment. When making decisions that might significantly affect the environment, the Ministry will provide opportunities for involvement of Aboriginal peoples** whose interests may be affected by such decisions so that Aboriginal interests can be appropriately considered. This commitment is not intended to alter or detract from any constitutional obligation the province may have to consult with Aboriginal peoples.[84] (emphasis added.)

The above emphasized language is not elaborated upon further by the Ministry. The plain meaning of the words highlighted remain vague in what they mean for First Nation involvement in sustainability and stewardship roles in Ontario.

3.7 The Application of Canadian Law to First Nations Relating to Water: Does the Law Recognize a Right to Stewardship?

Within current Canadian law, there are three possible sources that deal with the recognition and protection of indigenous peoples' rights to water and

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[82] Kempton, *supra* note 23 at 96.

[83] *Environmental Bill of Rights*, S.O. 1993, c. 28.

[84] Ontario Ministry of the Environment, Statement of Environmental Values, online: *Environmental Registry - Ministry of Natural Resources* <http://www.ebr.gov.on.ca/ERS-WEB-External/content/sev.jsp?pageName=sevList&subPageName=10001> at s. 7, "Consideration of Aboriginal Peoples" (last visited April 10, 2010).

rights in water.[85] A fourth source deals with the right to use some resources found within bodies of water. They include the following:

1) Reserve water rights
2) Aboriginal title rights
3) Treaty rights
4) Aboriginal rights (e.g. the right to fish)[86]

Section 35(1) of the *Constitution Act, 1982* states: "The existing aboriginal and treaty rights of the aboriginal people of Canada are hereby recognized and affirmed." This refers to those rights that were not extinguished prior to 1982 when s. 35 came into force. This Canadian constitutional protection limits government actions (both federal and provincial) that infringe Aboriginal title, rights or treaty rights and includes Aboriginal treaty rights to or in water.[87] According to Kempton, "s. 35 is not a grant of rights, but a recognition of rights derived from other sources, and the according of such rights with constitutional status."[88] The purpose underlying section 35(1) of the *Constitution Act, 1982*, is to achieve reconciliation between the prior existence of indigenous peoples and the assertion of Crown sovereignty.[89] This has been affirmed by the Supreme Court of Canada in *R. v. Sparrow,*[90] *R v. Van der Peet,*[91] and *Delgamuukw v. B.C.*[92]

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[85] Walkem, *supra* note 2 at 304.
[86] *See R. v. Sparrow*, [1990] 1 S.C.R. 1075; *R v. Gladstone*, [1996] 2 S.C.R. 723.
[87] Walkem, *supra* note 2 at 306.
[88] Kempton, *supra* note 23 at 19.
[89] *Sparrow* at 1109.
[90] [1990] 1 S.C.R. 1075.
[91] [1996] 4 C.N.L.R. 177.
[92] [1998] 1 C.N.L.R. 14.

3.7.1 Reserve Land & Water Rights in Canada

Reserve lands[93] are created by the federal government under section 91(24) of the *Constitution Act, 1867*[94]. Hogg makes clear that the phrase "lands reserved for the Indians" includes lands set aside as reserves both before and after confederation.[95] Reserve water allocations, though, fall under provincial or territorial water systems.[96] Reserves that have been created either through treaty or other agreement may take account the allocation of water for uses including domestic, agricultural, or other purposes.[97] Where water is not specifically included in a treaty or agreement, one author states that

> [i]t is arguable that the reserve should be understood to include a sufficient supply of water to allow the people to make full and beneficial use of the land, including water for domestic and economic purposes.[98]

Historically, treaties and agreements were entered into with First Nations peoples living in what is today the province of Ontario.[99] Ontario has over 1.7 million acres of reserve lands, and over 91% of these reserve lands were set apart pursuant to treaty or agreement.[100] Most of the reserve lands were set apart on

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[93] "Reserve" is the term used to describe a parcel of land set aside in Canada for "the use and benefit of indigenous peoples and required that they move onto these lands. Some reserves include an explicit allotment of water for domestic, agricultural, or other purposes." Walkem, *supra* note 2 at 304-305.

[94] Section 91 of the *Constitution Act, 1867*, is the legislative authority of the Parliament of Canada. Subsection 24 applies to "Indians, and Lands reserved for the Indians." The creation of reserves is a prerogative power, meaning it is a power or privilege that is unique to the Crown only.

[95] Peter W. Hogg, *Constitutional Law of Canada: 2009 Student Edition* (Toronto: Thomson Reuters Canada Limited, 2009) at 619 [***Hogg***].

[96] Walkem, *supra* note 2 at 305.

[97] *Ibid*. at 304

[98] *Ibid* at 305. The author states that these uses include domestic and economic purposes.

[99] Richard Bartlett, *Aboriginal Water Rights in Canada: A Study of Aboriginal Title to Water and Indian Water Rights* (Calgary: Canadian Institute of Resources Law, 1986) at 15 [***Bartlett***].

[100] *Ibid*. at 22; 148.

rivers and lakes in order to ensure the maintenance and traditional forms of sustenance.[101]

In order to determine what water rights attach to those lands, Bartlett states that consideration of the written terms and reported undertakings of the treaties, the "Indian understanding of the treaties" and the principles of interpretation govern.[102] For example, Bartlett states:

> The early surrenders commonly made express reference to the surrender of "waters" and "watercourses." One of the largest surrenders in southern Ontario was the surrender of the Chippewa of Chenail Ecarte and St. Clair in 1827, which released aboriginal title to over two million acres in the "London and Western Districts", "together with...water, watercourses...hereditaments and appurtenances saving and excepting the reserved tracts aforesaid."[103]

Furthermore, "subsequent agreements tended to make no reference whatever to water or water rights in the surrender or in the reservation of lands."[104] In 1850, the Robinson Treaties were entered into which provided for the surrender of aboriginal title upon the northern shores of Lake Huron and Lake Superior.[105] In general, Bartlett finds that treaties did not expressly provide for water rights beyond provisions for hunting, trapping and fishing.[106]

Although water rights on reserves are derived from the intent found in treaty or in agreement, they also originate from possession of riparian land (*see*

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[101] *Ibid.* at 148.
[102] *Ibid.* at 22.
[103] *Ibid.* at 23 quoting in part Canada, *Indian Treaties and Surrenders*, Ottawa, King's Printer, c.1912, r.1971, 3v., No 29, at 71-75.
[104] Bartlett, *supra* note 99 at 23.
[105] *Ibid.*
[106] *Ibid.* at 51-52.

Chapter 2, *supra*). These rights to water represent an independent source of Aboriginal water rights.

Aboriginal and treaty rights that are "constitutionalized" are paramount over common law rights, and as of 1982 such rights cannot be extinguished by either the federal or provincial governments.[107] In *R. v. Adams*, the Supreme Court of Canada held that Aboriginal rights exist independent of Aboriginal title.[108] Even though these rights may not be extinguished, the courts have determined that they can still be infringed by the federal government.[109] In *R v. Sparrow*, the Supreme Court of Canada found that rights are not absolute and that the power of governments to legislate in areas must be reconciled with the fiduciary duty owed by governments by demanding justification of any government regulation or action that infringes upon such rights. *Sparrow*, *supra*, establishes the three part test necessary for an aboriginal party to succeed in preventing a government infringement of an aboriginal right. The test that must be met is as follows:

1) Is there an existing right? (onus on the aboriginal party)
2) Has there been a prima facie infringement of the right? (onus on the aboriginal party)
3) Can the infringement be justified? (onus on the government)

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[107] Section 35 of the Constitution Act, 1982, gives constitutional protection to rights created by treaties entered into with Indian tribes or bands and operates as a limitation on the powers of the federal Parliament as well as the provincial Legislatures. Hogg, *supra* note 95 at 623.
[108] *R. v. Adams* [1996] 3 S.C.R. 101.
[109] Kempton, *supra* note 23 at 22.

In *R. v. Badger*, it was established that this test is applicable to both Aboriginal and treaty rights.[110]

3.7.2 Aboriginal Title & Water Rights

Bartlett asserts that all of Canada was originally subject to aboriginal title but the question, however, is whether aboriginal title includes a right to water.[111] Aboriginal title was defined in Canada in *Delgamuukw v. British Columbia* ("*Delgamuukw*") by Lamer C.J:

> Although the courts have been less than forthcoming, I have arrived at the conclusion that the content of aboriginal title can be summarized by two proposition: first, that aboriginal title encompasses the right to exclusive use and occupation of the land held pursuant to that title for a variety of purposes, which need not be aspects of those aboriginal practices, customs, traditions which are integral to distinctive aboriginal cultures; and second, that those protected uses must not be irreconcilable with the nature of the group's attachment to that land.[112]

Aboriginal title gives the Aboriginal nation exclusive use and occupation of land.[113] Kempton notes,

> [...] in Canada, aboriginal title was recognized as held by aboriginal societies at the time of the assertion of British sovereignty and full title could only be acquired by the Crown through grant from aboriginal peoples (mostly through treaty).[114]

Not all aboriginal peoples have signed treaties nor have they signed treaties that ceded such title, especially title to water.[115] Under these circumstances,

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[110] *R. v. Badger*, [1996] 1 S.C.R. 771 at ¶ 75.
[111] Bartlett, *supra* note 99 at 7.
[112] *Delgamuukw v. British Columbia*, [1997] 3 S.C.R. 1010 at para 117.
[113] Shin Imai, *The 2008 Annotated Indian Act and Aboriginal Constitutional Provisions* (Toronto: Thomson Carswell Ltd., 2007) at 524, Commentary.
[114] Kempton, *supra* note 23 at 39, citing Bruce Clark, *Indian Title in Canada* (1987) at 74.
[115] *Ibid.* at 39.

aboriginal people retain aboriginal title, but this title must be proven in court or recognized by a modern treaty (known as a land claim agreement) before it can be more fully protected.[116] Furthermore, title lands are held in common amongst the aboriginal group and cannot be transferred or sold to anyone other than the federal Crown.[117] When either title or reserve lands are surrendered, full title usually vests in the provincial Crown pursuant to section 109 of the *Constitution Act, 1867*.[118] Yet, the provincial Legislature of Ontario and the Parliament of Canada have entered into agreement whereby reserve lands, if and when surrendered, may be disposed of by or under the direction of Canada.[119] This is in direct conflict with what Aboriginal title has come to mean for First Nation peoples:

> Aboriginal title is a communal interest, flowing from indigenous peoples' historic relationship with their territories (including waters) and reflects the fact that [indigenous peoples] have land tenure and resource management systems that have been in practice since time immemorial. A right to, and in, water itself is included as part of Aboriginal title. Oceans, lakes, rivers, streams, wetlands, ice, and permafrost are all included as part of Aboriginal title territories.[120]

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[116] Kempton, *supra* note 23 at 39.
[117] *Ibid.* at 40.
[118] *Ibid.*
[119] *An act for the settlement of certain questions between the Governments of Canada and Ontario respecting Indian Reserve lands*, S.C. 1924, c. 48., as cited in *Ibid.* at 40. Also note that Canada, Ontario and an "Indian" band may enter into a binding agreement about lands and resources under the *Indian Lands Agreement (1986) Act*, S.C. 1988, c. 39. This statute does not affect the validity of any treaty or surrender, nor would any agreement made pursuant to the statute. Note also that the *Indian Lands Agreement (1986) Act* was repealed by the *Legislation Act, 2006*, S.O 2006, c. 21, but later reinstated retroactively under *Creating the Foundation for Jobs and Growth Act, 2010*, S.O. 2010, c. 1., Schedule 10. Royal Assent was received on 18 May 2010.
[120] Walkem, *supra* note 2 at 306.

Continuing, Walkem asserts that "Aboriginal title recognizes indigenous people's right to be involved in all land and water use decisions that affect their territories."[121]

3.7.2.1 The Aboriginal Title Test & Submerged Water Spaces

In *Delgamuukw*,[122] the Supreme Court of Canada, through Lamer C.J., set out the following test for Aboriginal title:

> In order to make out a claim for aboriginal title, the aboriginal group asserting title must satisfy the following criteria: (i) the land must have been occupied prior to sovereignty; (ii) if present occupation is relied on as proof of occupation pre-sovereignty, there must be a continuity between present and pre-sovereignty occupation: and (iii) at sovereignty, that occupation must have been exclusive.[123]

According to Quig, based on the particular facts of *Delgamuukw*, the test was not specifically designed to deal with title claims to water spaces and submerged lands (i.e. outside the "dry land" context).[124] Where Aboriginal groups claim areas such as the territorial sea of Canada, the Great Lakes or the St. Lawrence Seaway, it may be that the indicators of exclusive occupation as set out in the test would be absent and thus raise numerous questions that highlight the need

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[121] *Ibid.*

[122] *Delgamuukw v. British Columbia*, [1997] 3 S.C.R. 1010.

[123] *Delgamuukw* at ¶ 143. *See* Paula Quig, "Testing the Waters: Aboriginal Title Claims to Water Spaces and Submerged Lands—An Overview" (2004) 45 Les Cahiers de Droit 659 at 675-676 [***Quig***]. The author notes that in the "sovereignty" component of the test, Lamer C.J. in *Delgamuukw* did not explain fully his meaning of "sovereignty", introduced three different stages of sovereignty, and did not clearly articulate how "sovereignty" is to be established in all stages. Therefore, until the Supreme Court of Canada defines clearly the meaning of sovereignty, questions still remain.

[124] *Ibid.* at 675.

for clarity with regard to the manner in which common law and Aboriginal perspectives factor into Aboriginal title determinations.[125]

In her study, Quig notes the Aboriginal understanding of land tenure:

> [M]any Aboriginal groups define their relationship to their traditional territories as one of stewardship based on an understanding of responsibilities flowing from their special relationship with these territories as opposed to rights arising from this relationship. A more holistic concept of territoriality also figures prominently in many Aboriginal cultures, who often view their traditional territories as including elements of water, air, land and resources, and who incorporate principles of ownership, control and jurisdiction based on the need to protect and sustain the environment and its resources.[126]

Moreover, jurisdictional issues arise regarding aboriginal title claims and the application of provincial laws. The province of Ontario has enacted legislation that vests the beds of inland navigable waterways in the Crown.[127] According to Quig, if Aboriginal title were found in water spaces and submerged lands, courts would have to consider the applicability of provincial legislation to those areas subject to title since s. 91(24) of the *Constitution Act, 1867* provides that the laws relating to "Indians, and the lands reserved for Indians" falls within the exclusive legislative jurisdiction of the federal government.[128]

Another layer that adds to the complexity is the international component pertaining to shared bodies of water. This includes part of the Great Lakes Basin. As discussed in Chapter Two, *supra*, the *Boundary Waters Treaty*

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[125] *Ibid.* at 679.
[126] *Ibid.* at 680-81.
[127] *Beds of Navigable Waters Act*, S.O. 1911, c. 6, s. 2; *The Beds of Navigable Waters Amendment Act*, 1951 S.O. 1951, c. 5; *Beds of Navigable Waters Act*, R.S.O. 1990, c. B-4.
[128] Quig, *supra* note 123 at 688.

1909[129] establishes that the waters of the Great Lakes should be free and open and only Canada and the United States, being parties to the treaty, can have control over these waters (The *Boundary Waters Treaty 1909* is encompassed and acknowledged within the *Great Lakes Agreement*). There is no clear guidance from the courts yet concerning Aboriginal title to water spaces and submerged lands.[130]

3.7.2.2 Current Cases in Ontario

Although it is not clear whether Aboriginal title to water spaces and submerged lands constitute s. 35(1) rights[131] or whether title to these submerged lands is even theoretically possible under current Canadian legal regimes, two cases ready for trial in Ontario may lead the Supreme Court to decide this issue at some point in the near future. In *Walpole Island First Nation, Bkejwanong Territory v. Attorney General of Canada and Her Majesty the Queen in Right of Ontario* and *Chippewas of Nawash Unceded First Nation and Saugeen First Nation v. The Attorney General of Canada and Her Majesty the Queen in Right of Ontario*[132] ("Walpole Island"), both Canada and Ontario put forward that aboriginal title to the claimed areas of the Great Lakes would give the respective

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[129] *Schedule to the International Boundary Waters Treaty Act*, R.S.C. 1985, c. I-17.
[130] Quig, *supra* note 123 at 664.
[131] *Ibid.* at 692.
[132] *Walpole Island First Nation, Bkejwanong Territory v. Attorney General of Canada and Her Majesty the Queen in Right of Ontario*, Statement of Claim, Court File No. 00-CV-189329, Ontario Superior Court of Justice, April 26, 2000; *Chippewas of Nawash Unceded First Nation and Saugeen First Nation v. The Attorney General of Canada and Her Majesty the Queen in Right of Ontario*, Statement of Claim, Ontario Superior Court of Justice, Court File No. 03-CV-261134CM1, served January 5, 2004. A motion to strike those portions of the above pleadings dealing with Aboriginal title to the Great Lakes was dismissed by Carnwath J. of the Ontario Superior Court of Justice on May 13, 2004 [***Walpole***].
Leave to Appeal dismissal denied by Matlow J. of the Ontario Divisional Court on September 15, 2004.

First Nations the ability to exclude and the power to prevent the exercise of right of public navigation over the lake bed.[133] This is contrary to the common law right of public navigation and therefore, absolute title to the lake bed is not compatible with the common law. Ontario submits that title to the Canadian portion of the Great Lakes, as well as all navigable waters, is vested in the Crown for the benefit of the public and that the Crown holds title in trust for the public.[134] The plaintiffs submit that aboriginal title has the attributes of ownership and that the concept of "exclusivity" must be viewed from this perspective and not confused with sovereignty or the right to interfere with navigation.[135] Furthermore, the plaintiffs, in response to Ontario's submission of incompatibility, submit that this issue remains open for argument based on the result in *Mitchell v. M.N.R.*[136] In this case McLachlin C.J. (Gonthier, Iacobucci, Arbour and LeBel JJ. concurring) stated:

> I would prefer to refrain from comment on the extent, if any, to which colonial laws of sovereign succession are relevant to the definition of aboriginal rights under s. 35(1) until such time as it is necessary for the Court to resolve this issue.[137]

As of the time of writing, the Walpole Island cases have not been decided by the Court.

3.7.3 Treaty Rights

Section 35 of the *Constitution Act, 1982* provides that:

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[133] *Walpole*, *supra* note 132 at para. 8.
[134] *Ibid.* at para. 9.
[135] *Ibid.* at para. 10.
[136] *Mitchell v. M.N.R.,* [2001] 1 S.C.R. 911 [***Mitchell***].
[137] *Ibid.* at para. 64.

> (1) The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.
> (2) In this Act, "aboriginal peoples of Canada" includes the Indian, Inuit and Métis peoples of Canada.
> (3) For greater certainty, in subsection (1) "treaty rights" includes rights that now exist by way of land claims agreements or may be so acquired.
> (4) Notwithstanding any other provision of this Act, the aboriginal and treaty rights referred to in subsection (1) are guaranteed equally to male and female persons.

In *R v. Simon*,[138] the Supreme Court of Canada noted that a treaty with "Indians" is unique. A treaty "is an agreement *sui generis* which is neither created nor terminated according to the rules of international law."[139] In *R. v. Badger*, a treaty was stated by the court to represent "an exchange of solemn promises...whose nature is sacred."[140] As mentioned previously, First Nations signed treaties with British and, later, Canadian governments before and after Confederation in 1867.

As Kempton asserts,[141] Section 88 of the *Indian Act* has been found to stand for the principles that treaties signed between aboriginal peoples and the Crown "preclude any interference with rights under treaties resulting from the impact of provincial legislation"[142] and "provincial legislation cannot restrict native treaty rights."[143]

3.8 The Duty For the Government to Consult First Nations

According to Hogg,

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[138] *R. v. Simon*, [1985] 2 S.C.R. 387.
[139] *R. v. Sioui*, [1990] 1 S.C.R. 1025 at ¶ 42.
[140] *R. v. Badger*, [1996] 1 S.C.R. 771 at ¶ 41.
[141] Kempton, *supra* note 23 at 25.
[142] Citing to *R. v. George*, [1966] 2 S.C.R. 267.
[143] Citing to *R. v. Simon*, [1985] 2 S.C.R. 387 at 410.

> Section 35 not only guarantees existing aboriginal and treaty rights, it also imposes on government the duty to engage in various processes even before an aboriginal and treaty right is established.[144]

When a government action or legislation might infringe an asserted aboriginal right, both the federal and provincial governments must consult the aboriginal groups who would be adversely affected.[145] In *Delgamuukw*, Lamer C.J. declared that:

> [t]he nature and scope of the duty of consultation will vary with the circumstances. In occasional cases, when the breach is less serious or relatively minor, it will be no more than a duty to discuss important decisions…Of course, even in these rare cases when the minimum acceptable standard is consultation, this consultation must be in good faith and with the intention of substantially addressing the concerns of the Aboriginal peoples whose lands are at issue. In most cases, it will be significantly deeper than mere consultation. Some cases may even require the full consent of an Aboriginal nation, particularly when provinces enact hunting and fishing regulations in relation to Aboriginal lands.[146]

Lawrence and Macklem have identified this as a sliding scale of consultation, and add that the Court in *Delgamuukw* also repeated a call for negotiated settlement as a means of achieving reconciliation between First Nations and the Crown.[147] The duty to consult, then, may be seen as an instrument used in order to foster reconciliation between First Nations and the Crown.

