

Assessing the Consistency of Subnational Agreements with International Norms:
Water Policy in the Great Lakes-St Lawrence River Watershed

by

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AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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ABSTRACT

The purpose of this study is to assess whether the subnational water agreements that apply to the Great Lakes-St Lawrence River watershed are consistent with international norms and principles as articulated at United Nations conferences in Dublin, Ireland (1992) and Bonn, Germany (2001) and to establish the significance of these findings in the context of Ontario's role in water management. The concepts of complex governance, decentralisation, internationalisation, norms, regimes and soft law contribute the theoretical bases, while a methodological approach of qualitative research, carried out using content analysis and a literature review, is utilised. The content analysis reveals that subnational policies for water management in the GLSLR watershed, as articulated in the Great Lakes Charter, the Great Lakes Charter Annex and the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement, are consistent with international norms in many regards, with nearly identical language found in some areas, such as conservation and restoration of water resources and basin-level management. However, in the subnational agreements, there is a clear avoidance of some subjects closely tied to international norms, such as the unique roles and responsibilities of women, the urgent need for action, and the importance of indigenous knowledge. Furthermore, comparison among the three GLSLR water policies, which were developed over a twenty-year period, reveals that public participation became less prominent over time while this norm was strengthened at the international level. The roles and responsibilities of the federal government are discussed and it is proposed that, in the context of Canada-Ontario shared jurisdiction, the national government must establish national standards and policies. Ultimately, the inconsistencies between subnational GLSLR water policies and international norms are less significant than the notable consistencies, which are more remarkable given the weaknesses of the federal government's role in water policy.

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DEDICATION

To my dad Jim, who made the first draft possible, and who has always supported my seemingly never-ending studies – there are not enough thank yous. It took longer than expected, but it's finished!

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CHAPTER 1: INTRODUCTION

Introduction

In a compelling examination of Canada's environmental policies and performance, Perl and Lee conclude that environmental progress in Canada is difficult to achieve due to the division of authority and power among different levels of government involved with environmental management.¹ An area where this schism becomes apparent is the water policies of the Great Lakes-St Lawrence River (GLSLR) watershed², which involve numerous levels of government and both ecological and anthropogenic boundaries. The purpose of this thesis is to assess whether the water resource policies developed by the province of Ontario and other subnational actors for the management of the GLSLR watershed are consistent with the international freshwater management norms and principles articulated at United Nations conferences in Dublin, Ireland (1992) and Bonn, Germany (2001). To begin this examination, the following section introduces the reader to the complexities of the watershed and one aspect of water policy in this region.

Water Research

Water is a complex resource to study and the realm of water research is vast. In order to narrow the scope of possible research activities, two key concepts are central to this thesis. First, the watershed has been adopted as the best division for sustainable water management; thus, research should be conducted with this in mind. A second underlying belief is that goals expressed in policy statements are an important component of sustainable water management, in addition to elements such as implementation, participation, resources, etc., which are not explored in this paper. By focusing on watershed-based policies, this thesis aims to contribute to

¹ Perl, A. and E. Lee (2003).

² Watersheds are as described interchangeably as basins or river basins.

the scholarship devoted to sustainable water resources management and environmental governance.

To a large degree, the complexity of watershed-based policy has inhibited scholars from addressing this subject.³ However, “if taken seriously, watershed-based thinking, organizing, and policymaking would change radically the way we confront human and ecological issues.”⁴ From this position, water resources management policy in the GLSLR watershed is a crucial component of sustainable use of freshwater.

Water resources sustainability is “the development and use of water resources in a manner that can be maintained for an indefinite time without causing unacceptable environmental, economic, or social consequences.”⁵ Essentially, sustainable use means that water extracted from the system is returned uncontaminated to the ecosystem. There are many obstacles that hinder water sustainability in Canada, including, as Granzeier asserts, “the forces of globalization, pressures to remain economically competitive in rapidly changing markets, and the devolution of environmental authority to the provinces creating a jurisdictional ‘void’.”⁶ In order to address these issues, empirical and theoretical research “must simultaneously examine divergent policy spheres and various governmental jurisdictions.”⁷ As such, this thesis examines international norms, decentralisation, jurisdictional issues and the resulting implications for water management policy in Ontario.