The duty of consultation was further clarified in two later cases: *Haida Nation v. BC (Minister of Forests)*[148] and *Taku River Tlingit First Nation v. BC*

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[144] Hogg, *supra* note 95 at 667.
[145] Kempton, *supra* note 23 at 35.
[146] *Delgamuukw v. British Columbia*, [1997] 3 S.C.R. 1010 at 1113.
[147] Sonia Lawrence and Patrick Macklem, "From Consultation to Reconciliation: Aboriginal Rights and the Crown's Duty to Consult (2000) 79 Can. Bar Rev. 252 at 257; 263.
[148] [2004] 3 S.C.R. 511.

(Project Assessment Director).[149] Today, governments must consult when a right has already been proved through litigation in court or when the right is recognized by the Crown, such as through a treaty or a land claim agreement.[150] In addition, consultation must also take place when such a claim has been asserted but not yet proven in court or recognized by the Crown.[151] The duty of the government to consult aboriginal people is grounded in the "honour of the Crown" which is to be interpreted and understood as reconciling "the assertion of Crown sovereignty over self-governing aboriginal societies."[152] As McLachlin C.J. asserted:

> In all its dealings with Aboriginal peoples, the Crown must act honourably, in accordance with its historical and future relationship with the Aboriginal peoples in question. The Crown's honour cannot be interpreted narrowly or technically, but must be given full effect in order to promote the process of reconciliation mandated by s. 35(1).[153]

Looking specifically to *Haida*, *supra*, the Supreme Court of Canada states that knowledge of a credible but unproven claim triggers a duty to consult and accommodate the maker of the claim.[154]

Due to the uncertainty underlying current cases before the courts regarding aboriginal title to beds of the Great Lakes as well as the Supreme Court's insistence on negotiation over litigation, Aboriginal rights litigation over

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[149] [2004] 3 S.C.R. 550.
[150] Kempton, *supra* note 23 at 35.
[151] *Ibid.*
[152] *Ibid.*
[153] Taku *River Tlingit First Nation v. British Columbia (Project Assessment Director),* [2004] 3 S.C.R. 550 at para. 24.
[154] *Haida Nation v. British Columbia (Minister of Forests),* [2004] 3 S.C.R. 511 at ¶ 37. In *Hiawatha Indian Band v. Ontario (Minister of Environment),* [2007] 2 C.N.L.R. 186, Pardu J. wrote: "An aboriginal right or prospective right is required to trigger the Haida/Mikisew duty to consult. There is no authority for the proposition that an interest that does not go as far is sufficient to trigger the duty" at ¶50.

control of water beds may not offer the "best" safeguard for First Nations maintenance of water values. The current system and the realization that a paradigm shift will most likely not take place any time soon suggests that better recognition may lie in meaningful participation of First Nations at the legislative and co-management levels.

3.9 *The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*: Is There a Place for Traditional Knowledge and First Nation Participation?

3.9.1 The *Great Lakes Agreement* Revisited

In the U.S., like Canada, aboriginal communities live throughout the Great Lakes Basin. Whereas First Nations in Canada have constitutionally protected rights and must be consulted whenever government action may interfere with those rights (*see Haida Nation, supra*), in the U.S., Indian tribes have been recognized as having authority equivalent to that of states for purposes of environmental regulation.[155] For purposes of environmental regulation, **U.S. tribes are directly involved in water quality regulations**.[156] (emphasis added.)

In both the *Great Lakes Agreement* and the *Great Lakes Compact*, even though there is an emphasis on water conservation and resource protection based on new scientific knowledge as it becomes available,[157] there is no emphasis placed on including Aboriginal Knowledge as a mandatory component. According to the council of Great Lakes Governors,

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[155] Marcia Valiante, *Management of the North American Great Lakes* at 248 in O. Varis, C. Tortajada and A.K. Biswas, eds., *Management of Transboundary Rivers and Lakes* (Springer) [***Valiante***].

[156] *Ibid.* at 248.

[157] Noah D. Hall and Bret B. Stuntz, "Climate Change and Great Lakes Water Resources: Avoiding Future Conflicts with Conservation" (2008) 31 Hamlin L. Rev. 641at 675 (Westlaw).

> [e]ach State and Province will develop a program to determine which uses must meet [the standard set out in the agreements] while ensuring that, overall, uses are sustainable.[158]

The *Great Lakes Agreement* will be incorporated into the *Ontario Water Resources Act.*[159] Within these sections of the *Water Resources Act*, however, neither the term "First Nations" nor "Traditional Knowledge" is found. Reference is made to incorporating the standards agreed to under Article 102 of the *Great Lakes Agreement.*[160]

3.9.2 How the *Great Lakes Agreement* Includes First Nations

The *Great Lakes Agreement* acknowledges, before the general provisions are set out, that nothing in the *Great Lakes Agreement* is intended to abrogate or derogate from the protection provided for existing aboriginal or treaty rights of the aboriginal peoples in both Ontario and Québec as it is recognized and affirmed by section 35 of the Canadian *Constitution Act, 1982*.

In Chapter Five of the *Great Lakes Agreement*, Article 504, "First Nations and Tribes Consultation" reads as follows:

> 1. In respect of a Proposal,[161] **appropriate consultation shall occur with First Nations** or federally recognized Tribes in the Originating Party in the manner suitable to the individual Proposal and the laws and policies of the Originating Party.

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[158] Council of Great Lakes Governors, Frequently Asked Questions: *Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement & Great Lakes—St. Lawrence River Basin Water Resources Compact* (April 2007), online <http://www.cglg.org/projects/water/CompactEducation/GLCompactResourceKit-10-18-07.pdf > at 70 (last visited 12 April 2010).

[159] R.S.O. 1990, CHAPTER O.40, s. 34.4-34.11.

[160] *Great Lakes Agreement*, Article. 102

[161] A proposal is defined in the *Great Lakes Agreement* to mean a "Withdrawal, Diversion or Consumptive Use of Water that is subject to [the] Agreement".

2. The Regional Body shall:
   a. **Provide notice to the First Nations** and federally recognized Tribes within the Basin of a Proposal undergoing Regional Review and an opportunity to comment in writing to the Regional Body on whether the Proposal meets the Exception Standard;
   b. **Inform the First Nations** and federally recognized Tribes of public meetings and invite them to attend;
   c. Forward the comments that it receives from the First Nations and federally recognized Tribes under this Article to the Originating Party for its consideration before issuing a Declaration of Finding; and,
   d. **Consider the comments** that it receives from the First Nations and federally recognized Tribes under this Article before issuing a Declaration of Finding.

3. In addition to the specific consultation mechanisms described above, **the Regional Body shall seek to establish mutually agreed upon mechanisms or processes to facilitate dialogue with, an input from First Nations** and federally recognized Tribes on matters to be dealt with by the Regional Body; and, the Regional Body or the appropriate Parties shall seek to establish mutually agreed upon mechanisms to facilitate on-going scientific and technical interaction and data exchange regarding matters falling within the scope of this Agreement. (emphasis added.)

In Article 506, "Declaration of Finding", section 2 reiterates that analyses of comments (if any) made by First Nations are to be considered. Finally, in Chapter 7, Article 702, "Relationship to First Nations and Tribes", reads as follows:

1. Nothing in this Agreement is intended to abrogate or derogate from treaty rights or rights held by any Tribe recognized by the federal government of the United States based upon its status as a Tribe recognized by the federal government of the United States.

2. Nothing in this Agreement is intended to abrogate or derogate from the protection provided for the existing aboriginal or treaty rights of aboriginal peoples in Ontario and Québec as recognized and affirmed by section 35 of the *Constitution Act, 1982*.

In Article 505, although "appropriate consultation" is stated, this term is not elaborated on further in the *Great Lakes Agreement*. In Article 504(2)(d), the Regional Body must only "consider" comments from First Nations before declaring its finding. Regardless, the language of the agreement is void of specific reference to incorporation and use of traditional knowledge.

3.9.3 What Has the Ontario Government Done To Implement Traditional Knowledge into the *Great Lakes Agreement's* Resulting Process?

On March 27, 2007, the Anishinabek Nation[162] and Ontario's Minister of Natural Resources signed three memoranda of understanding "[to] help strengthen cooperation and collaboration on issues related to natural resource management" in working together on implementing the *Great Lakes Agreement* in Ontario.[163] A memorandum of understanding may be defined as a written statement detailing the preliminary understanding of parties who plan to enter into a contract or some other agreement; a noncommittal writing preliminary to a contract. A letter of intent, however, is not meant to be binding and does not

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[162] According to the Anishinabek Nation website, <http://www.anishinabek.ca/index.php?option=com_content&task=view&id=55&Itemid=38> (last visited 10 April 2010), the tribal groups represented within the Nation include the Odawa, Ojibway, Pottawatomi, Delaware, Chippewa, Algonquin and Mississauga. Furthermore, the Anishinabek Nation represents approximately 30% of the total First Nation population in Ontario and 7% of the total First Nation population in Canada. The Anishinabek Nation territory encompasses First Nations along the north shore of Lake Superior and surrounding Lake Nipigon, the north shore of Lake Huron, Manitoulin Island, east to the Algonquins of Golden Lake (150 km east of Ottawa), and through the south central part of Ontario to the Chippewas of Sarnia First Nation.

[163] Anishnabek/Ontario Agreements Pledge Cooperation, online: *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Newsroom/LatestNews/MNR_E004229.html> (last modified 14 March 2008) (last visited 12 April 2010) [***Anishnabek/Ontario Agreement***].

hinder the parties from bargaining with a third party.[164] It is up to the individual provinces of Ontario and Québec to implement the Agreement into their respective laws.

The emphasis underlying the agreements is on co-management and cooperative integration of the common priority or protecting and conserving waters of the Great Lakes Basin.[165] The memorandum of understanding relating to the Great Lakes commits the province of Ontario and the Anishinabek Nation to act together regarding the following:

- Hold an annual meeting between the Anishinabek Grand Council Chief and the Minister of Natural Resources
- Establish a joint Great Lakes Charter Annex Agreement Implementation Committee, and
- Help build Anishinabek Nation advisory and technical capacity through the Union of Ontario Indians[166] retaining a technical advisor, as well as other measures.[167]

Evident in this memorandum is the lack of participation of all Ontario First Nations with links to the Great Lakes.[168] The Anishinabek Nation only represents

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[164] According to Black's Law Dictionary, a letter of intent is "[a] written statement detailing the preliminary understanding of parties who plan to enter into a contract or some other agreement; a noncommittal writing preliminary to a contract." Black's, *supra* at 424.

[165] Anishnabek/Ontario Agreement, *supra* note 164 .

[166] *Ibid.* "The Anishinabek Nation incorporated the Union of Ontario Indians (UOI) as its secretariat in 1949. The UOI is a political advocate for 42 member First Nations across Ontario. The Union of Ontario Indians...trace[s] its roots back to the Confederacy of Three Fires, which existed long before European contact."

[167] *Ibid.*

[168] *See supra* note 158.

30% of the total First Nation population in Ontario.[169] First Nations having brought suit in Ontario discussed previously are included under this memorandum of understanding.[170] Whether this is a result of, among other things, political organization among First Nations is beyond the scope of this thesis. What is a fact is that those without a voice at the table are not included in the discussion.

On April 28, 2010, the Anishinabek Nation and the province of Ontario and its Ministry of Natural Resources signed four agreements related to natural resources, including an extension of the *Great-Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement* Implementation Memorandum of Understanding for a further three years.[171] Additionally,

> The new memorandum…provides enhanced basin-wide collaboration opportunities, development of a protocol for First Nations review of major water use proposals in the Great Lakes basin, Anishinabek Nation community outreach and more.[172]

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[169] *See* supra note 163.

[170] *See supra* note 132.

[171] The other three agreements included a letter of Commitment to Priorities and Implementation which renewed previous agreements and clarified responsibilities. It also commits the Anishinabek Nation and the province of Ontario to hold an annual meeting between the Anishinabek Grand Council Chief and the Minister of Natural Resources to review progress. Second, a new agreement was signed to extend the work of the Anishinabek/Ontario Resource Management Council for another three-year period. The council, established in 2000, provides a forum for the discussion of resource management issues, and promotes alternative conflict resolution, coordinated approaches and collaboration on a range of resource management issues. Third, the *Trapping Harmonization Agreement* was signed to support the Anishinabek Nation's fur management program that provides social and economic benefits to First Nation communities. Fur harvesting is an activity of cultural importance, and the management of Aboriginal trapping activities and the ability to obtain harvest information assist in the sustainable management and humane treatment of Ontario's furbearing animals. "Anishinabek Nation and Ontario Strengthen Relationship: McGuinty Government Signs Fours Agreements With Anishinabek Nation" (April 28, 2010) online: Newsroom Ontario < http://news.ontario.ca/mnr/en/2010/04/anishinabek-nation-and-ontario-strengthen-relationship.html> (last viewed December 28, 2010).

[172] *Ibid*.

The memorandum is acknowledged by Ontario as representing a step forward in advancing a positive relationship between the ministry and the Anishinabek Nation. The weakness of such a step forward is the potential for two steps back at any time in the future. Nonetheless, it does advance some First Nation concerns and shows a growing willingness for the government to include First Nations, albeit a minority of the total population.[173]

3.10 Other Developments

3.10.1 The U.N. Declaration on Indigenous Rights and Canada

On September 13, 2007, the *United Nations Declaration on the Rights of Indigenous Peoples*[174] (the "U.N. Declaration") was adopted by the U.N. General Assembly by a vote of 143 in favour, with four votes against and eleven abstentions. Initially, Canada, along with the U.S., Australia and New Zealand, refused to sign the Declaration. However, on November 12, 2010, Canada formally signed the non-binding declaration.[175] The U.S. is the lone non-signatory.

The U.N. Declaration commits the signing member states to protect the rights and resources of indigenous peoples within the signing state.[176]

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[173] *See* John Borrows, *Canada's Indigenous Constitution*, (Toronto: University of Toronto Press, 2010) for a detailed discussion on the legal traditions, the role of governments and courts, and the prospect of a multi-juridicial legal system. The author argues that Canada's constitution is incomplete without a broader acceptance of Indigenous legal traditions.

[174] U.N. GAOR, 61st sess, GA Res 61/295, UN Doc A/RES/47/1 (2007).

[175] John Ibbitson, "Ottawa wins praise for endorsing UN indigenous-rights declaration" (November 12, 2010) online: The Globe and Mail, Ottawa Notebook <http://www.theglobeandmail.com/news/politics/ottawa-notebook/ottawa-wins-praise-for-endorsing-un-indigenous-rights-declaration/article1797339/> (last viewed December 28, 2010)

[176] *Ibid*.

Specifically, Articles 24 to 30 deal with resources, lands and territories. According to Davis, this is the most controversial section of the entire U.N. Declaration:

> Article 26 states that Indigenous peoples have the right to own, develop, control and use lands and territories. This encompasses rights to the total environment of such lands, therefore comprising air, waters, coastal seas, sea-ice, flora and fauna and other resources which Indigenous people have traditionally owned or otherwise occupied or used. This includes the right to the full recognition of their laws, traditions and customs, land tenure systems and institutions for the development and management of resources, and the right to effective measures by states to prevent any interference with, alienation of or encroachment upon these rights.[177]

However,

> [...] since the [Declaration] does not per se create legally binding obligations, some doubts exist with regard to its legal significance and capacity to affect State behaviour.[178]

Regardless, it is worth noting that Canada's signing of the Declaration signals another important step forward for giving validity to First Nations' resource management. As stated by Shawn Atleo, Grand Chief of the Assembly of First Nations, the signing "signals a real shift, a move forward toward real partnership between the first nations and the government."

3.10.2 First Nations and Bottled Water

In 1997, the Aboriginal Policy Roundtable on Indigenous Heritage Rights, which was comprised of a number of Indigenous academics and community

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[177] U.N. Declaration on the Rights of Indigenous Peoples, Adopted by General Assembly Resolution 61/295 on 13 September 2007. Megan Davis, "The United Nations Declaration on the Rights of Indigenous Peoples" (2007) Vol. 11(3) Australian Indigenous Law Reporter 55-63 at 60.

[178] Mauro Barelli, "The Role of Soft Law in the International Legal System: The Case of the United Nations Declaration on the Rights of Indigenous Peoples" (2009) Vol. 58 Int'l and Comparative Law Quarterly 957-983 at abstract.

representatives, argued that regional economic integration can have both positive and negative effects on the indigenous peoples of Canada.[179] Acknowledging that indigenous peoples should strive to be "direct beneficiaries" of multilateral trade organizations, including the NAFTA, and "not just potential victims," the roundtable determined that the inclusion of Indigenous peoples and their interests in multilateral trade organizations is advantageous.[180]

> MTOs can encourage change at the national level and can offer stronger protection for the key economic assets of Indigenous peoples, such as their lands, cultural and artistic traditions, ecosystems, and scientific knowledge.[181]

At least one First Nation has decided to participate in the bottled water market. Established in 2001 in Bala, Ontario, Wahta Springs is a water bottling company which is owned by and operated exclusively on the Wahta Mohawk Territory.[182] The mission statement of Wahta Springs is "to produce the purest and highest quality of water product…through excellence, team work, and attention to detail, from the source to the finished product."[183]

Although this may appear to be counter to First Nation values, this is an example of First Nation participation in resource extraction and this example makes clear that First Nations are not simply ecological warriors, but also active participants in today's economic markets. Since not all First Nations will necessarily agree on whether or not export of bottled water is consistent or inconsistent with First Nations values and law, there is a need for further

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[179] Kiera L. Ladner and Caroline Dick, "Out of the Fires of Hell: Globalization as a Solution to Globalization— An Indigenist Perspective" (2008) 23 Can. J. L. & Soc. 63 (Westlaw)
[180] *Ibid.* at 85.
[181] *Ibid.*
[182] Wahta Springs website, online: <http://www.wahtasprings.com/labeling.php>.
[183] Wahta Springs Mission Statement, online: <http://www.alibaba.com/member/ca115886883.html>.

research on the content of First Nation's values and the relationship with ecological integrity values and indigenous law as it relates directly to water.

3.11 Summary

It remains to be seen how the momentum of Canada's signing of the U.N. Declaration and Ontario's extension of the Anishinabek memorandum of understanding, *supra*, carries forward and what it amounts to. Regardless of the possibilities that may exist under the U.N. Declaration and the Anishinabek memorandum, two conclusions are evident. First, the fact remains that the *Great Lakes Agreement* currently fails to include aboriginal knowledge as a mandatory component in decision making regarding the Great Lakes Basin and the waters of Lake Ontario. This may be because there is no pressure on the province of Ontario to use aboriginal knowledge like there is at the federal level because of the U.N. Declaration, although all levels of government are equally subject to international law norms.

Second, within the procedural process of the *Great Lakes Agreement*, First Nations in this context are regarded as worthy of comment only. The decision to approve a diversion lies with the Regional Body. First Nations are not included at the decision making table itself. Moreover, there is a focus on adaptive management that includes scientific knowledge alone.[184] Whether this is consistent with environmental racism (*supra* at page 99) is left unanswered. This is, however, contrasted with the implementation of previous agreements, namely

[184] In Article 100 of the Great Lakes Agreement, Objective 1(h) states that an adaptive management approach to conservation and management of the Great Lakes Basin water recognizes the adjustment and evolution of scientific knowledge as it concerns the water resources.

the *Boundary Water Treaty 1909*, where First Nations had no participation at all.[185]

Third, while this chapter provides some insights into Ontario First Nations values with regard to water, it is incomplete. Notably, it is unclear whether

[185]On June 13, 2009, the Haudenosaunee Environmental Task Force delivered a Summary Statement on Behalf of the Haudenosaunee People at the Boundary Waters Treaty of 1909 Centennial Celebration in Niagara Falls, NY: "In honor of the "sharing the waters" theme expressed here today, we felt it was our responsibility to share an indigenous perspective on the Boundary Waters Treaty of 1909, and to offer some suggestions on how to work together for the future.

> # 1- Water is the lifeblood of Mother Earth. At any gathering of the people, we have been instructed to turn our minds to the waters. The many forms of water quench our thirst and provide us with strength. Water is life- *Awe awete.* The people gathered here are of one mind on this universal concept.
>
> #2- We, the Haudenosaunee People, are still dependent on the waters of the Great Lakes as were our ancestors thousands of years ago. We depend on them for our ceremonies and our way of life. We will work together to make sure future generations will be able to drink, swim and fish in these waters in another thousand years.
>
> #3- Water is not a commodity and does not belong to any person or place. It is wrong for people and their governments to assume they have ownership or title to the waters. Our only concern should be to make sure the waters can fulfill their responsibility to the rest of Creation, as instructed by the Creator.
>
> #4- We were neither notified nor consulted on the Boundary Waters Treaty of 1909 at the time of its inception. The Treaty was ratified without concern to existing Treaties made between the Haudenosaunee Confederacy and the Dutch, the United States, and Great Britain. International law maintains that Haudenosaunee rights to the use of water feeding and bordering our lands are paramount over other users of the same water source.
>
> #5- The Haudenosaunee Confederacy has never accepted the exclusive jurisdiction of the United States and Canada over the waters of Mother Earth as established in Article Two of the Boundary Waters Treaty. The treaty is merely another piece of legislation which has dispossessed the Haudenosaunee of their rights to international waters.
>
> #6 – Indigenous Nations affected by this Treaty must be included in decisions affecting their riparian rights, water withdrawals, and restoration. At a minimum, we insist the International Joint Committee, established by the Treaty, appoint at least one Native Commissioner to represent native interests and communities.

See online:
<http://www.hetf.org/index.php?option=com_content&view=category&layout=blog&id=52&Itemid=84>.

Ontario First Nations would take a consistent approach to resource extraction proposals like the export of bottled water.

This thesis now turns to the examination of property law in Ontario, and whether or not the property paradigm can and should incorporate a property theory in line with First Nations' values in order to advance the sustainability agenda of the Great Lakes waters.

CHAPTER FOUR: NAVIGATING WATER'S CURRENT PLACE IN ONTARIO'S PROPERTY PARADIGM—IS THERE A NEED OR ROOM FOR A HOLISTIC THEORY OF WATER?

4.1 Introduction

> One of the main aspects of water governance is the implementation of integrated water resources management, a process which favours a coordinated development and management of water, soil and other related resources, and aims to maximize, in an equitable manner, the economic and social well-being, without compromising the sustainability of the vital ecosystems. Integrated water resources management should be, by definition, environmentally sustainable, economically efficient, and socially equitable.[1]

> An analysis of water resources in any water body would thus need to explore this web or network of "jural relations." Governance is a mix of elaborate judicial determinations of privileges, claims, duties, and exposures together with governmental rules that create complementary and sometimes conflicting incentives for people.[2]

This chapter begins by exploring water rights in relation to traditional property theory in order to explore and present to the reader how water fits within the current property paradigm. The chapter then surveys the limits of traditional property theory in dealing with water and looks at relevant modern property theories which may be a better paradigm for water. The chapter then discusses the origin, development and implementation of the Public Trust Doctrine to see if this doctrine can (and should) be used in Canada to plug the holes property theory may have in relation to water. The Public Trust Doctrine is also discussed as a doctrine which parallels First Nation water

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[1] Luis Veiga da Cunha, "Water: A human right or an economic resource?" in M. R. Llamas, L. Martinez-Cortina, and A. Mukherji, eds., *Water Ethics* (London: Taylor & Francis Group, 2009) at 112 [***da Cunha***].

[2] Mark Sproule-Jones, "Property Rights and Water" in Mark Sproule Jones, Carolyn Johns and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) at 125 [***Sproule-Jones***].

values. The chapter concludes by examining sustainability theory at both the local and international level, as well as touching upon a human right to water that has recently been recognized by the U.N.

4.2 What is a Water Right?

According to Lucas, water has "never fitted comfortably into the traditional categories of property rights"[3] and it is only since growth in human population has placed a strain on fresh water resources that serious questions have been asked in the country of Canada about the legal character of water rights.[4] While there are certain clearly defined property rights relating to water within the provinces of Canada, these rights become less clear when the resource straddles or flows across provincial or territorial boundaries.[5]

In defining what a water right is, it is necessary to first define what a property right is. This requires an explanation of the system of property law within which rights exist:

> Property, in its broadest sense, is an institution governing the use of things. It is an economic institution in the sense that it is concerned with the allocation and use of goods and it is a social institution in that property provides a means to achieve social order. It is also a legal institution: law is the vehicle for the definition and regulation of any regime of property.[6]

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[3] Alastair R. Lucas, *Security of Title in Canadian Water Rights* (Calgary: The Canadian Institute of Resources Law, 1990) at 1 [***Lucas***].

[4] *Ibid.* at 2.

[5] John K. Grant, "Against the Flow: Institutions and Canada's Water-Export Debate" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008) at 169 [***Grant***].

[6] Richard Barnes, *Property Rights and Natural Resources* (Portland: Hart Publishing, 2009) at 22 [***Barnes***].

From this quote, then, property exists in three areas: (1) economic (2) social, and (3) legal. Although what exactly a right is or is not may be debated[7], when focusing on the legal arena, property rights are "the product of property rules and property rules are located within legal systems."[8] Yet, within a legal system of rules, property rights are "invariably exposed to the values and limitations which inhere with a legal system and any analysis of property that disregards such values and limitations is incomplete."[9]

> Property in land and resources has with it accompanying rules. For example,
>
> [t]hrough the notions of usufruct and possession, the law articulates ideas about the ways in which property in land can come about, and reveals something about the intrinsic nature and value which the law attaches to land.[10]

Property can be further divided into the categories of "public property" and "private property." In explaining the dynamic between public and private property, Morrow and Coyle state:

> [p]rivate property is something we slide into gradually; though the divisions we settle upon are the outcomes of consensus forged in the fire of collective experience, the emergence of those agreements is in some sense an historically necessary part of human evolution: as humanity expands, the common use of land becomes inconvenient and the move from the commons to a state of private property is inevitable.[11]

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[7]Sean Coyle and Karen Morrow, *The Philosophical Foundations of Environment Law: Property, Rights and Nature* (Oregon: Hart Publishing, 2004) at 11 [***Coyle and Morrow***]. Coyle and Morrow continue,

> Although the terms in which property is conceived have remained fairly static in Western legal thought, theoretical understandings of terms such as 'right' have varied considerably with shifts in philosophical perspective and the form of our social arrangements. *Ibid.*

[8]Barnes, *supra* note 6 at 22. Barnes also points out that not all things are subject to the property institution. Rather, other measures of regulation can exist. Barnes states that this is evident in the provision of public services.

[9] *Ibid.*

[10]Coyle and Morrow, *supra* note 7 at 4.

[11]*Ibid.* at 20.

Although this is only a small part of the property rights paradigm,[12] it is a paradigm based on a European legal tradition. According to Battiste and Henderson, in the European legal tradition, property is:

> [...] the material foundation for creating and maintaining social order. The central idea was that all land belonged to the Crown...Property rights were not to satisfy individual preferences or to increase wealth. Estates in land provided the foundation for citizens to increase well-being of the entire polity.
>
> ...
>
> The modern idea of a fluid society in which individuals readily move...in the social hierarchy, was anathema to the proprietarian order, and today is the language of the market place that dominates legal discourse about property. The essence of this is the idea of property as a bundle of rights...The relationship between property as order and property as commodity creates much of the tension and much of the synergy about the issue of protecting Indigenous rights within the Eurocentric legal system.[13]

Furthermore,

> What unites the traditional theories [of property] is an ethical perspective that attributes intrinsic value to individual dominion over private property. That value may stem from traditions of Western religions, the related tenets of natural law in Western philosophy, or more simply from the utilitarian intuition that private property is essential for human happiness in a democratic society.[14]

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[12] *Ibid.* at 9. The authors state:

> Modern legal scholarship moves within a conception of law which views property as a pattern of interpersonal relationships of entitlement. Theoretical characteristics as well as practical invocations of property rights consciously articulate a specifically legal phenomenon which has no immediate connection with any wider theories of morality, politics or society. The modern lawyer's idea of property is both technical and deeply positivist: the lineaments of property rights are regarded as flowing from refined lawyerly definitions and distinctions, and from rules and principles laid down in statutes and decided cases, rather than being shaped by wider social, moral, or religious notions. (emphasis added.)

[13] Marie Battiste and James (Sa'ke'j) Youngblood Henderson, *Protecting Indigenous Knowledge and Heritage: A Global Challenge* (Saskatoon: Purich Publishing Ltd., 2000) at 146 [***Battiste and Henderson***].

[14] Carl J. Circo, "Does Sustainability Require a New Theory of Property Rights?" (2009) 59 Kan. L. Rev. 1 (forthcoming); online: *Social Science Research Network* <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1343228> at 2 (last modified May 6, 2009) (last accessed March 12, 2010) at 12 [***Circo***].

In contrast to Eurocentric legal thought, and in opposite of the commodity idea,

> [...] almost all Indigenous thought asserts that property is a sacred ecological order and manifestations of that order should not be treated as commodities. The role played by property in a sustainable economic order creates a fissure between Eurocentric thought and Indigenous thought.[15]

As Chapter Two makes clear, property rights act within a set of rules for the governance of resources.[16] This includes water management. In Canada, property rights may favour different interests from province to province and from water body to water body.[17] Today, however,

> [w]hether or not people are "putting" uses into a water body...or taking water for other uses...one normally needs permission to do so. The permission may be from a private person, a government or governments (more than one), or a community or persons. Such property rights are allocated, in the Canadian sense, either by governments...or by custom (through common-law precedents).[18]

A water right as a type of property right, then, may be perceived in broad terms as being all the "claims, entitlements, and related obligations among people regarding the use and disposition of [the water] resource."[19] Water, however, does not fit well into the above stated definition. This is partly because of its transient nature. As Saxer concludes "water is too unlike land to be subject to private property holdings."[20] Water, nonetheless, can be privately held under the current property paradigm, such as when it is captured and reasonably used under the riparian rights, or when a permit for taking

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[15] Battiste and Henderson, *supra* note 13 at 145.
[16] Sproule-Jones, *supra* note 2 at 127.
[17] *Ibid*. at 127.
[18] *Ibid*. at 120.
[19] Oliver M. Brandes and Linda Nowlan, "Wading into Uncertain Waters: Using Markets to Transfer Water Rights in Canada—Possibilities and Pitfalls" (2009) 19 J. Env. L. & Prac. 267 at 269 [***Brandes and Nowlan***].
[20] Shelly Ross Saxer, "The Fluid Nature of Property Rights In Water" (2010) Duke Envtl L. & Pol'y F.; Pepp. U. Legal Studies Research Paper No. 2010/13 at 1, online: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1636529> **[*Saxer*]**.

water is granted by the government. Part of the problem of fitting water into a property paradigm lies with the history of the system of property law itself.

4.3 Explaining the Current Property Paradigm

Humanity has evolved much in such a short period of time. Some misunderstandings about science, for example, have been clarified with time. This holds true for the science of water. Saxer posits that because of a lack of early scientific knowledge about groundwater, the historical development of water law initially focused on surface water only. Such a focus in turn limited human understanding of water and the accompanying interconnectedness between surface water and ground water. As such, case law and scholarship focused extensively on surface water, garnering the most attention and legal refinement.[21] Today, the hydrologic cycle makes clear that surface water is just part of one large system of global water movement.[22]

When viewed through the lens of the bundle of rights metaphor used for real property,[23] the right to use water dons the classical characteristic of exclusivity, alienability, and utility.[24] However, there are now some academics who propose to view water in a new light. For example, Arnold proposes a "web of interests" metaphor to more appropriately address the characteristics of water as a resource, taking into consideration the interrelatedness of things and people.[25] Applying this reasoning gives

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[21] *Ibid*. at 2.

[22] *See* Chapter One.

[23] The bundle of rights metaphor is used to describe the relationship between people and property. A person who holds property has with it various accompanying rights, depending on various factors including the property itself, the holder, and the laws governing that relationship.

[24] Saxer, *supra* note 20 at 3.

[25] Craig Anthony Arnold, "The Reconstitution of Property: Property as a Web of Interests" (2002) 26 Harv. Envtl. L. Rev. 281 (Westlaw) [**Arnold**].

way to a holistic view of water and moves away from the "older thinking". These new notions may also parallel First Nation water values.

4.3.1 Traditional Property Theorists

With regards to a resource, the most important right for traditional or classical property theorists is that of ownership, because ownership implies possession of that resource.[26] Indeed, the majority of historical writings on property rights center on the possession or ownership element of property.[27] With possession and ownership comes the right to exclude anyone from using that resource.[28]

> Exclusion is a property right or a claim that determines who will have use of a resource. It is a claim because others owe a correlative duty to the rights holder not to access the resource without consent. There is no reciprocal duty.[29]

Access may be granted to another for a resource held in one's possession and the use of a water resource for acts such as water withdrawal and discharge is considered a privilege under property law.[30] Furthermore, managing the resource allows a holder of a property right "to create and annul claims and privileges in a resource."[31] According to Sproule-Jones, four kinds of governance regimes are possible when based on the right to exclude people from a resource (including water):

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[26] Sproule-Jones, *supra* note 2 at 127.
[27] *Ibid*. at 118.
[28] *Ibid*. at 119.
[29] *Ibid*. at 124.
[30] *Ibid*.
[31] *Ibid*.

Private Property Regime	State Property Regime (*Res Publica*)	Communal Property Regime (*Res Communes*)	*Res Nullius*
An individual or a corporation can control access to the resource Ex: an underground aquifer on privately held land	A legitimate government is in charge of the resource Ex: selling fishing licenses	Ex: An entire First Nation band that may have full Aboriginal title to a lake	No government or legitimate authority exists to exclude others; anyone can access and capture

Table 4: Property Regimes Based on the Right to Exclude[32]

The *res publica* system of governance has dominated much of the classical legal thinking because of its ability to prevent anarchy over a resource, resulting in the prevention of a *res nullius* situation.[33] However, scholarship from the last thirty years has discovered that *res communes* governance regimes are effective and extensive for all water resources.[34]

Having undertaken recent study in the area of traditional property theory, Schlager and Ostrom state that there are four types of property rights that are held cumulatively by rights holders: (1) use; (2) management; (3) exclusion and (4) transfer.[35] For these academics, "[a] rights holder may have rights extending from use through the other three rights." Within these rights are four positions that a property rights holder can take:

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[32] Adapted from Sproule-Jones, *supra* note 2 at 119.

[33] *Ibid*. at 119. If res nullis did take place, then "users would compete for the resource beyond any level of long-run sustainability, in case others got there first." *Ibid.*

[34] *Ibid*., citing in part to Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (New York: Cambridge University Press, 1999).

[35] Edella Schlager and Elinor Ostrom, "Property Rights Regimes and Natural Resources" (1992) 68 Land Economics 246-62, cited in Sproule-Jones, *supra* note 2 at 124.

Owner	Has all the rights to a resource including the right of transfer
Proprietor	Has all the rights to a resource except the right of transfer
Claimant	Has all the rights except the right of transfer or the right to exclude
Authorized user	Had only the right to withdraw or the right to add to the water[36]

Thus, even though the property paradigm recognizes a regime in-line with the values of First Nations peoples, this is only one of four possible regimes, and remains a minority among those present realities today. Moreover, the Communal Property Regime has the potential to be challenged in Court, as is the case with Warpole and other discussed in chapter three, *supra*.

4.3.1.1 The Limits of the Traditional Property Rights Paradigm

The property rights paradigm is intellectually limited in analyzing some common-pool problems because the paradigm does not "fit or resolve" some important problems.[37] Spoule-Jones notes three important limits. The first limitation relates to assigning liability. In cases of non-point source pollution that emanates from land or air sources that eventually contaminate a water resource, the property rights paradigm is not able to specify or assign liability for such a resource when that pollution is co-mingled to the point of causing damage. The property rights paradigm presumes that human actors can be located and assigned the property right to access the water resource with their wastes and pollution, and then be held responsible for the damages caused.[38] But this is not always the case.

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[36] Edella Schlager and Elinor Ostrom, "Property Rights Regimes and Natural Resources" (1992) 68 Land Economics 246-62, cited in Sproule-Jones, *supra* note 2 at 124.
[37] Sproule-Jones, *supra* note 2 at 126.
[38] *Ibid*.

> The property rights paradigm is fundamentally about the moral responsibilities of human actors, rather than about natural ecosystems and ecosystem processes that include human actors.[39]

Second, the current property paradigm is restricted in its ability to resolve multiple-use competition over water.[40] Courts, bureaucracies, and legislatures can specify priorities among the multiple users under the property rights paradigm, with regulations building upon existing property rights arrangements.[41] However,

> [...] the property rights paradigm needs supplementary theory about collective action (governance) to deal with a full allocational process for multiple-use water resources.[42]

Third, the property rights paradigm does not take into account the fact that resources, like water, can flow across multiple sovereign jurisdictions.[43] Since this does take place, the rights and liabilities under the property rights paradigm require supplementary theory regarding intergovernmental cooperation and regulation over the water.[44]

Property rights in water are "muddied."[45] In Ontario, there is indeed a usufruct right related to water as well as a right to take water (physical taking) by permit, in which case, the water may be used and combined to produce a product which may be sold (ex. bottled water). If a resource can be measured and transferred, then it can be turned into a commodity.[46] The province of Ontario's increase in water management and water allocation through a permitting system is a clear acknowledgement and step away from the common law's inability to deal with surface and groundwater resource

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[39] *Ibid.*
[40] *Ibid.*
[41] *Ibid.* at 126-27.
[42] *Ibid.* at 127.
[43] *Ibid.*
[44] *Ibid.*
[45] Saxer, *supra* note 20.
[46] Sproule-Jones, *supra* note 2 at 120.

management. So too is its implementation of the *Great Lakes Agreement*, *supra*. Furthermore provinces are increasingly expecting applicants for water use permits to demonstrate what impact their proposed withdrawal will have on neighbouring water bodies.[47]

4.3.2 Modern Property Theory

Some modern theorists place a premium on access and withdrawal rules for the sustainability of water because unfettered access to the resource can lead to resource depletion and degradation.[48] Although much of the world is dependent on resources that are subject to the possibility of a tragedy of the commons,[49] Sproule-Jones notes that, today, unfettered access to water in Canada will most likely ***not*** lead to a "tragedy of the commons" scenario[50] because both the Crown and private owners work to define and enforce property rights.[51] As such, a balance will be struck between the resource

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[47] L. Nowlan, "Burried Treasure: Groundwater Permitting and Pricing in Canada" (Walter and Duncan Gordon Foundation, 2005) cited in Steven Renzetti, "Are the Prices Right? Balancing Efficiency, Equity, and Sustainability in Water Pricing" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 272.

[48] Sproule-Jones, *supra* note 2 at 128.

[49] Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (New York: Cambridge University Press, 1999) at 3 [***Ostrom***].

[50] "Tragedy of the Commons" refers to the term coined by Garret Hardin in 1968. According to Hackett, this refers to

> [...] the excessive appropriation from a common-pool resource under an open-access or dysfunctional common-property regime. Excessive appropriation occurs because (1) each user imposes appropriation externalities on the others, and (2) governance structures that might limit appropriation to sustainable levels are inadequate or lacking. The tragedy is that the rational appropriator knows that the resource should be conserved, but nevertheless depletes the resource because resource units conserved by one will simply be appropriated by another. The tragedy of the commons leads to the dissipation of rents and damage or destruction of the common-pool resource.

Steven C. Hackett, *Environmental and Natural Resources Economics: Theory, Policy, and the Sustainable Society*, 3rd ed. (New York: M.E. Sharpe, Inc., 2006) at 509 [***Hackett***].

[51] Sproule-Jones, *supra* note 2 at 128.

use, demand and quantity. This scenario, however, is not without conflict as both errors of commission and omissions have taken place throughout history.[52]

Governance arrangements that work to define and amend different property rights are important to modern property theorists.[53] Within the recent decades, there has been dramatic change in the participation of non-government communities in water governance in Canada.[54] Both the federal and provincial governments set rules for determining what property rights may be held by whom, for what period of time, and when and how they may be changed.[55] The bundle of rights relating to water resources has been and continues to develop to referee conflicts among rival fresh water resource users.[56]

Government policies can also influence and create property rights. Such rules, created for day-to-day governance of the resource, can become outdated, disputed, or come into conflict with one another requiring a resolving government process.[57] This is evident when examining the Canada Federal Water Policy. Canada's current Federal Water Policy, which dates back to 1987, makes clear that water is to be viewed as a good:

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[52] *Ibid*. at 128.
[53] *Ibid*.
[54] A.H.J Dorcey and T. McDaniels, "Great Expectations, Mixed Results: Trends in Citizen Involvement in Canadian Environmental Governance" in E. A. Parson, Governing the Environment: Persistent Challenges, Uncertain Innovations (Toronto: Toronto University Press, 2001) cited by Sproule-Jones, *supra* note 2 at 128.
[55] Sproule-Jones, *supra* note 2 at 128.
[56] *Ibid*. at 129.
[57] *Ibid*.

> We must now start viewing water both as a key to environmental health and as a commodity that has real value, and begin to manage it accordingly.[58]

The overall purpose of the federal policy is:

> [...] to encourage the use of freshwater in an efficient and equitable manner consistent with the social, economic and environmental needs of present and future generations[59]

The federal policy has received much criticism. On the one hand, the policy has been described as a document full of good intentions that indicates the necessity to address relevant problems or overcome historical challenges.[60] On the other hand, Canada today lacks a federal water policy that will, "integrate and coordinate federal, provincial, territorial, and First Nations policy dimensions or provide effective leadership with regard to international issues.[61]

Muldoon believes that the lack of a current up-to-date federal water policy is most likely due in part to complex issues that have a direct impact on the many economic and industrial interests tied to the current uses of freshwater in Canada.[62] That being said, an updated federal water policy "must be correlated to and preferably integrated with provincial, territorial, and First Nations interests" which is no doubt a difficult task in today's current political and legal arrangement.[63]

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[58] Environment Canada, Federal Water Policy, online: *Environment Canada* <http://www.ec.gc.ca/eau-water/D11549FA-9FA9-443D-80A8-5ADCE35A3EFF/e_fedpol.pdf> at 1 [***Federal Water Policy***].