In this thesis, the GLSLR watershed serves as a case study of complex governance and policy coherence, demonstrating the theoretical linkages between international norms and subnational policies. Spanning two countries and their constituent political divisions, including

³ McGinnis, M. V., p. 498.

⁴ McGinnis, M. V., p. 498.

⁵ Barlow, P.M., W.M. Alley and D. N. Myers, p. 76.

⁶ Granzeier, M. S., p. 155.

⁷ Granzeier, M. S., p. 155.

two Canadian provinces (Ontario and Quebec) and eight U.S. states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin), the basin is representative of the additional complexities and institutional limitations found in transboundary waters.⁸ By focussing on one of the subnational jurisdictions in the GLSLR watershed (i.e. Ontario), the research takes into account its history of water policy and governance arrangements and can make recommendations specific to the unique circumstances of this jurisdiction. A similar study could draw out the implications for the other parties to the GLSLR agreements by examining the situation within each of the GLSLR states and the province of Quebec.

Watersheds

Watersheds provide numerous goods and services, such as “the supply and purification of fresh water, the provision of habitat that safeguards fisheries and biological diversity, the sequestering of carbon that helps mitigate climatic change, and the support of recreation and tourism.”⁹ However, despite declarations exhorting the economic valuation of water, commercial markets do not adequately value these services. As a result, societies do not optimise the natural benefits provided by watersheds.¹⁰ One of the main challenges of creating policies for sustainable water management is that “water not only ignores our political boundaries, it evades institutional classification and eludes legal generalizations.”¹¹ As such, water management cannot be conducted along traditional political boundaries and the watershed is now seen as the appropriate unit to incorporate issues relating to the quality and quantity of surface and groundwater sources.¹²

⁸ Wolf, A. T. *et al.*, p. 387.

⁹ Postel, S. L. and B. H. Thompson, Jr., p. 98.

¹⁰ Postel, S. L. and B. H. Thompson, Jr., p. 98.

¹¹ Wolf, A. T. (1997) p. 333.

¹² Wolf, A. T. (1997) p. 333.

The spatial boundaries of watersheds are ecologically meaningful and the health of a freshwater system is indicative of the welfare of surrounding terrestrial and coastal areas.¹³ Furthermore, the watershed is an integrative entity that reveals connections among terrestrial, coastal and freshwater ecosystems.¹⁴ In addition to environmental advantages, a watershed-based approach to water management “provides one of the best units for intergovernmental management”¹⁵. Within a watershed, different governments share many of the same pressures and concerns about water resources (e.g. protection of water quality), providing a common starting point for negotiations. The watershed is also seen as being comprehensive enough to manage competing demands from a variety of uses such as ecosystem services, municipal water supply, industrial and commercial processes and agriculture.¹⁶ This is particularly important in a transboundary context, such as the GLSLR region.

The health of the watershed is critical to the surrounding environment. Conservation Ontario recognizes that “because all environmental systems within a watershed (wetlands, forests, groundwater, surface water, etc.) are connected, the key to healthy great lakes is healthy watersheds.”¹⁷ In addition to long-standing environmental issues, there are many new transboundary issues which impact upon the health of the watershed. For instance, invasive species and pharmaceutical chemicals in the water system have become urgent problems in recent years.¹⁸ As Dempsey has noted,

the new problems facing the lakes are not simply or easily cured. More than clean water acts and wetland protection laws will be necessary to combat the risks imposed by climate change, population growth, energy waste, and an economy that continues to reward, even subsidize, actions that sicken the lakes.¹⁹

¹³ McGinnis, M. V., p. 498.

¹⁴ Postel, S. L. and B. H. Thompson, Jr. p. 98.

¹⁵ McGinnis, M. V., p. 498.

¹⁶ Churchill, J. L., G. Hoover, A. Howatson and J. Roberts, p. 8.

¹⁷ Conservation Ontario.