[59] *Ibid.* at 2.

[60] Paul Muldoon and Theresa McClenaghan, "A Tangled Web: Reworking Canada's Water Laws" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 249 [***Muldoon***].

[61] *Ibid.* at 250.

[62] *Ibid.*

[63] *Ibid.* Furthermore, The Canadian Federal Water policy mentions the word "sustainable" only once and does so referring to sustainable economic development (at 2). The policy states that sustainable economic development "recognizes the dependence of a productive economy upon a healthy environment." *Ibid.*

The problems relating to water and property law have led some scholars to believe that interests in water are best described as "quasi-property".[64] According to Zellmer and Harder, although a rational conception of property recognizes both a human relationship with a "thing" and the nature of the thing itself, an assessment

> [...] of the nature of the interests in water undercuts the commonly accepted contemporary view that property is more about legal relations among people than about the thing itself.[65]

The problem with the bundle of rights metaphor used to describe property is that it is a one-dimensional depiction of the various interests associated with the property in question.[66] Furthermore,

> [t]he bundle fails to assess either the character of the thing in question or the nature of human relationships with it, and it also overlooks the importance of that thing to related human and ecological communities.[67]

This is not to say that the bundle of rights metaphor should be discounted in property law. Instead, the metaphor should be adjusted when dealing with water. Viewing property as a "web of interests" helps to place the thing (be it tangible or intangible, corporeal or incorporeal) at the center of the web, and all relationships with that thing forming the internal strands of the web and the surrounding web frame.[68] The relationships include the incidents of private ownership, public rights and communal rights.[69] Although Arnold proposed the web metaphor as a means of analyzing issues

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[64] Sandra B. Zellmer and Jessica Harder, "Unbundling Property in Water" (2007) 59 Ala. L. Rev 679-745 (Westlaw) at 683 [***Zellmer and Harder***].
[65] *Ibid.*
[66] *Ibid.* at 684.
[67] *Ibid.*
[68] *Ibid.*, citing in part and building on the concept crafted by Craig Anthony Arnold, "The Reconstitution of Property: Property as a Web of Interests" (2002) 26 Harv. Envtl. L. Rev. 281
[69] Zellmer and Harder, *supra* note 64 at 684.

related to property, Zellmer and Harder use the metaphor to determine "whether property exists in the first place."[70] According to the authors,

> [t]he web can only exist if its elemental strands are intact. The same is true for property, which only exists if the elemental incidents of property with respect to the thing in question are intact.[71]

Writing from an American perspective, the web metaphor can be an effective heuristic tool when applied to water and water rights in the following way:

> The outermost circumference of the web, or the webframe, represents societal norms attached to the thing in question. As applied to water rights, the webframe reflects the public trust doctrine, which safeguards public access for critical purposes such as subsistence use. Governmental rights and responsibilities as the trustee of the res (the water, stream beds, and shorelines) are found here at the outer parameter of the web. The concentric circles radiating from the center of the web represent appropriators for the water, riparian landowners, and other people who use the water for subsistence, recreation, or navigation, the fisheries and other water-dependent species, and, for interstate waterbodies, upstream and downstream states. The spoke-like strands that hold the web together represent the elemental incidents of property. Only if these incidents are present can the private interest in water be considered property; otherwise, the web falls apart.[72]

In Canada, however, there is no formal public trust doctrine. As such, this metaphor, when applied to Canadian water rights, lacks an outermost web. Moreover, the model itself is just that, a model. The integration of any theoretical model into actual use remains a larger complex issue requiring a change in perspective and status quo. It is enough at this point to state that there is a property theory--the web of interests—which appears to better represent a general Ontario First Nation view of water. The next section explores whether the public trust doctrine can be applied in Ontario.

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[70] *Ibid*. at 685.
[71] *Ibid*.
[72] *Ibid*.

4.4 The Public Trust Doctrine: The Missing Link to Holistic Great Lakes Water Management?

4.4.1 The Origin, Evolution and Use of the Public Trust Today

The public trust doctrine functions to mediate between and harmonize public and private property rights in important resource, and transforms private property rights, rather than eradicate them.[73] The public trust doctrine states that certain resources, including water, are common to all and are shared property of all citizens, and must be stewarded in perpetuity by the State.[74] The public trust doctrine has a long history that dates back to the Roman rule of Emperor Justinian and the year 579.[75] Within the *Corpus Juris Civilis*[76], the following codification was made: "By the law of nature these things are common to mankind—the air, running water, the sea, and consequently the shores of the sea."[77]

The public trust doctrine was accepted into English common law several hundred years after the fall of the Roman Empire.[78] The doctrine's importance for maintaining control over navigable waters and the lands underlying them was considered an essential element of sovereignty and were owned by the Crown in trust for its people's use.[79] Although legal title to the land underlying navigable water was transferrable by

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[73] Michael C. Blumm, "The Public Trust Doctrine and Private Property: The Accommodation Principle" 27 Pace Envtl. L. Rev. (forthcoming 2010), online: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1543885> at 2.
[74] David Takacs, "The Public Trust Doctrine, Environmental Human Rights, and the Future of Private Property" (2008) 16 N.Y.U. Envtl. L. J. 711 at 713 [***Takacs***].
[75] *Ibid*.
[76] Also known as the Code of Justinian, this is the collection of jurisprudence issued by order of Justinian I.
[77] Institutes of Justinian § 2.1.1, at 90 (Thomas Collett Sandars trans., 7th ed. 1922), cited in Kenneth K. Kilbert, "The Public Trust Doctrine and the Great Lakes Shores" (forthcoming 2010) 58 Clev. St. L. Rev. 1 at 4
[78] Takacs, *supra* note 74 at 713.
[79] *Ibid*.

the Crown to a private party, the Crown maintained an obligation to the people and continued to hold the land in trust for them.[80]

The United States inherited the doctrine from the common law of England.[81] In the U.S., the doctrine is applied at both the federal and state levels. The federal public trust doctrine was proclaimed by the U.S. Supreme Court in *Illinois Central Rail Road Co. v. Illinois*.[82] The decision made clear that the state holds title to submerged lands in trust for the people of that state.[83] The federal public trust doctrine protects three public uses of waters: (1) navigation, (2) commerce, and (3) fishing.[84] The federal doctrine also acts to restrain "the state's ability to alienate the beds and banks of navigable waters or to abdicate regulatory control over those waters."[85] States have emphasized different aspects of the doctrine.[86] Yet, when looking at the property paradigm, the arrangement remains that any appropriation from a navigable water source in the U.S. is a usurfructuary right and the waterway itself remains owned by the government in a public trust capacity first and foremost.[87]

Although the public trust doctrine is a set of broad uniform principles, the doctrine's application is varied within individual U.S. state law, including the Great Lakes states.[88] The doctrine has the potential to be used for water regulation; however, this is dependent on the state's implementation and position regarding the doctrine:

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[80] *Ibid*.
[81] *Ibid*. at 714.
[82] 146 U.S. 387 (1892), as cited in Robin Kundis Craig, "A Comparative guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries" (2007) 16 Penn. St. L. Rev. 1 at 9 [***Craig***].
[83] Illinois Central, *supra* at 452.
[84] Craig, *supra* note 82 at 10 citing to *Illinois Central R.R.*, 146 U.S. at 452.
[85] Craig, *supra* note 82 at 10.
[86] *Ibid*.
[87] Hackett, *supra* note 50 at 71.
[88] Craig, *supra* note 82 at 3.

> Current interest in the public trust doctrine often centers on "how far" the states will push public trust rights. Predicting answers requires some general sense of the particular state's "attitude" toward its public doctrine. For example, several states view the public trust doctrine as being primarily concerned with navigation and commerce—the hearts of the federal public trust doctrine. However, a state can also view its public trust doctrine as a comprehensive and evolving common-law protection of all public rights in waters. Given the private property rights usually involved, only states taking this view are likely to extend their public trust doctrines to uncommon applications, such as environmental protection.[89]

The "attitude" of a state toward its public trust doctrine varies widely in both its rhetoric and in its application.[90] When looking at resource management, the variation in state attitude has the potential to be both positive and negative. Using climate change and its threat to freshwater supply as an example, Craig states that coastal states that consider their public trust doctrine as a "revolutionary" tool may decide that the doctrine gives the state extensive authority to override private interests.[91] In the alternative, the state could use the public trust doctrine to afford greater protections to the water and its ecosystems.[92] According to Craig, any state's public trust doctrine is composed of common basic components:

> [A] state's public trust doctrine outlines public and private rights in water and submerged lands by delineating five definitional components of those rights: (1) the beds and banks of waters that are subject to state/public ownership; (2) the line or lines dividing private from public title in those submerged lands; (3) the waters subject to public use rights; (4) the line or lines in those waters that mark the limit of public use rights; and (5) the public uses that the doctrine will protect in the waters where the public has use rights.[93]

The following table briefly illustrates the basic variation in the Public Trust Doctrine followed by each Great Lakes state:

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[89] *Ibid.* at 19.
[90] *Ibid.* at 25.
[91] *Ibid.*
[92] *Ibid.*
[93] *Ibid.* at 4.

State	Date of Statehood	Is there a State constitutional provision that references a Public Trust Doctrine?		Number of statutes that include elements of the Public Trust Doctrine
		YES	NO	
Illinois	1818	X		12
Indiana	1816		X	8
Michigan	1837	X		8
Minnesota	1858	X		7
New York	1788		X	7
Ohio	1803		X	4
Pennsylvania	1787	X		3
Wisconsin	1848	X		4

Table 4: U.S. Great Lakes States and Incorporation of the Public Trust Doctrine[94]

According to Pentland, modern public trust in the U.S. is a creature of state courts. Most states, however, share some important similarities.[95] These similarities include:

- At the least, the resources subject to the public trust include navigable waters, the lands beneath those waters and the living resources within those waters
- The state has the ability to define the physical boundaries of the resources which are subject to the public trust
- As trustee, the state must preserve and continuously assure the public's ability to fully use and enjoy those resources under the public trust for uses consistent with the purposes of the trust
- The state can recognize and convey private proprietary interests in respect of these resources provided the public interest is not substantially impaired.[96]

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[94] This chart is composed using the information provided by Craig, *supra* note 82 at 26-113, "Appendix: State-By-State Summary of Eastern States' Public Trust Doctrines". For greater detail, *see ibid.*

[95] Ralph Pentland, "Public Trust Doctrine—Potential in Canadian Water and Environmental Management", online: (2008) POLIS Project on Ecological Governance Water Sustainability Project <http://www.waterdsm.org/publication/261> at 4 [***Pentland***].

Furthermore,

> [i]n certain cases south of the border, the public trust doctrine has moved from its initial emphasis on ensuring public access to a greater concern with resource conservation, and in some instances even to recognition of intrinsic value of preservation.[97]

As Takacs summarizes,

> The public trust doctrine names an ancient belief about the proper relationship between citizens, nature, and government; each successful legal use of the Public Trust Doctrine translates this belief into more responsible stewardship of natural resources.[98]

According to Pentland, the public trust doctrine in the United States "mirrors an historic expansion of public consciousness and concern away from immediate private interests to the interest of others in society, future generations of humans, and even non-human life."[99] "American Indians," however, have been limited in using the public trust doctrine to challenge government actions that harm tribal sacred sites located on federal public lands.[100]

4.4.2 The Public Trust in Canada: Incomplete or Ready to Launch?

To repeat, the public trust doctrine plays a central role in water management in the U.S. by allowing states to put the public use of a resource ahead of a private use. This is in contrast to Canada where, for the most part, the doctrine has been notable

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[96] John C. Maguire, "Fashioning an Equitable Vision for Public Resource Protection and Development in Canada: The Public Trust Doctrine Revisited and Reconceptualized" (1997) 7 J. Envtl. L. & Prac. 1, [***Maguire***], as cited in Pentland, *supra* note 95 at 4.

[97] Pentland, *supra* note 95 at 2.

[98] Takacs, *supra* note 74 at 718.

[99] Pentland, *supra* note 95 at 7.

[100] *See* Kristen A. Carpenter, "A Property Rights Approach to Sacred Sites Cases: Asserting a Place for Indians as Non-Owners" (2005) 52 U.C.L.A. L. Rev. 1061. The author argues that even as nonowners, Indians may have enforceable property rights to use, and maintain the physical integrity of sacred sites.

only in its absence.[101] In order to explain Canada's non-use of the public trust doctrine, Maguire finds that the most probable explanation is found in the nature and scope of public property rights in Canada compared to the United States:

> In the United States, the original thirteen states replaced the English Crown as the owner of the beds and banks of navigable watercourses. Since the 1892 *Illinois Central Railway v. Illinois case*, U.S. courts have always held that the states hold title to the lands under navigable waters "in trust for the people of the State."[102]

Although it may appear at first to be illogical that the public, as represented by the state, be both the trustee and beneficiary of the same public trust, in transferring navigable water courses as well as the land under the water to the states, the U.S. federal government reserved a navigational easement.[103] This transfer was subject to the preservation of the right of navigation by the states and, as Pentland notes, **the federal government "could not sever the public trust from these former Crown resources**."[104] (emphasis added.)

In Canada, the Crown remains owner of all public land under s. 109 of the *Constitution Act, 1867*, "subject to any trust existing in respect thereof and to any interest other than that of the province in the same."[105] From this, Pentland concludes that:

> [t]he absence of a full-blown "trust" arrangement under these circumstances appears to have been a significant impediment to the evolution of a U.S. style public trust doctrine in [Canada].[106]

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[101] *Ibid.* at 2, citing in part to Barbara Von Tigerstrom, "The Public Trust Dooctrine in Canada" [***Von Tigerstrom***].
[102] *Ibid.* at 3.
[103] *Ibid.*
[104] *Ibid.*
[105] *Ibid.* at 4.
[106] *Ibid.* at 4.

According to Petland, "the real power of the public trust doctrine lies not in the laws themselves, but in the creativity of the courts and those arguing cases before them."[107]

The closest the Ontario courts have ever come to recognizing the public trust in the province was in the case of *Green v. R.*[108] In this case, the plaintiff, a researcher at the University of Toronto, brought an action against the Province of Ontario based on a breach of trust in maintaining a certain provincial public park. The action was based on the fact that the province, two years prior to establishing the park, had leased sixteen acres adjacent to it to a co-defendant company for 75 years for the purposes of sand extraction. The breach of trust was supposed to consist in the effect on the unique ecological, geological and recreational resource required to be maintained for the benefit of the people of Ontario. The defendants were successful in moving to have the statement of claim struck out as disclosing no reasonable cause of action. The plaintiff did not claim and was found not to have suffered any direct and substantial damage and thus had no status to maintain the action. Such an action could only be maintained in the name of the Attorney General with someone as relator in the proceedings. Furthermore, the plaintiff's contention that the Province was holding the land in trust and was compelled to use it as a park was unfounded. Pentland concludes that,

> the very fact that the province had discretion under provincial legislation to allow parkland, regardless of its unique ecological features to be used for private enterprise, was fundamentally inconsistent with any intention to create a trust.[109]

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[107] *Ibid.*

[108] *Green v. The Queen* (1972), 34 DLR (3d) 20 (Ont. HC). But note, some argue that the *Constitution, 1867* as well as the Ontario Environmental Bill of Rights, 1998, recognize that the province of Ontario holds non-renewable resources "subject to any Trusts:. *See* Executive Summary (27 November 2002), online: *Canadian Institute for Environmental Law and Policy* <http://www.cielap.org/pdf/watergrab2es.pdf> (viewed 30 December 2010).

[109] Pentland, *supra* note 95 at 4.

Maguire asserts that the relationship between the public and the government relating to public resources is not based on the existence of a classical trust but instead on a relationship of "confidence" (i.e. a trusting relationship).[110] It is therefore arguable that something like a public trust doctrine may be relevant in Canada.[111] Pentland notes that the Supreme Court of Canada, in *British Columbia v. Canadian Forest Products Ltd.*,[112] has delivered some commentary in regards to the public trust doctrine. Pentland suggests that the "tone" of Binnie J. in his discussion hints that the Court may be receptive to a public trust type argument in the future.[113]

This indication by the Supreme Court of Canada is part of a recent change in Canada over the past few decades suggesting that a public trust concept may be accepted into Canada. The other developments include a more activist role by the judiciary in response to the *Canadian Charter of Rights and Freedoms*, broad fiduciary duties that are not dependent on a traditional trust relationship (this includes the fiduciary duty owed by the government to Aboriginal peoples discussed in chapter two, *supra*), and the appearance of the term "public trust" in two Canadian statutes.[114]

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[110] *Ibid.,* citing to John C. Maguire, "Fashioning an Equitable Vision for Public Resource Protection and Development in Canada: The Public Trust Doctrine Revisited and Reconceptualized" (1997) 7 J. Envtl. L. & Prac. 1.

[111] Pentland, *supra* note 95 at 4.

[112] 2004 SCC 38, [2004] 2 S.C.R. 74. *See* paragraphs 73-80; 220,

[113] Pentland, *supra* note 95 at 6.

[114] This term is refererred to in the Yukon's *Environment Act*, R.S.Y. 2002, c. 76. In it, "public trust" is defined to mean "the collective interest of the people of the Yukon in the quality of the natural environment and the protection of the natural environment for the benefit of present and future generations." *See Ibid.* s. 7. "Public trust" also appears in the *Environmental Rights Act* , R.S.N.W.T. 1988, c. 83 (Supp.), in the former Northwest Territories

4.4.3 Paralleling First Nations' Values and the Public Trust Doctrine

When looking at the public trust doctrine for parallels as both a holistic view and tool for water management, one sees that there are indeed similarities. For instance, Takacs states that,

> [t]he Public Trust Doctrine's power comes from the longstanding idea that some parts of the natural world are gifts of nature so essential to human life that private interests cannot usurp them, and so the sovereign must steward them to prevent such capture. The philosophy and the obligation are the central elements of the doctrine, not the specific resources to which the ideas and duties attach. As such, the Public Trust Doctrine's reach seems constrained only by the imagination of those who would protect both the natural world and the public's right to the sustainable use of that world.[115] (emphasis added.)

This is paralleled with the recent Chiefs of Ontario declarations[116] that (1) recognize the spiritual connection of First Nations to all waters and (2) the responsibility of the First Nations as land and water stewards for present and future generations.

Although the public trust doctrine may appear capable of being used as a counterweight to private interests and property rights,[117] the doctrine offers no guidance on how to choose between competing public interests.[118] Thus, those who could fill in this gap would most likely remain those in power, namely, the government and the judiciary. So, although the public trust doctrine offers some parallels to Ontario First Nations' values, such as balancing public resource use with private resource use, it has not been implemented in the province of Ontario as it has in the Great Lakes states.[119]

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[115] Takacs, *supra* note 74 at 718.

[116] Chiefs of Ontario, "Water Declaration of the First Nations in Ontario October 2008" online: <http://chiefs-of-ontario.org/Assets/COO%20long%20form%20declaration.pdf>.

[117] Von Tigerstom, *supra* note 101 at 6.

[118] *Ibid.*

[119] The use of the public trust doctrine in the United States relating to the Great Lakes waters is limited but has been used nonetheless. As Barlowe notes:

Furthermore, any implementation of the public trust doctrine in Ontario would not necessarily empower First Nations as water stewards directly.

4.5 Examining "Sustainability" and Sustainability Theory

The concept of sustainability theory and property has become an important topic of recent scholarly study, especially in terms of implementing theory into practice.[120] The Brundtland Commission, *supra*, marked the beginning of a global reality regarding sustainable development and what "sustainability" means. The concept of sustainable development, as delivered by the U.N., is as follows:

1. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
   i. the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
   ii. the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.
2. Thus the goals of economic and social development must be defined in terms of sustainability in all countries - developed or developing, market-oriented or centrally planned. Interpretations will vary, but must share certain general features and must flow from a consensus on the basic concept of sustainable development and on a broad strategic framework for achieving it.
3. Development involves a progressive transformation of economy and society. A development path that is sustainable in a physical sense

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The Great Lakes states have some good public trust law and history [...]. In 2005, the U.S. Supreme Court [referring to *Glass v. Goeckel*, 683 N.W.2d 719, 262 Mich. App. 29 (2004), rev'd and remanded, *Glass v. Goeckel*, 703 N.W.2d 58, 473 Mich. 667 (2005), *cert. denied* 546 U.S. 1174, 126 S. Ct. 1340] ruled that Michigan residents have the right to walk along that state's more than 5,000 kilometres of shoreline. Michigan, Wisconsin and Ohio all have the right of public access under the Public Trust Doctrine extending to all navigable lakes and streams. *Supra* at 26.

[120] Circo, *supra* note 14 at 7.

> could theoretically be pursued even in a rigid social and political setting. But physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in the distribution of costs and benefits. Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity within each generation.[121]

From this concept flows the idea that present generations should not compromise resources for future generations.

There are various ways to approach the definition of sustainability for the purposes of this thesis. The most logical approach is to use the definition put forward in the *Great Lakes Agreement* and accompanying legislation and to compare such a definition or definitions with the Ontario First Nations' study, *supra*. This is important because written principles or definitions may parallel sustainability concepts valued by Ontario's First Nations. However, any written definition or principle has the potential to be vague and/or void of relevant wording. Simply giving a definition of what sustainability means is not an end unto itself. As Circo notes,

> Commentators frequently note the lack of agreement on how best to implement sustainability...this is inevitable because sustainability itself carries many different meanings. Indeed, some of the most prominent documents of the sustainability movement offer notoriously vague outlines of the specific actions required to achieve sustainability.[122]

When looking at the *Great Lakes Agreement*, no formal definition of "sustainable" or "sustainability" is provided. The legislation reviewed in this thesis (*see* Chapter Two) that has already undergone modification in Ontario, and which contains a usable

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121 Our Common Future: Report of the World Commission on Environment and Development, Chapter 2: Towards Sustainable Development, A/42/427 (UN).

[122] Circo, *supra* note 14 at 7.

definition, is limited to one document only (albeit important and relevant).[123] In the *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem* (2007), "sustainability" closely parallels the definition given by the Brundtland Commission. This definition reads:

> Sustainability--consider social, economic and environmental demands to balance the needs of the present without compromising the ability of future generations to meet their own needs.[124]

Although this definition is vague, the theory or theories underlying it may shed light on Ontario's current view regarding water and sustainability of the Great Lakes and St. Lawrence River Basin.

According to the sustainability principle, "all resources should be used in a manner that respects the needs of future generations."[125] Circo notes three contrasting theoretical models that can be used in order to analyze the relationship between sustainability and property rights.[126] The three models of sustainability, in order of their increasing "potential to threaten"[127] private property rights, are as follows:

1. **Resource Conservation**: based on the theory of conventional environmentalism, ecologically sustainable actions are both utilitarian (society should maximize the value of natural resources for the common good by using those resources efficiently and without gratuitous waste or contamination) and ethical (sustainability as

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[123] *See* Appendix, i*nfra*, Table 2.

[124] *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem,* Article III, 1(f), online: <http://www.ene.gov.on.ca/publications/6263e.pdf> at 4.

[125] Tom Tietenberg and Lyne Lewis, *Environmental Economics and Policy*, 6th ed., (New York: Addison-Wesley, 2010) at 499.

[126] Circo, *supra* note 14 at 4. Circo's focus is property rights, sustainability and U.S. law.

[127] *Ibid*. By "threatening private property rights" Circo means to compare the theories of sustainability to the traditional property theories of Blackstone, Locke and U.S. constitutional doctrine that tolerates restrictions on private property rights for the sake of public welfare.

conservation may reflect an intuitive respect for nature that stems from a fundamental preference for resource protection and preservation, taking its foundation either from traditional cultural and religious beliefs or from a secular value system).[128]

2. **Generational Justice**: each generation must preserve natural resources at least to the extent necessary for future generations to benefit on a relatively equal basis with the current generation.[129] The earth has finite resources and capacities that no generation has any right to take away from any future generation.[130] Generation justice often implies a global perspective, although globalism is not its defining characteristic.[131]
3. **Social Justice**: seeks an eventual redistribution of the earth's resources to achieve at least some minimal level of allocation to all individuals. The most radical form of sustainability incorporates the tenets of global social justice, so that the object is not only to preserve the earth's resources for future generations, but also to alter social institutions so that in the future all societies and individuals will benefit from both natural and other resources more equitably.[132]

According to Circo, traditional property theories today resist the strongest version of sustainability which promotes generational and social justice.[133] According to Circo,

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[128] *Ibid.* at 4-5, citing in part to Steven C. Hackett, *Environmental and Natural Resources Economics: Theory, Policy, and the Sustainable Society,* at 325 (2006).
[129] Circo, *supra* note 14 at 5-6, citing in part to Edith Brown Weiss, "Intergenerational Equity: A Legal Framework for Global Environmental Change" in Environmental Change and International Law, E. Brown Weiss, ed. (1992).
[130] Circo, *supra* note 14 at 6.
[131] *Ibid.*
[132] *Ibid.*, citing in part to Michael Redclift, *Sustainable Development: Concepts, Contradictions, and Conflicts*, at 169 (1993).
[133] Circo, *supra* note 14 at 7.

> [s]ustainability theory claims that those who exercise dominion over natural resources should do so only to the extent they can without consuming, exhausting, or injuring those resources. In other words, every owner is a steward of the natural capital over which he or she may exercise dominion. As a result, the theoretical tension between sustainability and private property stems primarily from the difference between ownership in usufruct (the temporary right to use property without diminishing its future value) and absolute ownership (the prototypical, Blackstonian fee simple).[134]

Yet, all "dominant property theories" will tolerate significant restrictions on private property rights in the name of resource conservation.[135] It is far less likely, according to Circo, that traditional property theories will tolerate government strategies that are justified primarily by social justice which has a goal of distributive equity.[136] Moreover, distributive justice currently does not figure prominently in either the legislative or the judicial bases for current environmental protection (in the United States).[137] Circo holds that sustainability will challenge the property regime depending on the underlying theoretical justification offered for it.[138] Whereas sustainability as resource conservation has been reconciled with a traditional property framework, economic analysis of property recognizes generational justice depending on current and future work by economists on how natural capital is viewed.[139] Overall, however,

> [t]he concept of property...embodies sufficiently eclectic perspectives to accommodate much that sustainability demands...effective sustainability programs and strong property rights can coexist in the United States, but not necessarily at the level the international sustainability movement promotes. The critical question is whether the...sustainability advocates

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[134] *Ibid*. at 44.
[135] *Ibid*. at 45.
[136] *Ibid*. at 46.
[137] *Ibid*.
[138] *Ibid*. at 51.
[139] *Ibid*.

> can muster the theoretical support they need to achieve their social justice objectives. For now, at least, it seems they cannot.[140]

Some of the important findings of Circo's work include, (1) that the traditional property framework "may be sufficiently malleable and subjective to accept a generational justice basis for sustainability"[141] and (2) the objectives underlying the sustainability movement are capable of being adapted into mainstream regulation and governance.[142] Which theory is used, however, depends on its acceptance by those forces and people who have the power to do so. This change will most likely only occur when society, through its government and policy focus, is ready to accept it.

Regardless of the theories underlying the current sustainability model used in Canada, Muldoon and McClenaghan make clear that sustainability and conservation put into practice in this country must be a fully integrated Canada-wide process, with many "players" (including the First Nations) involved in its implementation:

> It is critical that the federal government coordinate with the provinces, territories, and First Nations on a conservation strategy for Canadian water. Conservation goals should be unified, integrated, and non-contradictory, and they should be based on sound science.[143]

For the first Nations of Ontario and all of Canada that recognize the spiritual nature of water, "decisions relating to water must treat it with awe and reverence rather than as merely one more resource to be managed, controlled, exploited, and used."[144] According to Walkem, "a commitment to reversing the deliberate suppression of

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[140] *Ibid.*
[141] *Ibid.*
[142] *Ibid.*
[143] Muldoon, *supra* note 60 at 255.
[144] Ardith Walkem, "The Land is Dry: Indigenous Peoples, Water, and Environmental Justice" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 316.

indigenous laws and territorial rights offers hope of restoring environmental justice."[145] Currently, this spiritual nature of water is lacking in the law and governance of the Great Lakes basin.

4.6 International Law & The Human Right to Water: Adding Another Layer to the Great Lakes "Onion"

Further adding to the complexity of water management is the issue of the human right to water. In 2004, the United Nations passed a resolution to proclaim that the decade beginning in 2005 and ending in 2015 is the "Water for Life, the International Decade for Action."[146] On July 28, 2010, after previous failed attempts[147], the United Nations General Assembly adopted a resolution recognizing access to clean water and sanitation as a human right by a vote of 122 in favour, none against and forty abstentions (including Canada).[148] This historic vote signals the official recognition at the international level of a new global water ethic.[149] There is debate, however, as to

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[145] *Ibid*. at 316-17.

[146] *International Decade for Action, "Water for Life", 2005-2015*, Res. 58/217, UN GAOR, 58th Sess., UN Doc. A/RES/58/217 (2004), online: <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N03/507/54/PDF/N0350754.pdf?OpenElement>.

[147] *See* Linda Diebel, "Canada foils UN water plan" The Toronto Star (2 April 2008), online: thestar.com <http://www.thestar.com/News/Canada/article/409003> (last viewed 20 September 2010).

[148] U.N. GA, 64th GA, 108th Mtg., Res. 10967 (2010), online: <http://www.un.org/News/Press/docs/2010/ga10967.doc.htm> (last viewed 15 September 2010). Canada is one of the founding members of the United Nations, and became a member state on 9 November 1945. On 10 December, 1948, the U.N. General Assembly adopted and proclaimed the Universal Declaration of Human Rights (*see* online: <http://www.un.org/en/documents/udhr/index.shtml>). Currently there are 192 member states. The actions of the U.N. are based on certain principles, including that all members must fulfill their U.N. Charter obligations (*see* online: <http://www.un.org/en/documents/charter/index.shtml>) and that the U.N. may not interfere in the domestic affairs of any state.

[149] An ethic has been defined as:

> [...] a set or system of moral principles or values that guides the actions or decisions of an individual or group. It helps...determine what is acceptable conduct in society and provides a basis for judging how to act rightly or wrongly. No set of ethics provides a basis for judging how to act rightly or justly. No set of ethics provides all the answers.

Cushla Matthews, Robert B. Gibson, and Bruce Mitchell, "Rising Waves, Old Charts, Nervous Passengers: Navigating toward a New Water Ethic" in Bakker, *supra* at 337 [***Matthews et al***.].

whether or not water should be (and can be) viewed as a human right or as an economic resource, or as both:

> The consideration of water as an economic resource means that water must be allocated to its various uses in a way which maximizes its value for a social group or region. The consideration of water as a social resource implies that its availability should favour social well being, at both individual and collective levels.[150]

Although the U.N. vote signals the official U.N. acceptance of water as a human right at the international law level, Canada's abstention is consistent with its domestic legislation, where a right to water currently does not exist.[151] Writing before the U.N. resolution was passed, the Council of Canadians (a non-government organization) stated that:

> [a] binding convention on the right to water would outline the responsibility of international governments to provide safe drinking water for all people, regardless of the community or country they live in. Most importantly, water would be recognized as a fundamental right. This would ensure that access to safe water is not determined by one's ability to pay for it.
>
> A [U.N.] convention on the right to water would establish clear reporting and redress mechanisms. It would also help put a stop to the rampant pollution, depletion and abuse of [Canadian] water sources. States would be required to provide access to clean water and basic sanitation to all peoples within their borders. A convention would not require countries to provide water to others.[152]

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[150] da Cunha, *supra* note 1 at 97.

[151] The Right to Water Webpage, online: The Council of Canadians <http://www.canadians.org/water/issues/right/index.html> citing The Honourable Dennis R. O'Connor, *Report of the Walkerton Inquiry: The Events of May 2000 and Related Issues*, part. 1 (Toronto: Ontario Ministry of the Attorney General, 2002).

[152] "A National Disgrace: Canada's shameful position on the right to water", online: The Council of Canadians <http://www.canadians.org/water/documents/factsheet/RTW-Canada.pdf> (last modified 26 July 2010) (last viewed 20 September 2010).

As noted by Sampford, in many cases human rights may also be economic goods, and "if the right is recognized and valued by individuals, it will generally be valued by a market if it is available on a market. This may lead to a demand for property rights."[153]

Water compatibility as both an economic resource and as a human right can only be solved by resorting to effective water governance, which includes the range of political, social, economic and administrative systems in place.[154] Complete water governance involves the government, institutional and legal reforms, private interests and the civil society, including water users and stakeholders.[155]

4.7 Conclusion

Theoretically, new theories of water management and property have been examined and make clear that a holistic view of water can exist in the property paradigm. What appears to be lacking in principle in the province of Ontario (and the country of Canada), however, is the view of water as something more than just a common pool resource.

> In sum, there is lacking, both within the federal government and between the federal and provincial levels any [one] mechanism that could qualify as a comprehensive and effective means for coordinating—let alone harmonizing—interjurisdictional arrangements affecting water management in Canada.[156]

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[153] Charles Sampford, "Water right and water governance: A cautionary tale and the case for interdisciplinary governance" in M. R. Llamas, L. Martinez-Cortina, and A. Mukherji, eds., *Water Ethics* (London: Taylor & Francis Group, 2009) at 55.

[154] da Cunha, *supra* note 1 at 112.

[155] da Cunha, *supra* note 1 at 112.

[156] J. Owen Saunders, "Interjurisdictional Issues in Canadian Water Management" (Calgary: Canadian Institute of Resources Law, 1988) at 46, cited in Grant, *supra* note 5 at 170.

This is most likely a product of history which, at first, did parallel, to some extent, notions of common use and protection, but did not include the value of water as viewed by the First Nations of Ontario:

> To assert that European settlement brought a new approach to water management is an understatement. The idea of applying property rights to water use arose out of attempts to protect water's public uses while allowing private parties to use it for their own purposes. Historically, public uses predominated in Canadian common law, whose originals are in British and Roman law. The Roman approach to water held that the primary values of rivers and seas are preserved when they are held in common, with protection of public values being predominant; however, it admitted that marginal improvement to overall welfare might occur when some limited private access was allowed.[157]

Somewhere along the history of management and use, most likely with the advent of industrialization and capitalism, societal values changed pertaining to water:

> Currently, it would be difficult to argue that Canada manages water for the primary purpose of protecting common values. While all Canadian jurisdictions, except Ontario and Prince Edward Island, explicitly vest the ownership of water in the Crown, most provincial governments manage water in order to maximize private commercial and/or industrial activity, which "requires" granting private parties "secure" access rights.[158]

According to Richardson, modern systems of planning law and environmental regulation have rationalized rights to development which has in turn allowed governments to control even the most trivial of activities pertaining to water management.[159] Although more governance and management would seem at first to be

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[157] Randy Christensen and Anastasia M. Lintner, "Trading Our Common Heritage? The Debate over Water Rights Transfers in Canada" in Karen Baker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 222, citing in part to R. A. Epstein, "On the Optimal Mix of Private and Common Property" in E.F. Paul, F. E. Miller, Jr., and J. Paul, eds., *Property Rights* (Cambridge: Cambridge University Press, 1994).

[158] *Ibid.*, citing in part to Randy Christenson, *Groundwater Pricing Policies in Canada* (Toronto: Walter and Duncan Gordon Foundation, 2005).

[159] Benjamin J. Richardson, "The Ties That Bind: Indigenous Peoples and Environmental Governance" in B. Richardson, S. Imai and K. McNeil, eds., *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Oxford: Hart Publishing, 2009) at 369 [***Richardson***].

a good thing, the full appreciation for water as something more than a just a thing for industry, etc., is what is truly lacking today.

For private property owners, whether Indigenous or non-Indigenous, the Blackstonian notion of absolute, unfettered control over land, and water, is a myth.[160]

> Property rights in Western legal traditions are conceptualized as a bundle of rights, in which development and environmental rights are increasingly the prerogative of governmental authorities. Indigenous property can be similarly regulated.
>
> Even constitutionally-protected Aboriginal and treaty-based resource rights in Canada are susceptible to land use regulation by the Crown.[161]

[160] *Ibid.* at 27.
[161] *Ibid.* at 28.

CHAPTER FIVE: CONCLUSION

5.1 Sacrificing Sustainability? *The Times They Are a-Changin'*[1]

As the human race continues to multiply and expand around the globe with every passing day, and resources are consumed at a pace never before seen in human history, certain realities at both an individual level and localized societies, apparent also from a global perspective, make clear a desire for change from past and current practice. Resource sustainability is such an example. The "Green Consciousness" has made its way into Western Society, and with it, a new mindset, affecting many realms of society. The Great Lakes and St. Lawrence River, the world's largest source of freshwater, is the subject of such protection.

There has been an increase in calls for new approaches and institutional arrangements for water governance in Canada.[2] This thesis has explored the issue of how First Nations in the province of Ontario are included in the Great Lakes water governance, and how property law and legal theory has shaped the current management structure. One of the few areas of convergence across the provinces of Canada with respect to water appear to be the law, regulations and policies in place to prohibit bulk water removal of freshwater.[3] This includes the Great Lakes waters. Although the measures taken to manage the Great Lakes may not parallel all Ontario

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[1] "The Times They Are a-Changin'" is a song written by Bob Dylan. It was released as the title track of his 1964 album titled "The Times They Are a-Changin'."

[2] Carolyn Johns, "Introduction" at 4, in M. Sproule-Jones, C. Johns, and B. T. Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008). *See* K. Bakker, "Conclusion: Governing Canada's Waters Wisely" in K. Bakker, ed., Eau Canada: The Future of Canada's Water (Vancouver: UBC Press, 2007).

[3] Carey Hill, et al., "A Survey of Water Governance Legislation and Policies in the Provinces and Territories", in Karen Baker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) at 384.

First Nation values directly and completely, the management structure currently in place does value a form of sustainability of the Great Lakes basin with regards to water withdrawal within and outside of the basin. Furthermore, although a holistic theory of property pertaining to water exists in the academic world, the practical implications of its implementation and application remain theoretical at this point in time. At issue in the practical sense remain questions of what extent Ontario First Nations will play, and should play, in the current and future management of the Great Lakes and St. Lawrence River fresh water basin. Canadian law, policy, and societal views and values are all at play. As Richardson concludes,

> Indigenous peoples' ties to environmental governance have been shaped by specific legal rights, as well as academic and policy debates about the relative value of Indigenous knowledge and customs to modern environmental management. It is too simplistic, however, to conclude that more indigenous control will resolve both their desires for self determination and ensure sustainable use of the environment.[4]

Therefore, no assumption should be made that there is indeed an inevitable path to reform that will parallel First Nations' values with Great Lakes water management. Canada and Ontario have begun the process of increasing the indigenous voice in Great Lakes governance. But a simple voice as an end goal may not be enough. Richardson believes that

> [...] if indigenous livelihoods that respect the environment are to be sustained, an Indigenous voice in local environmental governance is not enough—it must also be heard in the institutions that shape the global economy, trade, finance and other fundamental causes of environmental pressure.[5]

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[4] Benjamin J. Richardson, "The Ties That Bind: Indigenous Peoples and Environmental Governance" in B. Richardson, S. Imai and K. McNeil, eds., *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Oxford: Hart Publishing, 2009) at 369 [***Richardson***].

[5] *Ibid*. at 370.

Change of this type is without a doubt a tall order. It also highlights the reality that global forces are at play within this conversation, and add to the levels of complexity of this issue. To begin with, scholarly literature on First Nations values, knowledge and perspectives alone will not provide a "sufficiently plausible account of all Indigenous peoples' relationships to the environment."[6] Furthermore, Indigenous peoples' relationships with the environment vary. Today, "some communities have successfully adapted to new environmental threats and conditions, while others have struggled."[7] Likewise, romanticizing Indigenous people as ecological guardians can foster harmful stereotypes that may imply expectations that are unrealistic in today's world.[8] Richardson states that "where the ownership of the land is in the hands of the traditional owners, they are in a much stronger position to control its environmental management."[9] However,

> [...] because Indigenous self-determination and environmental protection may not always be mutually reinforcing, other institutions are needed to reconcile Indigenous livelihoods (as with all lifestyles) with overarching collective responsibilities to safeguard the planet.[10]

There are past instances where Canadian law has evolved, recognized and adapted to include the value of Indigenous perspectives within the Canadian legal system. For example, First Nation community participation in the Canadian criminal justice system was first used in 1993 by Stuart J. in *R. v. Moses*.[11] "Circle sentencing"

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[6] *Ibid*. at 389
[7] *Ibid*.
[8] *Ibid*. at 389-90. Richardson also notes that within Western environmental traditions there exist diverse philosophies and practices which include deep ecologism and animal liberationism. *Ibid*.
[9] *Ibid*. at 390.
[10] *Ibid*.
[11] (1993), 71 C.C.C. (3d) 347 (Y. Terr. Ct.).

is now used as an alternative procedure to conventional sentencing of Aboriginal peoples.[12] In fact,

> [c]ircle sentencing aims to reverse the colonial pattern of excluding Aboriginal people and values from important decision-making functions with respect to the administration of justice.[13]

This alternative, however, has not been used outside the Aboriginal community.

There are examples of joint resource management in Canada with Indigenous peoples. A case on point is Canada's Comprehensive Land Claims Process ("CLCP") which allows Indigenous communities to participate in environmental decisions, with Aboriginal and non Aboriginal-stakeholders working together to manage natural resources, including water.[14] Most of the CLCP agreements, however, have been able to work because they involve areas of land in Northern Canada where Aboriginal and Inuit lands were not historically ceded to the Crown.[15] This is not the historic reality in the province of Ontario, bus see the 2010 *Far North Act*, discussed below.