¹⁸ Royal Society of Canada; The American Assembly, p. 9.

¹⁹ Dempsey, D., pp. 3-4.

Echoing this sentiment, the bi-national organisation, The Great Lakes Governors and Premiers of Ontario and Québec, has stressed that: 1) there are threats to the Great Lakes Basin now, and they promise to increase in the future; 2) the Great Lakes are critical to our economy; and 3) these waters must be preserved and protected now and for future generations.²⁰ These findings highlight that the management of the watershed is a pressing environmental, economic and ethical concern.

Water Policy

Water policy deals broadly with governance issues related to freshwater resources (e.g. allocation, optimal usage, tradeoffs, etc.). In the policy sciences literature, Clark defines policy as, “a social process of authoritative decision making by which the members of a community clarify and secure their common interests.”²¹ Another definition underlines the role of policy in planning for predictable and consistent future decisions.²² This sense indicates that general goals and acceptable procedures have been considered among a range of alternatives, usually by government bodies, and chosen to guide the development of an overarching plan. As policy is a process and involves numerous elements, this thesis focuses primarily on policy statements and the goals conveyed in these statements.

In Canada, water policies have become an area of government focus leading both federal and provincial governments to develop and implement water policies that support recreation, economic development and ecological functions.²³ In the context of a federal political system such as that that exists in Canada, differences can arise between national imperatives and local concerns. For instance, diverging climate change policies between provincial governments and

²⁰ Council of Great Lakes Governors.

²¹ Clark, T. W., p. 6.

²² Deutsch, K. W., p. 77.

²³ Campbell, I. (2004) p. 4.

the federal government demonstrates the limits facing each order of government.²⁴ The existence of multi-level governance raises questions of accountability and responsibility regarding the development of policies for water management and there have been calls for the creation of “an integrated, complete suite of policies for source-to-tap-to-environment water quality and supply management.”²⁵

Water management policy in the GLSLR basin is a complex environment. There are multiple sources of water management policy in the watershed including international, national, provincial, and local jurisdictions (e.g. conservation authorities), with various interactions among these. Due to the changing political landscape characterised by internationalisation and the decentralisation of powers from the federal government to provincial governments, it is difficult, and overly simplistic, to examine one policy level in isolation of the other jurisdictions. It has even been argued that the “complete separation of domestic and international policy spheres [is] not only artificial, but also potentially dangerous.”²⁶

The aspect of policy examined in this thesis is the consistency among policy statements, namely subnational watershed management policies and international norms relating to water management. The consistency among policies regarding a particular issue is referred to as “policy coherence”.²⁷ Policy coherence is important because when policies are incoherent within a given policy area, confusing and potentially conflicting messages are sent to the targeted audience of the policy.²⁸ This is often the case with environmental policies due to the numerous jurisdictions involved with policy-making, and the interactions that occur amongst policies.²⁹

²⁴ See Heather A. Smith, “Canadian Federalism and International Environmental Policymaking: The Case of Climate Change.”

²⁵ Campbell, I. (2004), p.4.

²⁶ Eliadis, P., p. 33.

²⁷ May, P. J., J. Sapotichne and S. Workman, p. 383.

²⁸ May, P. J., J. Sapotichne and S. Workman, p. 381.

²⁹ May, P. J., J. Sapotichne and S. Workman, p. 382.

For policy coherence to be effectively evaluated, the list of policies under assessment must be sufficiently narrow to allow for in-depth comparison.³⁰ In this paper, policy coherence between two levels of jurisdiction (international and provincial/state, i.e. subnational) delineates the area of study; however, these limits mean that other relevant, overlapping policies are not brought to bear on this issue. There are numerous policies that affect the GLSLR basin, from the municipal to international levels. In the assessment of policy coherence, this paper focuses on three GLSLR watershed subnational policies: the Great Lakes Charter (1985), the Great Lakes Charter Annex (2001), and the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement (2005); and, at the international level, the Guiding Principles of the Dublin Statement on Water and Sustainable Development (1992) (hereafter Dublin Principles) and the Bonn Keys (2001).