With regards to land use and water governance, First Nations and the Canadian government negotiated the *First Nations Land Management Act* (1999)[16] which gives First Nation bands the choice to opt into a self governance regime over their own reserve land.[17] In Ontario, six bands[18] acts as operation members while four[19] are

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[12] *See* Luke McNamara, "The Locus of Decision-Making Authority in Circle Sentencing: The Significance of Criteria and Guidelines" (2000) 18 Windsor Y.B. Access Just. 60 at 72 (Westlaw).

[13] *Ibid.* at 1.

[14] Richardson, *supra* note 4 at 407

[15] *Ibid.* at 407-08.

[16] *An Act providing for the ratification and the bringing into effect of the Framework Agreement on First Nation Land Management*, S.C. 1999, c. 24.

[17] Richardson, supra note 4 at 406. According to Richardson, as of July 2008, 35 First Nations committed to the process. This process involves drafting land management codes for each community and negotiation of an individual agreement with Indian and Northern Affairs and Northern Development. *Ibid.* See www.fafnlm.com/content/en/LandCodes.html

[18] These bands include: Nipissing, Scugog Island, Georgina Island, Whitefish Lake, Mississauga and Henvey Inlet. *See* http://www.fafnlm.com/member-communities.html.

under development. Richardson finds, however, that the land management codes drafted to date "resemble municipal planning codes setting out procedural standards rather than substantive environmental or land use policy goals."[20] Furthermore,

> Although Indigenous communities may enjoy significant control over natural resources on designated reserves, the small size of many reserves make long-term, sustainable management approaches impractical.[21]

Recently, the Ontario provincial legislature passed legislation for the purpose of protecting a substantial area of its northern land and its resources and, at the same time, includes the affected First Nations in its management and governance. The *Far North Act*[22] will, according to the government, enable a community-based land use planning process that will give First Nations in the Far North region of the province a "leadership role in determining areas to be protected."[23] This is at once an example of legislation that may from the outset have support from environmental groups, but, nonetheless, is not supported by all Ontario First Nations. It has been suggested that the bill violates treaty rights and takes away the ability of those affected First Nations to protect the land that they inhabit and gives the Ontario provincial government the power to override any land use decisions made by the First Nations.[24] *The Far North Act* appears on paper, at least, to advance the participation of First Nations in Ontario as

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[19] These bands include: Anishinaabeg of Naongashiing, Kettle & Stony, Alderville and Dokis. *Ibid.*

[20] Richardson, *supra* note 4 at 406. For an example of a land management code, see the Scugog Island First Nation Land Management Code at <http://www.fafnlm.com/land-codes/land-code-3.html>.

[21] Richardson, *supra* note 4 at 406.

[22] Bill 191, *An Act With Respect To Land Use Planning and Protection in the Far North*, 2nd Sess., 39th Leg., Ontario, 2010 (assented to 23 September 2010).

[23] Backgrounder – Bill 191, The Far North Act, 2010 – following Second Reading, online: Ontario Ministry of National Resources <http://www.mnr.gov.on.ca/en/Business/FarNorth/> (last viewed 25 September 2010) [***Far North Webpage***].

[24] Tanya Talaga, "Liberals push through Far North bill despite First Nations outcry" *The Toronto Star* (23 September 2010), online: <http://www.thestar.com/news/sciencetech/environment/article/865509--liberals-push-through-far-north-bill-despite-first-nations-outcry?bn=1>.

well as call for the inclusion of traditional knowledge,[25] however, the same type of vague permissive language used in the *Great Lakes Agreement* is also found in the *Far North Act*. It remains to be seen, then, how the Act translates into practice. The Ontario government continues to allow First Nations' input, but ultimately has the final say on what actually happens.[26] While there may be room for the hearing of First Nation values, the result may be inconsistent with Indigenous law.

5.2 Moving Forward: Ontario First Nations' Water Values and Holistic Property Theory

As has been hinted at, any end goal of a complete incorporation of First Nations' values into water governance would have to encompass great change at many levels. To begin with, a survey of every identifiable First Nation group across Ontario would have to take place. Since a holistic view of water sees it as something alive and interconnected within the environment, and knowing that water moves within a global

[25] This is found in s. 6 and 6.1 of the Act:

> 6. The following are objectives for land use planning in the Far North:
>
> 1. A significant role of First Nations in the planning
> 2. The protection of areas of cultural value in the Far North and the protection of ecological systems in the Far North by including at least 225,000 square kilometers of the Far North in an interconnected network of protected areas designated in community based land use plans.
> 3. The maintenance of biological diversity, ecological processes and ecological functions, including the storage and sequestration of carbon in the Far North.
> 4. Enabling sustainable economic development that benefits the First Nations.
>
> Contributions of First Nations
>
> 6.1 First Nations may contribute their traditional knowledge and perspectives on protection and conservation for the purposes of land use planning under this Act.

[26] According to the Ministry of Natural Resources website,

> "The Minister would be required to invite First Nations to participate in discussions with respect to establishing a joint body that **could** advise the Minister on the development, implementation and co-ordination of land use planning in the Far North. The discussions would include the criteria for members to be appointed to the joint body, the functions of the joint body, and the procedures the joint body would have to follow in carrying out its functions. The Joint Body would be established once the First Nations and the Minister make a joint recommendation to establish the body. The joint body would be composed of equal numbers of members from First Nations and the representatives from the Government of Ontario." Far North Webpage, *supra* note 23. (emphasis added.)

cycle, a further survey would have to take place across Canada and expanded out to around the world in order to truly understand and appreciate the variety of values and subtleties that most surely exist.

Even without such global information, a Canadian survey would probably be a more attainable goal. A new Federal Water Policy could also be a more realistic vehicle in which to incorporate these values. Being only a federal policy, however, it would have its positive as well as negative attributes. From a positive perspective, the federal policy could be used to elevate the seriousness of Indigenous knowledge and governance as a legitimately equal consideration. As a negative, such a policy would not have the permanency that legislation would have, but legislation is always subject to amendment and change with every new government.

5.3 Conclusions Reached After Research

Based on the research completed, this thesis draws the following conclusions:

1. The traditional property rights paradigm, which is based on the common law that was received in Ontario (and Canada) does not advance a holistic theory of property that parallels Ontario First Nation values.
2. First Nations have expressed a desire to have increased involvement in the water management of the Great Lakes basin and the St. Lawrence River as stewards of these waters from time immemorial. The implementation of the *Great Lakes Agreement* has allowed some Ontario First Nations to participate in a limited advisory role regarding the management of these waters.

3. This thesis cannot definitely conclude that the integration of all of Ontario's First Nations' water values would ensure ecological integrity of use of the Great Lakes basin and St. Lawrence River. Further research and application is required. Ontario First Nations, however, remain limited in their participation and governance of the entire Great Lakes and St. Lawrence River basin waters; equal room is not given to indigenous law.
4. Theoretical models of water sustainability are evident in novel legal theory. These theories may be said to generally parallel the cultural values of Ontario First Nations with regards to valuing water more so than the current property paradigm does, however, further study is required to specifically address the values of every First Nation in Ontario.
5. Water governance of the Great Lakes basin and St. Lawrence Seaway under the *Great Lakes Agreement* and its accompanying legislative modifications currently follows a sustainability model regarding intra- and inter-basin water diversions, yet water export under NAFTA remains an issue in legal flux with potentially serious implications for the future.
6. Water law in the province of Ontario and the country of Canada is fragmented and remains a tangled web of provincial and federal legislation, common law, international treaties, and good-faith agreements; the use of the public trust doctrine in the province of Ontario is limited but offers potential for the future.

5.4 Possible Ways Forward and Relevant Areas For Future Study

The following areas of study flow from the research conducted in this thesis:

1. Documenting the water values and respective customary laws for every identifiable First Nation group in Ontario

Future research will be required to uncover those Ontario First Nations' views and values as they relate to the water of the Great Lakes and St. Lawrence River basin, as well as all water sources. It is recognized that future research must determine what these values are and how they may inform future developments in the area of the Great Lakes and St. Lawrence River Basin water management and sustainability in province of Ontario. Possible work will be to analyze current treaties and agreements between the governments and the First Nations and to determine to what extent new agreements can be made that would incorporate the First Nation water values. Furthermore, going beyond just the values and into the study of the indigenous laws of each First Nation should be explored, compared and contrasted.

2. The legacy of the *Great Lakes Agreement* and any subsequent Great Lakes and St. Lawrence River Basin Legislation

New agreements, treaties or statutes relating to the Great Lakes and St. Lawrence River Basin will undoubtedly be drafted at some point in the future. Time will tell whether such legislation is focused on the increased sustainability of these waters. The "players" involved will need to be documented and compared to the facts and circumstances of the previous legislation. The issue of climate change will no doubt also be a factor.

3. Fresh water export and its implications under the internationally recognized human right to clean water in particular and to climate justice in general

The development and application of the new international right should be explored to see how, and if, it is utilized at the international level and whether it will impact the water of the Great Lakes and St. Lawrence River basin. How the Government of Canada reacts to any demand from foreign countries for freshwater will directly affect those dependent on freshwater in Canada.[27]

4. The implementation of *The Far North Act* (Ontario) and how First Nations are actually included in resource management

It will be important to document the level of direct management given to First Nations and whether or not any decisions are ultimately vetoed by the provincial government. A close study is important for determining if there has been a change in attitude of the government and, if so, whether the government would be more adept to allowing increased First Nation management in other resources, including the Great Lakes and St. Lawrence River waters.

5. The Public Trust Doctrine in Ontario

The use of the public trust doctrine in the province of Ontario should be monitored. According to Barlow, Ontario has yet to commit to key public trust law to

[27] For further information on the development of the Right to Water, *see* Maude Barlowe, "Our Right to Water: A People's guide to Implementing the United Nations' Recognition of the Right to Water and Sanitation" (June 2011) online: < http://www.canadians.org/water/documents/RTW/righttowater-0611.pdf>.

protect the Great Lakes and the St. Lawrence River basin.[28] Yet, the public trust doctrine has been identified as an important tool "[...] to fuse solutions to both the ecological and human water crises."[29] At this thesis has made clear, the public trust doctrine offers the potential for a hierarchy of use of water which may or may not make a difference in the current management structure of the Great Lakes and St. Lawrence River Basin.

5.5 Final Remark

The aim of this thesis has been to examine the relevant primary legal sources and to identify if these sources provide Ontario First Nations with a voice for indigenous values in managing the Great Lakes and St. Lawrence River freshwater basin. Having concluded that the current legislation and management framework provides a limited First Nation voice, future study and work in this area should be directed at capturing the views of those affected First Nation communities and to what extent each First Nation would (or should) incorporate its values into a management structure.[30]

Although the First Nations in Ontario have a connection as the original stewards of their lands, gaps[31] remain in the current water management structure precluding the First Nations from taking an increased management role in the continued sustainability

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[28] Maude Barlow, "Our Great Lakes Commons: A People's Plan to Protect the Great Lakes Forever" (2011) online: <http://www.blueplanetproject.net/resources/reports/GreatLakes-0311.pdf> at 28.

[29] *Ibid*. at 25.

[30] This assumes that every Ontario First Nation would want their own set of water values included into a joint Great Lakes and St. Lawrence River water basin management structure. This author has not come across any indication that would suggests that a First Nation would not want to be included, however, the possibility remains and must be researched further.

[31] These gaps have been identified throughout this thesis and include the limited voice given to Ontario First Nations in participating and decision making within the Great Lakes and St. Lawrence River water management structure. There is also the issue of lack of clean water infrastructure on some First Nation reserves, which this thesis has not covered. For more information, *see* Chiefs of Ontario, "National Assessment of First Nations Water and Wastewater Systems Highlights Dramatic Health Risks and the Need for Immediate Action" (July 15, 2011) online: < http://chiefs-of-ontario.org/News/Default.aspx?NewsID=225>.

of the Great Lakes and St. Lawrence River freshwater basin. With the increase in demand and pressure placed upon the use of this limited resource, fresh water sustainability is presently a local and a global issue and challenge. Ontario's First Nations' place in the management of the Great Lakes and St. Lawrence River Basin remains a complicated issue.

BIBLIOGRAPHY

Primary Materials

Legislation

An act for the settlement of certain questions between the Governments of Canada and Ontario respecting Indian Reserve lands, S.C. 1924, c. 48.

An Act providing for the ratification and the bringing into effect of the Framework Agreement on First Nation Land Management, S.C. 1999, c. 24.

An Act to amend the North-west Irrigation Act, S.C. 1895, c.33.

Beds of Navigable Waters Act, R.S.O. 1990, c. B-4.

Beds of Navigable Waters Act, S.O. 1911, c. 6, s. 2.

Bill 191, *An Act With Respect To Land Use Planning and Protection in the Far North*, 2nd Sess., 39th Leg., Ontario, 2010 (assented to 23 September 2010).

Canada Water Act, R.S. 1985, c. C-11.

Canada, Bill C-26, *An Act to amend the International Boundary Waters Treat Act and the International River Improvements Act*, 3rd Sess., 40th Parl., 2010 (The Bill has reached first reading as of 13 May 2010), online: <http://www2.parl.gc.ca/HousePublications/Publication.aspx?Docid=4528706&file=4>.

Canadian Environmental Assessment Act, S.C. 1992, c. 37.

Canadian Environmental Protection Act, S.C. 1999, c. 33.

Constitution Act, 1867 (U.K.), 30 & 31 Vict., c. 3, reprinted in R.S.C. 1985, App. II, No. 5.

Constitution Act, 1930, 20-21 Geo. V, c.26 [U.K.].

Constitutional Act, 1982, being Schedule B to the *Canada Act 1982* (U.K.), 1982, c. 11.

Drainage Act, R.S.O. 1990, c. D.17.
Environmental Bill of Rights, S.O. 1993, c. 28.

General Agreement on Tariffs and Trade, 30 October 1947, 58 U.N.T.S. 187, Can T.S. 1947 No. 27 (entered into force 1 January 1948).

Great-Lakes-St. Lawrence River Basin Water Resources Compact, Pub. L. No. 110-342, 122 Stat. 3739 (2008).

Indian Act, R.S.C. 1985, c. I-5.

Indian Lands Agreement (1986) Act, S.C. 1988, c. 39, repealed by the *Legislation Act, 2006*, S.O 2006, c. 21, reinstated retroactively under *Creating the Foundation for Jobs and Growth Act, 2010*, S.O. 2010, c. 1., Schedule 10.

Lakes and Rivers Improvement Act, R.S.O. 1990, c. L.3.

Lands Act, S.N.L. 1991, c. 36.

Migratory Birds Convention Act, S.C. 1994, c. 22.

Municipal Water and Sewage Transfer Act, S.O. 1997, c. 6, Schedule A.

North American Free Trade Agreement Between the Government of Canada, the Government of Mexico and the Government of the United States, 17 December 1992, Can. T.S. 1994 No. 2, 32 I.L.M. 289 (entered into force 1 January 1994).

North-West Territories Act, S.S. 1886, c. 50.

Nutrient Management Act, S.O. 2002, c. 4; amended 2009, c. 33, Sched. 15, s. 7, online: <http://www.glc.org/about/glbc.html>.

Ontario Clean Water Act, S.O. 2006, c. 22.

Ontario Environmental Assessment Act, R.S.O. 1990, Chapter E.18.

Ontario Water Resources Act, R.S.O. 1990, c. 0.40.

Ontario Water Resources Act, R.S.O. 1990, c. 0.40.

Ontario Water Resources Commission Amendment Act, 1960-61, S.O. 1960-61, c. 71, s.3.

Ontario Water Taking Regulation, O. Reg. 387/04.

Safe Drinking Water Act, S.O. 2002, c. 32.

Safeguarding and Sustaining Ontario's Water Act, 2007, S.O. 2007, c. 12.

Species At Risk Act, C. 29, 51 Elizabeth II.

Sustainable Water and Sewage System Act, S.O. 2002, c. 29.

The Beds of Navigable Waters Act, R.S.O. 1990, c. B.4, as amended by R.S.O. 2002, c.18, Sched.L, s.2.

The Beds of Navigable Waters Amendment Act, 1951 S.O. 1951, c. 5.

The Great Lakes Basin Compact, Pub. L. No. 90-419, 90 Stat. 660 (1968).

The North-west Irrigation Act, S.C. 1894, c.30.

Water Act Amendment Act, 1925, S.B.C. 1925, c. 61.

Water Privileges Act, 1892, S.B.C. 1892, c.47.

Water Resources Act, S.N.L. 2002, c. W-4.01, amended 2004 cL-3.1 s. 66; 2008 c. 47 s. 20; 2008 cE-9.1 s. 28.

Charters

The Great Lakes Charter, Principles for the Management of Great Lakes Water Resources, Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Quebec, Wisconsin, 11 February 1985, online: <http://www.cglg.org/projects/water/docs/GreatLakesCharter.pdf>.

Treaties

Boundary Waters Treaty, Jan. 11, 1909, United States-Great Britain (for Canada), Preliminary Article, 36 Stat. at 2448-49.

Treaty Relating to Boundary Waters and Questions Arising with Canada, United States and United Kingdom, 11 January 1909, 36 U.S. Stat. 2448, U.K.T.S. 1910 No. 23., Schedule to the *International Boundary Waters Treaty Act*, R.S.C. 1985, c. 1-17 as amended.

Federal-Provincial Agreements

Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem, online: <http://www.ene.gov.on.ca/publications/6263e.pdf>.

Provincial-State Agreements

Annex to the Great Lakes Charter, June 18, 2001, available at http://www.cglg.org/projects/water/docs/GreatLakesCharterAnnex.pdf (last visited 18 May 2010).

Great Lakes-St. Lawrence River Basin Water Resources Agreement, between the states and provinces of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, Quebec, Wisconsin, signed 13 December 2005, online: <http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@water/documents/document/200040.pdf>.

Case Law

British Columbia v. Canadian Forest Products Ltd., [2004] 2 S.C.R. 74.

Buck v. Cobourg and Peterboro Ry. (1857), 5 U.C.C.P. 552.

Byron v. Stimpson (1878), 17 N.B.R. 697.

Chasemore v. Richards (1859), 7 H.L.C. 349, 11 E.R. 140.

Chippewas of Nawash Unceded First Nation and Saugeen First Nation v. The Attorney General of Canada and Her Majesty the Queen in Right of Ontario, Statement of Claim, Ontario Superior Court of Justice, Court File No. 03-CV-261134CM1, served January 5, 2004.

Delgamuukw v. British Columbia, [1997] 3 S.C.R. 1010.

Dickson v. Carnegie (1882), 1 O.R. 110.

Embrey v. Owen (1851), 6 Ex. 353.

Green v. The Queen in Right of the Province of Ontario et al., [1972] O.J. No. 2068 (Ont. H.C.J.).

Haida Nation v. BC (Minister of Forests), [2004] 3 S.C.R. 511.

Illinois Central Rail Road Co. v. Illinois, 146 U.S. 387 (1892).

John Young & Co. v. Bankier Distillery Co., [1893] A.C. 691.

Lyon v. Fishmongers' Co (1876), 1 App. Cas. 662 (U,K. H.L).

McGillivray v. Township of Lochiel (1904), 8 O.L.R. 446.
McKie v. K.V.P. Co., [1949] 4 D.L.R. 497 (S.C.C.), aff'g with a variation [1948] O.R. 398 (H.C.).

Merritt v. City of Toronto (1913), 48 S.C.R. 1.

Mitchell v. M.N.R., [2001] 1 S.C.R. 911.

Parker v. Elliot (1852), 1 U.C.C.P. 470.

Pickels v. R. (1912), 14 Ex. C.R. 379.

R v. Van der Peet, [1996] 4 C.N.L.R. 177.

R. v. Adams [1996] 3 S.C.R. 101.

R. v. Badger, [1996] 1 S.C.R. 771.

R. v. George, [1966] 2 S.C.R. 267.

R. v. Gladstone, [1996] 2 S.C.R. 723.

R. v. Meyers (1853), 3 U.C.C.P. 305.

R. v. Moses (1993), 71 C.C.C. (3d) 347 (Y. Terr. Ct.).

R. v. Simon, [1985] 2 S.C.R. 387.

R. v. Sioui, [1990] 1 S.C.R. 1025.

R. v. Sparrow, [1990] 1 S.C.R. 1075.

Taku River Tlingit First Nation v. BC (Project Assessment Director), [2004] 3 S.C.R. 550.

Throop v. Cobourg and Peterboro Ry. (1856), 5 U.C.C.P. 509; affirmed: (1857), 2 O.A.R. 212*n.*

Tsilhqot'in Nation v. British Columbia [2007], B.C.J. No. 2465 (B.S.S.C.).

Van Egmond v. Town of Seaforth (1884), 6 O.R. 599.

Walpole Island First Nation, Bkejwanong Territory v. Attorney General of Canada and Her Majesty the Queen in Right of Ontario, Statement of Claim, Court File No. 00-CV-189329, Ontario Superior Court of Justice, April 26, 2000.

International Law

Convention on Biological Diversity, 5 June 1992, 1760 U.N.T.S.30619, (signed by Canada on 11 June 1992; registered ex officio on 29 December 1993).