Justification

Although many organisations are involved in the study and protection of the GLSLR watershed, there is still much to be learned about subnational policies and the role of Ontario in the development and implementation of water policies in this region. Only by studying past and current water policies can we ensure that future policy-making is effective in achieving desired water management objectives. Lester finds that,

at present, much more attention still needs to be directed toward the adequacy of subnational institutions in environmental policy-making and implementation...[this] is particularly important given the devolution of federal environmental programs to the states.³¹

While this conclusion highlights research gaps in the United States, the situation is extremely similar in Canada where decentralisation of responsibility from the federal government to the provincial governments is well underway and freshwater protection is primarily a subnational

³⁰ May, P. J., J. Sapotichne and S. Workman, p. 382.

³¹ Lester, J. P., p. 6.

responsibility. In fact, the provinces play a much more central and independent role with respect to environmental policy than do individual states in the US.³²

The evaluation of policy coherence is important because it can improve public policy by encouraging transparent and evidence-based decision-making, the establishment of appropriate implementation mechanisms and independent monitoring.³³ As well, policies greatly influence the inter-related factors that determine water availability and uses.³⁴ Therefore, analysis of water policies in the GLSLR watershed can improve our understanding of overall water availability and use in the basin. The evaluation of water availability is critical because, as Brooks notes, “in every practical way...the global supply of fresh water available for human use is fixed while human demand is ever-growing.”³⁵ This fact is particularly acute in the GLSLR watershed where the population is expanding rapidly. An examination of GLSLR basin water policies can help to ensure availability for the growing population, industries and ecosystems.

Although the GLSLR watershed has many unique characteristics, research of water policies in the basin can be utilized in other locations that are also engaged in developing water policies. Three aspects explain the far-reaching relevance of GLSLR basin water research. First, Canada utilizes water in the same way as other nations.³⁶ Second, state-provincial relations in the watershed provide a model for managing international environmental issues.³⁷ Third, “roughly half of all land in the world lies within river basins covering parts of the territory of two or more countries”³⁸ yet analyses of water issues tend to be based on national boundaries; as a

³² Paehlke, R., p. 172.

³³ Picciotto, R., p. 7.

³⁴ Barlow, P. M.; W. M. Alley and D. N. Myers, pg. 77. The six factors are: water works infrastructure; water demands; economic factors; water quantity and quality; regulations; and water law.

³⁵ Brooks, D. B., p. 4.

³⁶ Environment Canada (2005c), p. 1.

³⁷ The American Assembly, p. 9.

³⁸ Jøneh-Clausen, T. and J. Fugl, p. 507.

result, the basin-level manifestations of water resource problems are not adequately recognized, leading to critical misunderstandings.³⁹

Applied Relevance

The future of communities in the GLSLR basin is intrinsically tied to the health of the watershed. Therefore, it is important for policy-makers to realize the wide-ranging social consequences of water management policies. In addition to the implications for human health and economy, Blatter and Ingram maintain that “water has always had an emotional and symbolic value for communities, and it increasingly provides impetus for the formation of transitional networks and discourses.”⁴⁰

Focusing on the interaction of international norms with subnational agreements in the context of Ontario’s GLSLR basin water policies is a crucial step toward improving environmental governance because as Lee and Perl note, a “multinational framework could help Canada overcome the effect of domestic institutional constraints.”⁴¹ Indeed, Paehlke finds that international environmental pressures may be necessary for Canada to return to environmental sustainability.⁴² In addition to overcoming domestic obstacles, international norms may provide the basis for Canada to aggressively transform water policies in order to protect the function and health of freshwater ecosystems.⁴³

Academic Contribution

This thesis will apply qualitative content analysis to evaluate the consistency of subnational water agreements to international water management norms. The resulting evaluation demonstrates the utility of qualitative content analysis as a tool for policy comparison.

³⁹ Wolf, A. T. (2002), p. 9.

⁴⁰ Blatter, J. and H. Ingram, p. xv.

⁴¹ Lee, E. and A. Perl, p. 6.

⁴² Paehlke, R., p. 174.