Declaration 146, *NGO Forum, World Conference Against Racism, Racial Discrimination Xenophobia and Related Intolerance* (WCAR), Durban, South Africa, August 27-Sept 1, 2001, online: <http://academic.udayton.edu/race/06hrights/WCAR2001/NGOFORUM/Indigenous.htm>.

International Decade for Action, "Water for Life", 2005-2015, Res. 58/217, UN GAOR, 58th Sess., UN Doc. A/RES/58/217 (2004), online: <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N03/507/54/PDF/N0350754.pdf?OpenElement>.

The United Nations Declaration on the Rights of Indigenous Peoples, U.N. GAOR, 61st sess, GA Res 61/295, UN Doc A/RES/47/1 (2007).

U.N. GA, 64th GA, 108th Mtg., Res. 10967 (2010), online: <http://www.un.org/News/Press/docs/2010/ga10967.doc.htm>.

Reports

Chiefs of Ontario, *Aboriginal Traditional Knowledge and Source Water Protection: Final Report* (prepared by the Chiefs of Ontario for Environment Canada, August 2007).

Chiefs of Ontario, *Aboriginal Traditional Knowledge and Source Water Protection: First Nations' Views on Taking Care of Water* (prepared by Giselle Lavalley for the Chiefs of Ontario and Environment Canada, March 2006).

Chiefs of Ontario, *Drinking Water in Ontario First Nation Communities: Present Challenges and Future Directions for On-Reserve Water Treatment in the Province of Ontario* (March 25, 2001) Part II Submissions to the Walkerton Inquiry, online: <http://walkertoninquiry.com>.

David Johansen, Government of Canada, *Water Exports and the NAFTA*, (Ottawa: Law and Government Division, 8 March 1999) online: <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/EB/prb995-e.htm> (last modified 2 October 2002) (last viewed 15 September 2010).

National Aboriginal Health Organization, *Handbook and Resource Guide to the Convention on Biological Diversity* (Ottawa: National Aboriginal Health Organization, 2007).

Our Common Future: Report of the World Commission on Environment and Development, Chapter 2: Towards Sustainable Development, A/42/427 (UN).

The Royal Commission on Aboriginal Peoples (RCAP) (1996) Restructuring the Relationship. Part 2, Volume 2 (Ottawa: Ministry of Supply and Services Canada) in Chiefs of Ontario (2007).

"The United Nations World Water Development Report 3: Water in a Changing World, Overview of Key Messages", online: *United Nations Educational Scientific and Cultural Organization* <http://www.unesco.org/water/wwap/wwdr/wwdr3/pdf/08_WWDR3_overview_of_key_msgs.pdf> (last accessed 20 May 2010).

Troy Hunter, "Aboriginal Stewardship: A Better Way to Save the Mountain Caribou (Special Report on Aboriginal Law and the Environment)" *LawNow* (1 September 2008).

Secondary Material

Monographs

Merrell-Ann S. Phare, "International Trade Agreements and Aboriginal Water Rights: How the NAFTA Threatens the Honour of the Crown" (LL.M. Thesis, University of Manitoba, 2004) [National Library of Canada].

Academic Texts

Peter Annin, *The Great Lakes Water Wars* (Washington: Island Press, 2006).

Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007).

Richard Barnes, *Property Rights and Natural Resources* (Portland: Hart Publishing, 2009).

Richard Bartlett, *Aboriginal Water Rights in Canada: A Study of Aboriginal Title to Water and Indian Water Rights* (Calgary: Canadian Institute of Resources Law, 1986).

Maude Barlow, "Our Great Lakes Commons: A People's Plan to Protect the Great Lakes Forever" (2011) online: <http://www.blueplanetproject.net/resources/reports/GreatLakes-0311.pdf>

Marie Battiste and James (Sa'ke'j) Youngblood Henderson, *Protecting Indigenous Knowledge and Heritage: A Global Challenge* (Saskatoon: Purich Publishing Ltd., 2000).

Henry Campbell Black, *Black's Law Dictionary 4th ed.* (St. Paul: West Publishing Co., 1968).

Peter Block, *Stewardship: Choosing Service over Self-Interest* (San Francisco: Berrett-Koehler Publishers, 1993).

John J. Borrows and Leonard I. Rotman, *Aboriginal Legal Issues: Cases, Material & Commentary, 2nd ed.* (Markham: LexisNexis Canada Inc., 2003).

L. A. H. Chartrand, ed., *Who Are Canada's Aboriginal Peoples? Recognition, Definition, and Jurisdiction* (Saskatoon: Purich Publishing Ltd., 2002).

Randy Christensen and Anastasia M. Lintner, "Trading Our Common Heritage? The Debate over Water Rights Transfers in Canada" in Karen Baker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007).

Sean Coyle and Karen Morrow, *The Philosophical Foundations of Environment Law: Property, Rights and Nature* (Oregon: Hart Publishing, 2004).

A.H.J Dorcey and T. McDaniels, "Great Expectations, Mixed Results: Trends in Citizen Involvement in Canadian Environmental Governance" in E. A. Parson, Governing the Environment: Persistent Challenges, Uncertain Innovations (Toronto: Toronto University Press, 2001).

David H. Getches, Water Law in a Nutshell, 2nd ed. (St. Paul, Minn: West Publishing Co., 1990).

Joshua Getzler, *A History of Water Rights at Common Law* (Oxford: Oxford University Press, 2004).

John K. Grant, "Against the Flow: Institutions and Canada's Water-Export Debate" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008).

Steven C. Hackett, *Environmental and Natural Resources Economics: Theory, Policy, and the Sustainable Society*, 3rd ed. (New York: M.E. Sharpe, Inc., 2006).

Carey Hill, et al., "A Survey of Water Governance Legislation and Policies in the Provinces and Territories", in Karen Baker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007).

Peter W. Hogg, *Constitutional Law of Canada: 2009 Student Edition* (Toronto: Thomson Reuters Canada Limited, 2009).

Wesley N. Hohfeld, *Fundamental Legal Conceptions* (New Haven, CT: Yale University Press, 1919).

Shin Imai, *The 2008 Annotated Indian Act and Aboriginal Constitutional Provisions* (Toronto: Thomson Carswell Ltd., 2007).

Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008).
Carolyn Johns and Ken Rasmussen, "Institutions for Water Resource Management in Canada" in Carolyn Johns, Mark Sproule-Jones and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008).

Kate Kempton, *Bridge Over Troubled Waters: Canadian Law on Aboriginal and Treaty Water Rights, and the Great Lakes Annex* (Toronto: Walter and Duncan Gordon Foundation, 2005).

Steven A. Kennet, *Managing Interjurisdictional Waters in Canada: A Constitutional Analysis* (Calgary: Canadian Institute of Resources Law, 1991).

Matthew H. Kramer, "Rights Without Trimmings" in Matthew H. Kramer, N. E. Simmonds, and Steiner Hillel, *A Debate Over Rights: Philosophical Enquiries* (New York: Oxford University Press, 1998).

G. V. La Forest, *Water Law in Canada: The Atlantic Provinces* (Ottawa: Information Canada, 1973).

Alastair R. Lucas, *Security of Title in Canadian Water Rights* (Calgary: The Canadian Institute of Resources Law, 1990).

Peter W. Hogg, *Constitutional Law of Canada: 2009 Student Edition* (Toronto: Thomson Reuters Canada Limited, 2009).

Char Miller, ed.,*The Atlas of U.S. and Canadian Environmental History* (New York: Routledge, 2003).

Paul Muldoon and Theresa McClenaghan, "A Tangled Web: Reworking Canada's Water Laws" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007).

Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (New York: Cambridge University Press, 1999).

Ralph Pentland and Adele Hurley, "Thirsty Neighbours: A Century of Canada-US Transboundary Water Governance" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007).

David R. Percy, *The Framework of Water Rights Legislation in Canada* (Calgary: The Canadian Institute of Resources Law, 1988).

Merrel-Ann S. Phare, *Denying the Source: The Crisis of First Nations Water Rights* (Vancouver: Rocky Mountain Books, 2009).

Benjamin J. Richardson, "The Ties That Bind: Indigenous Peoples and Environmental Governance" in B. Richardson, S. Imai and K. McNeil, eds., *Indigenous Peoples and the Law: Comparative and Critical Perspectives* (Oxford: Hart Publishing, 2009).

Karen Roberts, *Circumpolar Aboriginal People and Co-Management Practice: Current Issues in Co-Management and Environmental Assessment* (Calgary: Arctic Institute of North America with Joint Secretariat-Inuvialut Renewable Resources Committee, 1996).

Michael Lee Ross, *First Nations Sacred Sites in Canada's Courts* (Vancouver: UBC Press, 2005).

Harriet I. Rueggeberg and Andrew R. Thompson, *Water Law and Policy Issues in Canada: Report on a Workshop for the Inquiry on Federal Water Policy* (Vancouver: Westwater Research Centre, 1984).

Charles Sampford, "Water right and water governance: A cautionary tale and the case for interdisciplinary governance" in M. R. Llamas, L. Martinez-Cortina, and A. Mukherji, eds., *Water Ethics* (London: Taylor & Francis Group, 2009).

Mark Sproule-Jones, "Property Rights and Water" in Mark Sproule Jones, Carolyn Johns and B. Timothy Heinmiller, eds., *Canadian Water Politics: Conflicts and Institutions* (Kingston: McGill-Queen's University Press, 2008).

David Suzuki, *The Sacred Balance: Rediscovering Our Place in Nature* (Vancouver, B.C.: Greaystone Books, 1997).

Tom Tietenberg and Lyne Lewis, *Environmental Economics and Policy*, 6th ed., (New York: Addison-Wesley, 2010).

Linda Tuhiwai Smith, *Decolonizing Methodologies: Research and Indigenous Peoples* (London: Zed Books, 1999).

Marcia Valiante, "Management of the North American Great Lakes" in O. Varis, C. Tortajada and A.K. Biswas, eds., *Management of Transboundary Rivers and Lakes* (Berlin: Springer, 2008).

Luis Veiga da Cunha, "Water: A human right or an economic resource?" in M. R. Llamas, L. Martinez-Cortina, and A. Mukherji, eds., *Water Ethics* (London: Taylor & Francis Group, 2009).

Ardith Walkem, "The Land is Dry: Indigenous Peoples, Water, and Environmental Justice" in Karen Bakker, ed., *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007).

Ronald Wright, *Stolen Continents* (Toronto: Penguin Books Canada Ltd., 1993).

Academic Journal Articles

Craig Anthony Arnold, "The Reconstitution of Property: Property as a Web of Interests" (2002) 26 Harv. Envtl. L. Rev. 281 (Westlaw).

Mauro Barelli, "The Role of Soft Law in the International Legal System: The Case of the United Nations Declaration on the Rights of Indigenous Peoples" (2009) Vol. 58 Int'l and Comparative Law Quarterly 957-983.

Michael C. Blumm, "The Public Trust Doctrine and Private Property: The Accommodation Principle" 27 Pace Envtl. L. Rev. (forthcoming 2010), online: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1543885>.

Peter Bowal, "Canadian Water: Constitution, Policy, and Trade" (2006) Mich. L. Rev. 1141 at 1151 (Westlaw).

Oliver M. Brandes and Linda Nowlan, "Wading into Uncertain Waters: Using Markets to Transfer Water Rights in Canada—Possibilities and Pitfalls" (2009) 19 J. Env. L. Pract. 267 (Westlaw).

Richard S. Campell et al., "Water Management in Ontario—An Economic Evaluation of Public Policy" (1974) 12 Osgoode Hall L.J. 475.

Canadian Environmental Law Research Foundation, "An Overview of Canadian Law and Policy Governing Great Lakes Water Quantity Management" (1986) 18 Case W.Res. J. Intl. L. 109.

Kristen A. Carpenter, Sonia Katyal and Angela Riley, "In Defense of Property" (2009) 118 Yale L.J. 1022, at 1026 (Westlaw).

Kristen A. Carpenter, "A Property Rights Approach to Sacred Sites Cases: Asserting a Place for Indians as Non-Owners" (2005) 52 U.C.L.A. L. Rev. 1061.

Carl J. Circo, "Does Sustainability Require a New Theory of Property Rights?" (2009) 59 Kan. L. Rev. 1 (forthcoming); online: *Social Science Research Network* <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1343228> at 2 (last modified May 6, 2009) (last accessed March 12, 2010).

Arthur L. Corbin, "Jural Relations and Their Classification" (1921) 30 Yale L.J. 3.

Robin Kundis Craig, "A Comparative guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries" (2007) 16 Penn. St. L. Rev. 1.

Megan Davis, "The United Nations Declaration on the Rights of Indigenous Peoples" (2007) Vol. 11(3) Australian Indigenous Law Reporter 55-63.

Noah D. Hall, "Toward a New Horizontal Federalism: Interstate Water Management in the Great Lakes Region" (2006) 77 U. Colo. L. Rev. 405 (Westlaw).

Noah D. Hall and Bret B. Stuntz, "Climate Change and Great Lakes Water Resources: Avoiding Future Conflicts with Conservation" (2008) 31 Hamline L. Rev. 641 (Westlaw).

Scott Hopley and Susan Ross, "Aboriginal Claims to Water Rights Grounded in the Principe Ad Medium Filum Aquae, Riparian Rights and the Winters Doctrine" (2009) 19. J. Env. L. & Prac. 225 (Westlaw).

Kenneth K. Kilbert, "The Public Trust Doctrine and the Great Lakes Shores" (forthcoming 2010) 58 Clev. St. L. Rev. 1.

Joyce Tekahnawiiaks King, "The Value of Water and the Meaning of Water Law for the Native Americans Known as the Haudenosaunee" (2007) 16 Cornell J. L. & Pub. Pol'y 449 (Westlaw).

Christine A. Klein, "The Law of the Lakes: From Protectionism to Sustainability" (2006) Mich. St. L. Rev.1259-1278 (Westlaw).

Sonia Lawrence and Patrick Macklem, "From Consultation to Reconciliation: Aboriginal Rights and the Crown's Duty to Consult (2000) 79 Can. Bar Rev. 252.

John C. Maguire, "Fashioning an Equitable Vision for Public Resource Protection and Development in Canada: The Public Trust Doctrine Revisited and Reconceptualized" (1997) 7 J. Envtl. L. & Prac. 1.

Deborah McGregor, "Linking Traditional Knowledge and Environmental Practice in Ontario" (2009) 43 J. Can. Stud. 3.

Luke McNamara, "The Locus of Decision-Making Authority in Circle Sentencing: The Significance of Criteria and Guidelines" (2000) 18 Windsor Y.B. Access Just. 60.

Paula Quig, "Testing the Waters: Aboriginal Title Claims to Water Spaces and Submerged Lands—An Overview" (2004) 45 Les Cahiers de Droit 659.

Margaret Jane Radin, "Market-Inalienability" (1987) 100 Harv.L.Rev. 1849.

Shelly Ross Saxer, "The Fluid Nature of Property Rights In Water" (2010) Duke Envtl L. & Pol'y F.; Pepp. U. Legal Studies Research Paper No. 2010/13 at 1, online: <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1636529>.

Edella Schlager and Elinor Ostrom, "Property Rights Regimes and Natural Resources" (1992) 68 Land Economics 246-62.

Mark S. Squillace, "Rethinking the Great Lakes Compact" (2006) Mich. St. L. Rev. 1347-74 (Westlaw).

David Takacs, "The Public Trust Doctrine, Environmental Human Rights, and the Future of Private Property" (2008) 16 N.Y.U. Envtl. L. J. 711.

Marcia Valiante, "The Future of Common Law Water Rights in Ontario" (2004) 14 J. Envtl. L. & Prac. 293 (Westlaw).

Marcia Valiante, "The Great Lakes Charter Annex 2001: Legal Dimensions of Provincial Participation" (2003) 13 J. Envtl. L. & Prac. 47 (Westlaw).

Marcia Valiante, "The Law of the Ecosystem: Evolution of Governance in the Great Lakes – St. Lawrence River Basin" (2007) 12 Lex Electronica 2.

Steven R. Willard, "Navigating the Murky Waters of Riparian Rights" (2001) 38 R.P.R. (3d) 55 (Westlaw).

Sandra B. Zellmer and Jessica Harder, "Unbundling Property in Water" (2007) 59 Ala. L. Rev 679-745 (Westlaw).

News Media Articles

Linda Diebel, "Canada foils UN water plan" The Toronto Star (2 April 2008), online: thestar.com <http://www.thestar.com/News/Canada/article/409003> (last viewed 20 September 2010).

John Ibbitson, "Ottawa wins praise for endorsing UN indigenous-rights declaration" (November 12, 2010) online: *The Globe and Mail, Ottawa Notebook* <http://www.theglobeandmail.com/news/politics/ottawa-notebook/ottawa-wins-praise-for-endorsing-un-indigenous-rights-declaration/article1797339/> (last viewed December 28, 2010).

Tanya Talaga, "Liberals push through Far North bill despite First Nations outcry" *The Toronto Star* (23 September 2010), online: <http://www.thestar.com/news/sciencetech/environment/article/865509--liberals-push-through-far-north-bill-despite-first-nations-outcry?bn=1>.

Government Correspondence

Letter from Rosalyn Lawrence, Assistant Deputy Minister of Natural Resource Management Division to David Naftzger, Secretary, Great Lakes-St. Lawrence River Water Resources Regional Body c/o Council of Great Lakes Governors, dated December 7, 2009 [copy with thesis author].

Website Articles (Academic & Other)

"Anishnabek/Ontario Agreements Pledge Cooperation", online: *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Newsroom/LatestNews/MNR_E004229.html> (last modified 14 March 2008) (last visited 12 April 2010).

"Anishinabek Nation and Ontario Strengthen Relationship: McGuinty Government Signs Fours Agreements With Anishinabek Nation" (April 28, 2010) online: Newsroom Ontario < http://news.ontario.ca/mnr/en/2010/04/anishinabek-nation-and-ontario-strengthen-relationship.html> (last viewed December 28, 2010).

Bryony Halpin, "Of the First Water: The rights and roles of First Nations in source protection and water quality," (July/August 2009) online: *Safe Drinking Water Foundation* <http:safewater.org/PDFS/waternewsmagazines/CWTJulyAug2009.pdf>.

Adele Hurley, "Sucking the Great Lakes Dry: Neglect, Climate Change and Bad Politics Threaten Fresh Water in the Great Lakes," *Canadian Perspectives* (Autumn Issue 2005) online: *The Council of Canadians* <http://www.canadians.org/publications/CP/2005/fall/CP_Fall05_GreatLakes.pdf > (last accessed 20 May 2010).

Linda Nowlan, *Customary Water Laws and Practices in Canada*, online: *Food and Agriculture Organization of the United Nations* <http://www.fao.org/Legal/advserv/FAOIUCNcs/Canada.pdf>.

Ralph Pentland, "Public Trust Doctrine—Potential in Canadian Water and Environmental Management", online: (2008) POLIS Project on Ecological Governance Water Sustainability Project <http://www.waterdsm.org/publication/261>.

6.1.1 Websites

"A National Disgrace: Canada's shameful position on the right to water", online: The Council of Canadians <http://www.canadians.org/water/documents/factsheet/RTW-Canada.pdf>.

"Anishnabek/Ontario Agreements Pledge Cooperation", online: *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Newsroom/LatestNews/MNR_E004229.html> (last modified 14 March 2008) (last visited 12 April 2010).

Anishinabek Nation Website, <http://www.anishinabek.ca/index.php?option=com_content&task=view&id=55&Itemid=38>.

Annual Report of the Great Lakes Regional Water Use Database Repository, online: *The Great Lakes Commission* <http://www.glc.org/wateruse/database/pdf/2006%20Water%20Use%20Report.pdf> (last accessed 20 May 2010).

Background to Great Lakes-St. Lawrence River Basin Compact, online: *The Council of Canadians* <http://www.canadians.org/water/issues/Great_Lakes/index.html> (last modified 12 December 2008) (last viewed 14 September 2010).

Chiefs of Ontario, "Water Declaration of the First Nations in Ontario October 2008" online: <http://chiefs-of-ontario.org/Assets/COO%20long%20form%20declaration.pdf>.

Council of Great Lakes Governors, Frequently Asked Questions: *Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement & Great Lakes—St. Lawrence River Basin Water Resources Compact* (April 2007), online <http://www.cglg.org/projects/water/CompactEducation/GLCompactResourceKit-10-18-07.pdf >.

Current Great Lakes-St. Lawrence Water Levels, online *Great Lakes Information Network* at < http://www.great-lakes.net/envt/water/levels/levels_current.html> (last accessed 24 May 2010).

"Drinking Water Safety in Aboriginal Communities in Canada" online: National Aboriginal Health Organization (May 21, 2002) <http://www.naho.ca/english/publications/ReB_water_safety.pdf>.

Earth's Water Distribution, online: *U.S. Geological Survey* (U.S.G.S.), *Department of the Interior* <http://ga.water.usgs.gov/edu/waterdistribution.html> (last modified 9 October 2009) (last viewed 16 March 2010).

Environment Canada, Federal Water Policy, online: *Environment Canada* <http://www.ec.gc.ca/eau-water/D11549FA-9FA9-443D-80A8-5ADCE35A3EFF/e_fedpol.pdf>.