⁴³ Postel, S., p. 7; 13.

In addition to applying qualitative content analysis, a literature review will compile current information that illustrates the important theoretical and practical links between international norms and local policies.

Many theoretical concepts are introduced in the examination of policy coherence. In the context of provincial-federal relations between Ontario and Canada, decentralisation of authority with respect to water management will be explored. The international context will examine the roles of norms, soft law, regimes and internationalisation with respect to water management. This thesis will also contribute to research on institutional interplay by analyzing the interactions among various institutions, specifically, provincial governments, national governments and supra-national organisations. Due to its focus on sub-national and supra-national actors, this research will provide insight regarding complex and multi-scale governance.

The governance of water in the GLSLR watershed is a case study of local preferences for environmental conservation and resource management in a transnational setting. In this context, “water is illustrative of a whole array of socioecological controversies that we can think of under the rubric of contentious transnational environmental politics.”⁴⁴ Water policy research therefore contributes to the academic fields of water management, environmental politics and public policy.

As with many environmental problems, the challenge of freshwater management has illustrated the failure of traditional management methods, governance arrangements and policy processes. Blatter, Ingram and Doughman posit that investigations about water issues can uncover governance problems and challenge widespread perceptions.⁴⁵ Studying water management policies assists in changing perceptions as well as generating “powerful

⁴⁴ Conca, K., p. 8.

⁴⁵ Blatter, J., H. Ingram and P. M. Doughman, p. 3.

consequences for politics and policy.”⁴⁶ Research can also provide information that supports “open, participatory, and responsible” governance.⁴⁷ These beliefs suggest that research focused on GLSLR basin water policies actually has wider applicability and academic relevance beyond the boundaries of the watershed.

Due to the relative failure of the Convention on the Law of the Non-navigational Uses of International Watercourses (1997) and other formal attempts to create legally binding international water laws, Conca maintains that “...water has not been an area of extensive or effective governance through the conventional institutional form of one or more international regimes.”⁴⁸ This thesis is guided by Conca’s critique of traditional regimes in freshwater governance and his contention that “...at least in principle, norms that take hold around the governance of international rivers might be able to “swim upstream” in the sense of having broader domestic reverberations.”⁴⁹ This thesis will demonstrate the importance of non-traditional institutions in creating and disseminating water resources management norms and demonstrate norm diffusion across different levels of government.

There is a need for policy-makers to review current governance regimes due to increasing pressures on transboundary waters and a growing awareness of future challenges.⁵⁰ Despite this understanding, much of the international environmental politics literature has primarily focused on research in areas such as climate change, biodiversity, trade in endangered species, ozone depletion, etc.⁵¹ It is necessary, then, to research international freshwater policies and management regimes in order to address these research gaps.

⁴⁶ Brooks, D. B., p. 34.

⁴⁷ Brooks, D. B., p. 39.

⁴⁸ Conca, K., p. 9.

⁴⁹ Conca, K., p. 95.

⁵⁰ Royal Society of Canada.

⁵¹ See, for example, *International Environmental Agreements: Politics, Law and Economics* and the journal *Global Environmental Politics*.

Conceptual Framework

A conceptual framework serves to clarify the relationships between research questions and the broader context of theories and academic concepts.⁵² To that end, this section describes the concepts that will be used in this study which include, complex governance, the political processes of internationalisation⁵³ and decentralisation, norms and soft law, and also explains how these apply to water policy in a transnational setting.

Two concurrent phenomena in water policy, internationalisation and decentralisation, have led to the research question explored in this thesis. Internationalisation and decentralisation have emerged as challenges to state-centric realism in that power and influence are increasingly exercised at sub- and supra-state levels. As Hughes describes the situation, in effect, “states are sharing power with both subregions and multicountry organisations. We might call the evolving model, with both variable geometry and multiple layers, complex governance.”⁵⁴ Complex governance recognizes the multiplicity of actors and stakeholders involved in political processes and public administration. Furthermore, complex governance challenges standard descriptions of political power, such as “top-down” authority or “bottom-up” authority, as it acknowledges how power shifts among different levels of government, including horizontal movements. Top-down authority operates on the basis of power residing at the national level and being distributed down to sub-national levels of government. In contrast, bottom-up authority derives power from the grassroots-citizenry up to elected government representatives. These simplistic descriptions of the locus and transfer of power are challenged by complex governance.

⁵² Miles, M. B. and A. M. Huberman, p. 22.

⁵³ Although often used interchangeably, internationalisation is used herein to avoid the economic associations with the term “globalisation”.

⁵⁴ Hughes, B. B., p. 224

Complex governance is easily identified in federal political systems. Federalism is marked by divisions of power among different levels of government as well as its strategy of intergovernmental negotiations and coordination. On the other hand, unitary governments have a central level of decision-making, often with reduced layers of participants, resulting in a simpler policy-making forum. Canada, with ten provincial governments, three territorial governments, and hundreds of municipal and regional governments, is a particularly good example to illustrate the division of powers, multiple stakeholders and unique challenges that characterise complex governance.

To overcome the challenges posed by complex governance, it is necessary to maintain effective relationships among different levels of government—requiring ongoing negotiation, diplomacy and compromise. Indeed, Smith contends that “the relations between the federal government and the provinces bear a striking resemblance to the relations between states at the international level.”⁵⁵ Not only do intergovernmental affairs resemble international relations, domestic and foreign policy are so closely connected that it is not possible to study them independently,⁵⁶ thereby adding significantly to the challenge of studying water policies in Canada.

Complexity is inherent in many situations that cross political boundaries because of the additional number of stakeholders in an international setting. GLSLR watershed policy-making is an excellent example of complex governance due to the basin’s shared jurisdiction with the US. As well, water policy within the part of the basin lying within Canada involves multiple levels of government. Therefore, GLSLR water policy exhibits the characteristics associated with complex governance. This context also epitomises the need for consistency among policies

⁵⁵ Smith, H. A., p. 17.

⁵⁶ Brawley, M., p. 35.

which can “reduce the degree of duplication; [and] reduce initiative fragmentation...”⁵⁷ among different policies.

In contrast to the “top-down” and “bottom-up” understandings of political power, water policy illustrates the simultaneous exercise of power at different levels of government. Blatter, Ingram and Doughman state that “...contemporary water is properly placed in a world of flows where influence is streaming simultaneously toward global and local levels, while at the same time nations retain significant influence pools.”⁵⁸ The movement of influence among local, national and international levels of government challenges the traditional “top-down” and “bottom-up” conceptions of power. The nation is influenced by local and international processes while simultaneously affecting each of those levels of governments. In the context of Canadian water management, de Loë and Kreutzwiser note that “in concert with globalization, the central or national state has been “retreating” from its traditional functions and that a variety of non-state and local or subnational actors are filling the void created.”⁵⁹

The process of changing governance arrangements is an integral concept in this thesis. Paehlke states “national environmental policy in Canada is thus caught between competing centrifugal and centripetal forces, between globalization and decentralization.”⁶⁰ These forces challenge realist conceptions of international and domestic politics in which the state is the locus of power. Both globalisation and decentralisation illustrate that the state is no longer the sole proprietor of legitimate authority within its territorial boundaries thus undermining its ability to act unilaterally to exploit or protect its natural resources. Canadian water governance is affected by these changes to such an extent that the traditional, state-centric approach to water management

⁵⁷ Duraiappah, A. K. and A. Bhardwaj, p.1.