Fact Sheets: Water Rights Across Canada, online: Program on Water Governance <http://www.watergovernance.ca/factsheets/pdf/FS_Water_Rights.pdf>.

Federal Policy & Legislation, online: *Environment Canada* <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=E05A7F81-1> at Nunavut and the Northwest Territories (last modified 6 January 2010) (last accessed 20 February 2010).

Great Lakes Commission Work Plan 2008-2010 (18 April 2008), online: *Great Lakes Commission* <http://www.glc.org/about/strategy/docs/GLC%20Biennial%20Workplan%20%202008-2010_FINAL%204-08.pdf>.

Great Lakes: Lake Ontario and the St. Lawrence River, online *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Business/GreatLakes/2ColumnSubPage/STEL02_173908.html> (last modified 5 March 2010) (last visited 21 May 2010).

Great Lakes: Living Systems, online: *Ontario Ministry of Natural Resources* <http://www.mnr.gov.on.ca/en/Business/GreatLakes/index.html> (last modified 10 February 2010) (last viewed 16 March 16, 2010).

Guiding Principles, online: Great Lakes Commission <http://www.glc.org/about/strategy/sp_gp.html> (last modified 18 May 2007) (last viewed 14 September 2010).

Historical Monthly and Yearly Mean Water Level Graphs 1918-2009, online: *Fisheries and Oceans Canada* <http://www.waterlevels.gc.ca/C&A/netgraphs_e.html> (last accessed 24 May 2010).

Hydrologic Cycle, online: Environment Canada <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=23CEC266-1> (last modified 27 November 2009) (last visited 16 March 2010).

Indian and Northern Affairs Canada, *Ontario First Nations: Overview*, online: <http://www.ainc-inac.gc.ca/ai/scr/on/ofn/index-eng.asp> (last visited 10 April 2010)

Ontario First Nations: Overview, online: *Indian and Northern Affairs Canada* <http://www.ainc-inac.gc.ca/ai/scr/on/ofn/index-eng.asp>.

Our Great Lakes—Great Lakes Overview, online: *Environment Canada* <http://www.on.ec.gc.ca/greatlakes/default.asp?lang=En&n=FC147FA0-1> (last modified 6 January 2010) (last accessed 23 February 2010).

Ontario Provincial Policy Statement, online: <http:www.mah.gov.on.ca/Asset1421.aspx>.

Permits to Take Water, online: *Ontario Ministry of the Environment* <http://www.ene.gov.on.ca/envision/water/pttw.htm> (last modified 21 October 2007) (last accessed 17 February 2010).

Quick Facts, online: *Environment Canada* <http://www.ec.gc.ca/eau water/default.asp?lang=En&n=11A8CA33-1> (last modified 26 November 2010) (last accessed 23 February 2010).

Scugog Island First Nation Land Management Code at <http://www.fafnlm.com/land-codes/land-code-3.html>.

St. Lawrence Centre: St. Lawrence Info, online Environment Canada <http://www.qc.ec.gc.ca/CSL/inf/inf010_e.html> (last modified 10 July 2007) (last viewed 17 March 2010).

Statistics Canada, *Aboriginal Peoples Technical Report, 2006 Census, Second Edition* (Ottawa: Minister of Industry, 2010) online: *Statistics Canada* <http://www12.statcan.gc.ca/census-recensement/2006/ref/rp-guides/rp/ap-pa_2/pdf/92-569-X2006001-Part2-eng.pdf>.

Strategic Plan for the Great Lakes Commission, online: *Great Lakes Commission*, <http://www.glc.org/about/strategy/docs/GLC_Strategic_Plan.pdf> (last viewed December 28, 2010).

The Atlas of Canada: Distribution of Freshwater, online: *Natural Resources Canada* <http://atlas.nrcan.gc.ca/site/english/maps/freshwater/distribution/1> (last modified 26 February 2009) (last visited 18 March 2010).

The Canadian Encyclopedia, *Fraser River Gold Rush*, online: <http://www.thecanadianencyclopedia.com/index.cfm?PgNm=TCE&Params=A1 ARTA0010032>.

The Great Lakes, online: *The Great Lakes Information Network* (GLIN) http://www.great-lakes.net/lakes/basinMap2.gif (last modified 31 March 2010) (last accessed 15 May 2010).

The Great Lakes Charter Annex Agreement Backgrounder (13 December 2005), online: Ontario Ministry of Natural Resources <http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@water/documents/document/200042.pdf> (last modified 5 May 2010) (last accessed 13 September 2010).

The Right to Water Webpage, online: The Council of Canadians <http://www.canadians.org/water/issues/right/index.html>.

Treaties and Agreements, online: *International Joint Commission* <http://www.ijc.org/rel/agree/water.html#text>.

Water: A Fresh Outlook on Water, online: *Ontario Ministry of the Environment* <http://www.ene.gov.on.ca/en/water/index.php> (last modified 16 September 2009) (last accessed 16 March 2010).

Water Encyclopedia, online: <http://www.waterencyclopedia.com/Po-Re/Prior-Appropriation.html> (last accessed December 28, 2010).

"Worlds First: An Evolving Terminology Relating to Aboriginal Peoples in Canada" online: *Indian and Northern Affairs Canada* <http://www.collectionscanada.gc.ca/webarchives/20071114213423/http://www.ainc-inac.gc.ca/pr/pub/wf/index_e.html>.

APPENDIX 1:
LEGISLATIVE AMENDMENTS AND ABORIGINAL TRADITIONAL KKNOWLEDGE

Legislation	Amendment	Inclusion of ATK?
***Ontario Water Resources Act*, 1990** ("OWRA")[1]	This Act is amended through the *Safeguarding and Sustaining Ontario's Water Act*[2] in order to incorporate provisions of the *Great Lakes Agreement*.	No.
Water Taking Regulation [3] under the OWRA	These amendments to the regulation are under development to bring the *Great Lakes Agreement* commitments into force, including the ban on intra-basin transfer and regulation exceptions.	No.
***Lakes and Rivers Improvement Act*, 1990** ("LRIA")[4]	This amendment repeals sections 18 and 38. The repealed sections are as follows: **Clearing flooded areas** **18.** (1) Where water has been impounded for power development or storage purposes, the Minister may order the owner of any dam that impounds the water, (a) to clear timber, slash or debris from the lands that are or were flooded; and (b) to remove any timber, slash or debris that has escaped from the flooded lands to any lake or river, within the time specified in the order. R.S.O. 1990, c. L.3, s. 18 (1). **Non-compliance with order** (2) Where the owner of a dam fails to comply with an order made under subsection (1) within the time specified in the order, the Minister may cause to be done whatever work is necessary to comply with the order, and the cost thereof is a debt due by the owner to the Crown and is recoverable with costs in any court of competent jurisdiction. R.S.O. 1990, c.	No.

	L.3, s. 18 (2). **Throwing matter from mill into lake or river** **38.** (1) No person shall throw, deposit or discharge, or permit the throwing, depositing or discharging of, any refuse, sawdust, chemical, substance or matter from any mill into a lake or river, or on the shores or banks thereof. R.S.O. 1990, c. L.3, s. 38 (1). (2) Repealed: 1998, c. 18, Sched. I, s. 37. **Order to cease depositing matter in lake, etc.** (3) Where the Minister finds that any refuse, sawdust, chemical, substance or matter from a mill is being thrown, deposited or discharged into a lake or river or on the shores or banks thereof, the Minister may order the owner or occupier of the mill to cause such throwing, depositing or discharging to cease and may in addition order, where in the Minister's opinion it is practicable to do so, that such owner or occupier take such steps within the time specified in the order as may be necessary to remove the refuse, sawdust, chemical, substance or matter from the lake or river or from the shores or banks thereof. R.S.O. 1990, c. L.3, s. 38 (3). (4) Repealed: 1998, c. 18, Sched. I, s. 37.	
***The Clean Water Act*, 2006**[5]	A key component relates to the preparation of locally developed science based risk assessment report and source protection plans.	No.
Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem ("COA")[6]	The Annex to the 2007 version states that Canada and Ontario will "foster sustainable water use and conservation consistent with the intent of the [*Great Lakes Agreement*]."	Vague. In "Shared Management of the Lakes", acknowledgement that "To turn the vision of the Agreement into a reality and restore the Basin Ecosystem, however, will require

		the cooperation of the Basin's…Aboriginal People […]."
The *Provincial Policy Statement*[7] under the authority of Section 3 of the *Planning Act*, relating to land use planning	The amendment provides policy direction on matters relating to land use planning that are of provincial interest including protecting and restoring water quality and quantity and promoting efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality.	No.
***Ontario Environmental Assessment Act*, 1990**[8]	The amendment repealed Part V, Administration, s. 32(1)1 which reads as follows: **Protection from personal liability** (1) No action or other proceeding may be instituted against the following persons for any act done in good faith in the execution or intended execution of any duty or authority under this Act or for any alleged neglect or default in the execution in good faith of such a duty or authority: 1. A member of the Tribunal.	No.

APPENDIX 1 NOTES

1. *Ontario Water Resources Act*, S.O. 1990, c. 0.40. This Act provides for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use. The act provides the authority for the Permit to Take Water Program administered by the Ministry of the Environment.
2. *Safeguarding and Sustaining Ontario's Water Act*, S.O. 2007, c.12, online: <http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=1562>.
3. *Water Taking Regulation*, Ontario Regulation 387/04. This regulation outlines matters that the Ministry of the Environment must consider when issuing a Permit to Take Water.
4. *Lakes and Rivers Improvement Act*, R.S.O. 1990, c. L.3. The Act is administered by the Ministry of Natural Resources and provides for the management, preservation and use of Ontario's lakes and rivers and the land under them, the protection of public rights and riparian interest, the management of fish and wildlife dependent on lakes and rivers, protection of natural amenities and the protection of people and property by ensuring that dams and diversions are suitably located, constructed and maintained.

5. *The Clean Water Act*, 2006, R.S.O. 2006, c. 22. This act is administered by the Ministry of the Environment and protects existing and future sources of Ontario's drinking water.
6. *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem,* online: <http://www.ene.gov.on.ca/publications/6263e.pdf>. The purpose of the agreement is: "to restore, protect and conserve the Great Lakes Basin Ecosystem in order to assist in achieving the vision of a healthy, prosperous and sustainable Basin Ecosystem for present and future generations." *Ibid.* at Art. II.
7. Provincial Policy Statement, online: <http:www.mah.gov.on.ca/Asset1421.aspx>.
8. *Ontario Environmental Assessment Act*, R.S.O. 1990, Chapter E.18. The Act provides for two types of environmental assessment planning and approval processes.

APPENDIX 2:
IDENTIFIED PURPOSE(S) OF RELEVANT ONTARIO LEGISLATION

Legislation	The Stated Purpose(s) found within the Legislation
***Ontario Water Resources Act*, 1990** ("OWRA")[9]	"The purpose of this Act is to provide for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use, in order to promote Ontario's long-term environmental, social and economic well-being."
Water Taking Regulation[10] under the OWRA.	Not stated.
***Lakes and Rivers Improvement Act*, 1990** ("LRIA")[11]	The purposes of this Act are to provide for, a) the management, protection, preservation and use of the waters of the lakes and rivers of Ontario and the land under them; b) the protection and equitable exercise of public rights in or over the waters of the lakes and rivers of Ontario; c) the protection of the interests of riparian owners; d) the management, perpetuation and use of the fish, wildlife and other natural resources dependent on the lakes and rivers; e) the protection of the natural amenities of the lakes and rivers and their shores and banks; and f) the protection of persons and of property by ensuring that dams are suitably located, constructed, operated and maintained and are of an appropriate nature with regard to the purposes of clauses (a) to (e). 1998, c. 18, Sched. I, s. 23.
***The Clean Water Act*, 2006**[12]	The purpose of this Act is to protect existing and future sources of drinking water. 2006, c. 22, s. 1.
Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem ("COA")[13]	1. The purpose of this Agreement is to restore, protect and conserve the Great Lakes Basin Ecosystem in order to assist in achieving the vision of a healthy, prosperous and sustainable Basin Ecosystem for present and future generations. 2. The Parties commit to continuing to work together in a cooperative, coordinated and integrated fashion, with each other and with others in the Basin, to achieve the vision. 3. To achieve the vision, the Agreement:

	a) establishes principles which will guide the actions of the Parties; b) describes the development of Annexes to respond to existing or emerging environmental issues; c) sets in place administrative arrangements for the effective and efficient management of the Agreement; d) establishes common priorities, goals, and results for the restoration, protection and conservation of the Basin Ecosystem; and e) establishes a commitment to report on the progress being made in achieving the goals and results of the Agreement. 4. By defining a vision for the Basin, specific goals and results, and the commitment to action by the Parties, this Agreement is intended to give momentum to wider efforts and to facilitate collaborative arrangements and collective action among all people and organizations with an interest in the Basin. 5. Implementation of this Agreement will contribute to meeting Canada's obligations under the Canada-United States Great Lakes Water Quality Agreement.
The *Provincial Policy Statement*[14] under the authority of Section 3 of the *Planning Act*, relating to land use planning	2.2 WATER 2.2.1 Planning authorities shall protect, improve or restore the *quality and quantity of water* by: a) using the *watershed* as the ecologically meaningful scale for planning; b) minimizing potential *negative impacts*, including cross-jurisdictional and cross-*watershed* impacts; c) identifying *surface water features*, *ground water features*, *hydrologic functions* and *natural heritage features and areas* which are necessary for the ecological and hydrological integrity of the *watershed*; d) implementing necessary restrictions on *development* and *site alteration* to: 1. protect all municipal drinking water supplies and *designated vulnerable areas*; and 2. protect, improve or restore *vulnerable* surface and ground water, *sensitive surface water features* and *sensitive ground water features*, and their *hydrologic functions*; e) maintaining linkages and related functions among *surface water features*, *ground water features*, *hydrologic functions* and *natural heritage features and areas*; f) promoting efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality; and g) ensuring storm water management practices minimize storm water volumes and contaminant loads, and maintain

	or increase the extent of vegetative and pervious surfaces.
***Ontario Environmental Assessment Act*, 1990**[15]	The purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment. R.S.O. 1990, c. E.18, s. 2.

APPENDIX 2 NOTES

9. *Ontario Water Resources Act*, S.O. 1990, c. 0.40, s. 0.1. This Act provides for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use. The act provides the authority for the Permit to Take Water Program administered by the Ministry of the Environment.
10. *Water Taking Regulation*, Ontario Regulation 387/04. This regulation outlines matters that the Ministry of the Environment must consider when issuing a Permit to Take Water.
11. *Lakes and Rivers Improvement Act*, R.S.O. 1990, c. L.3. The Act is administered by the Ministry of Natural Resources and provides for the management, preservation and use of Ontario's lakes and rivers and the land under them, the protection of public rights and riparian interest, the management of fish and wildlife dependent on lakes and rivers, protection of natural amenities and the protection of people and property by ensuring that dams and diversions are suitably located, constructed and maintained.
12. *The Clean Water Act*, 2006, S.O. 2006, c. 22. This act is administered by the Ministry of the Environment and protects existing and future sources of Ontario's drinking water.
13. *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem,* online: <http://www.ene.gov.on.ca/publications/6263e.pdf>. The purpose of the agreement is: "to restore, protect and conserve the Great Lakes Basin Ecosystem in order to assist in achieving the vision of a healthy, prosperous and sustainable Basin Ecosystem for present and future generations." *Ibid.* at Art. II.
14. Provincial Policy Statement, online: <http:www.mah.gov.on.ca/Asset1421.aspx>.
15. *Ontario Environmental Assessment Act*, R.S.O. 1990, Chapter E.18. The Act provides for two types of environmental assessment planning and approval processes.

APPENDIX 3:
FIRST NATIONS IN ONTARIO WITHIN THE GREAT LAKES AND ST. LAWRENCE RIVER BASIN[1]

FIRST NATION	COMMUNITY	GENERAL AREA
Fort William	Ojibway (Chippewa)	Lake Superior
Lac Des Mille Lacs	Ojibway (Chippewa)	Lake Superior
Biinjitiwaabik Zaaging Anishinaabek	Ojibway (Chippewa)	Lake Superior
Animbiigoo Zaagi'igan Anishinaabek	Ojibway (Chippewa)	Lake Superior
Kiashki Zaaging Anishinaabek	Ojibway (Chippewa)	Lake Superior
Whitesand	Ojibway (Chippewa)	Lake Superior
Long Lake No. 58 First Nation	Ojibway (Chippewa)	Lake Superior
Ginoogaming First Nation	Ojibway (Chippewa)	Lake Superior
Bingwi Neyaashi Anishinaabek	Ojibway (Chippewa)	Lake Superior
Red Rock	Ojibway (Chippewa)	Lake Superior
Pays Palt	Ojibway (Chippewa)	Lake Superior
Picmobert	Ojibway (Chippewa)	Lake Superior
Ojibways of the Pic River First Nation	Ojibway (Chippewa)	Lake Superior
Missanabie Cree	Cree	Lake Superior
Michipicoten	Ojibway (Chippewa)	Lake Superior
Chapleau Ojibway	Ojibway (Chippewa)	Lake Superior
Chapleau Cree First Nation	Cree	Lake Superior
Brunswick House	Cree	Lake Superior
Batchewana First Nation	Ojibway (Chippewa)	Lake Superior
Ketegaunseebee (Garden River First Nation	Ojibway (Chippewa)	Lake Superior
Thessalon	Ojibway (Chippewa)	Lake Huron
Serpent River	Ojibway (Chippewa)	Lake Superior
Mississauga	Ojibway (Chippewa)	Lake Superior
Sagamok Anishinawbek	Ojibway (Chippewa)	Lake Superior
Atikameksheng Anishinawbek	Ojibway (Chippewa)	Lake Superior
Wahnapitae	Ojibway (Chippewa)	Lake Superior

[1] This table is adapted from the Ontario Ministry of Aboriginal Affairs, which has included First Nation communities recognized under the Indian Act, and, according to the website, "coincides with the recent release of several interactive First Nations maps by other organizations." See the following Ministry websites for further information:
<http://www.aboriginalaffairs.gov.on.ca/english/about/firstnations_map.asp>
<http://www.aboriginalaffairs.gov.on.ca/images/firstnations_map(FULL).jpg>

Whitefish River First Nation	Ojibway (Chippewa)	Lake Superior
Aundick Omni Kaning	Ojibway (Chippewa)	Lake Superior
Seshegwaning	Ojibway (Chippewa)	Lake Superior
Zhiibaahaasing First Nation	Ojibway (Chippewa)	Lake Superior
M'Chigeeng First Nation	Ojibway (Chippewa)	Lake Huron
Saugeen	Ojibway (Chippewa)	Lake Huron
Chippewas of Kettle and Stony Point	Ojibway (Chippewa)	Lake Huron
Aamjiwnaang	Ojibway (Chippewa)	Lake Huron
Chippewas of Nawash Unceded First Nation	Ojibway (Chippewa)	Georgian Bay
Wikwemikong Unceded Indian Reserve	Ojibway (Chippewa) and Delaware	Georgian Bay
Chippewas of Georgina Island	Ojibway (Chippewa)	Georgian Bay
Beausoleil (Christian Island)	Ojibway (Chippewa)	Georgian Bay
Chippewas of Rama First Nation	Ojibway (Chippewa)	Georgian Bay
Wahta Mohawks (Mohawks of Gibson)	Haudenosaunee	Georgian Bay
Moose Dear Point	Ojibway (Chippewa) and Potawatomi	Georgian Bay
Wasauksing First Nation (Perry Island)	Ojibway (Chippewa)	Georgian Bay
Shawanaga First Nation	Ojibway (Chippewa)	Georgian Bay
Magnetawan	Ojibway (Chippewa)	Georgian Bay
Henvey Inlet First Nation	Ojibway (Chippewa)	Georgian Bay
Dokis	Ojibway (Chippewa)	Georgian Bay
Nipissing First Nation	Ojibway (Chippewa)	Lake Nipissing
Curve Lake	Ojibway (Chippewa)	Curve Lake
Mohawks of the Bay of Quinte (Tyendinaga Mohawk Territory)	Haudenosaunee	Lake Ontario
Alderville First Nation	Ojibway (Chippewa)	Lake Ontario
Hiawatha First Nation	Ojibway (Chippewa)	Lake Ontario
Mississaugas of Scugog Island First Nation	Ojibway (Chippewa)	Lake Ontario
Six Nations of the Grand River	Haudenosaunee	Lake Erie
The Mississaugas of the New Credit First Nation	Ojibway (Chippewa)	Lake Erie
Munsee-Delaware First Nation	Delaware	Lake Erie
Oneida Nation of the	Haudenosaunee	Lake Erie

Thames		
Chippewas of the Thames First Nation	Ojibway (Chippewa)	Lake Erie
Moravian of the Thames	Delaware	Lake Erie
Caldwell	Potawatomi	Lake Erie
Walpole Island (Bkejwanong Territory)	Ojibway (Chippewa) and Potawatomi	Lake St. Clair
Mohawks of Akwesasne	Haudenosaunee	St. Lawrence River