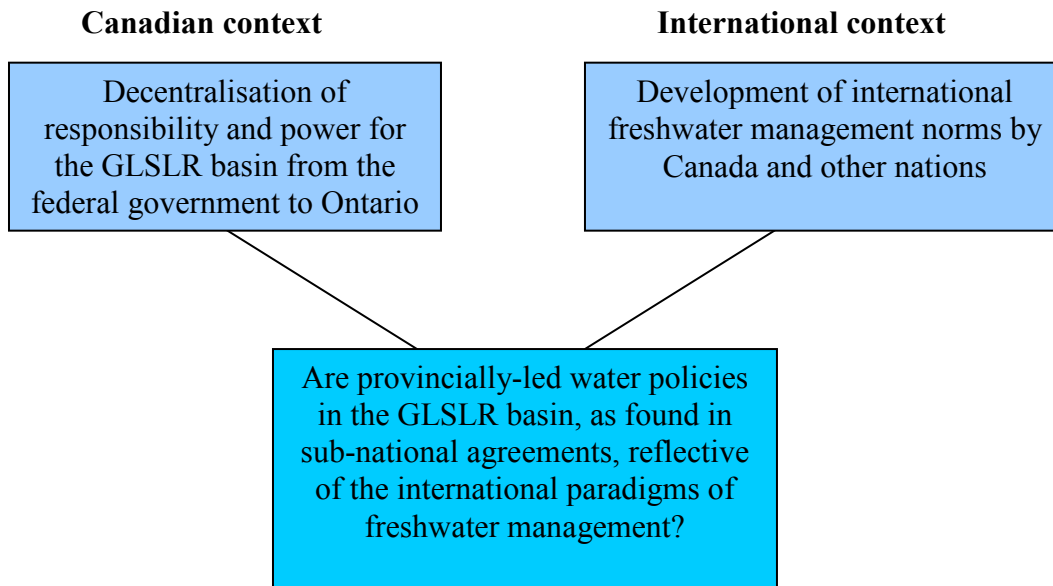
⁵⁸ Blatter, J., H. Ingram and P. M. Doughman, p. 3

⁵⁹ De Loë, R. and R. Kreutzwiser, p. 89.

⁶⁰ Paehlke, R., pp. 173-174.

faces serious challenges.⁶¹ As national authority wanes, the importance of supra-national and sub-national actors increases. Figure 1.1 illustrates how the research question of this thesis arises due to the growing authority of both the provincial and international jurisdictions.

Figure 1.1 The interaction of water management trends



Decentralisation

Decentralisation refers to the process of power and authority moving from the national arena to lower levels of government, in this case, the province of Ontario. Since its founding, Canada has experienced a significant shift that has given greater powers to the provinces and territories.⁶² The ability of Ontario to create water policies is one of the many powers that have shifted to the province allowing it to engage in actions that can create consequences beyond provincial boundaries.

Internationalisation

For the purposes of this paper, internationalisation is defined as “the phenomenon whereby policies within domestic jurisdictions face increased scrutiny and participation from actors and/or

⁶¹ De Loë, R. and R. Kreutzwiser, p. 99.

⁶² Landes, R. G., p. 78.

institutions outside of those jurisdictions.”⁶³ Internationalisation is a relatively recent phenomenon marked by increased among different actors at the international level. It involves nation-states, non-governmental organisations, diaspora communities and large businesses. Boardman states that the effect of internationalisation has been “internationally defined obligations and the presence of shifting mosaics of governance players exerting a greater pull on governments.”⁶⁴

Internationalisation has had the effect of strengthening both sub-national and international levels of governance. Howlett and Rayner maintain that this shift has occurred as a response to internationalisation with nation-states lending “their support to a variety of initiatives to institutionalize control at the regional and international levels.”⁶⁵ The role played by the International Joint Commission in the GLSLR watershed illustrates the institutionalisation of the international level in the governance of water. However, others argue that modern nation-states are in fact able to strengthen control over water through these new structures and relationships.⁶⁶

Norms, Soft Law and Regimes

Internationalisation brings to the fore non-legal aspects of political influence, such as norms, soft law, and regimes. A norm determines what actions are acceptable in a social context and influences group members to the extent that it guides, controls or regulates. Soft law is merely a well-defined norm, usually in written form. Parties are compelled to obey soft law due to expected negative social consequences rather than the threat of formal punishment.

Regimes act as decision-making fora, an area for cooperative discussions, and as a means to strengthen relationships and reduce conflict over use, pollution and/or the division of water resources.⁶⁷ A regime, in this sense, is a manifestation of cooperation between actors. In the

⁶³ Bernstein, S. and J. Cashore, p. 213.

⁶⁴ Boardman, R., p. 191.

⁶⁵ Howlett, M. and J. Rayner, p. 252.

⁶⁶ Blatter, J., H. Ingram and P. M. Doughman, p. 3

⁶⁷ Jägerskog, A. and D. Phillips, p. 17.

transboundary GLSLR watershed, for instance, recent policies have been based on good-faith agreements and shared norms among the ten signatories. This type of arrangement in transboundary settings has become fairly common and, consequently, the concept of water regimes is receiving increasing attention.⁶⁸ Concurrently, declarations from the United Nations conferences have contributed to the development of soft law and regimes with regards to international water management. How these subnational and international developments relate is the focus of this thesis.

Thesis Outline

Chapter 2 explains which methods will be used in this paper and the advantages of using a literature review and qualitative content analysis for this research. Chapter 3 provides information about the GLSLR watershed and describes how water management in Canada has changed so that the province of Ontario is now the primary jurisdiction for the GLSLR basin water policy. Chapter 4 relates international developments in water management policy with particular attention to the United Nations, while also exploring the theories of norms, soft law and regimes, in order to establish the important role of international influences in domestic water policy. Chapter 5 presents the findings of the content analysis related to the policy coherence among the international and subnational water policies. In Chapter 6, this thesis addresses the suggestion that “the *practical* significance [of a comparison] is what you need to assess.”⁶⁹ Thus, it looks at broader aspects of the water policies, discusses comparative strengths and weaknesses of the international and subnational policies and situates the comparative findings in the context of Ontario’s and Canada’s role in GLSLR watershed policy.

⁶⁸ Jägerskog, A. and D. Phillips, p. 17.

⁶⁹ Miles, M. B. and A. M. Huberman, p. 254.

CHAPTER 2: METHODOLOGY

Water research is conducted by practitioners in numerous fields; therefore, multiple methods can be used to examine different aspects of water. A recent collection of water research papers, *Reflections on Water: New Approaches to Transboundary Conflicts and Cooperation*, includes methods as diverse as network analysis, discourse analysis, historical and ethnographic case studies, and social ecology.⁷⁰ The editors approach water research from the following position: “Whereas modernist science insists on testing explanatory approaches against each other, we propose a complementary usage of approaches combining inductive and deductive or hermeneutical and scientific approaches.”⁷¹ In order to effectively answer the research question and substantiate the results, a literature review and qualitative content analysis is used to evaluate the consistencies and inconsistencies among the international freshwater management norms articulated in the Dublin Principles (1992) and the Bonn Keys (2001), in comparison to Great Lakes Charter, the Great Lakes Charter Annex, and the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement. Although it is difficult to measure policy coherence, it can essentially be determined when policies “go together because they share a set of ideas or objectives.”⁷² This line of reasoning supports the use of a literature review to determine which policies are applicable to a policy area and qualitative content analysis to determine if the policies espouse similar concepts.

As the GLSLR basin water policies have been fairly recently altered, this thesis is the first study to address this question and cannot directly draw upon previous work in the area. Therefore, this research is exploratory to develop initial ideas about the conformity of three subnational freshwater management policies in the GLSLR watershed with respect to

⁷⁰ Blatter, J., H. Ingram and P. M. Doughman, p. 6.

⁷¹ Blatter, J., H. Ingram and P. M. Doughman, p. 4

⁷² May, P. J., J. Sapotichne and S. Workman, p. 382.

international norms and principles and the significance of these findings the context of Ontario.⁷³ In developing the context surrounding the research questions, this thesis will also accomplish some of the goals of descriptive research.⁷⁴ This type of comparative research is important because it can suggest areas that future policies and implementation activities can be improved by highlighting inconsistencies between sub-national and international policies.

Literature Review

A thorough literature review is an integral component of this thesis. First, the literature review provides an introduction to the concepts and general background of the issues being researched. This information is necessary to establish credibility and familiarity with the research subject.⁷⁵ The review also identifies gaps in the literature, thereby providing justification for why this research is important.

The literature review is carried out in Chapters 3 and 4. These chapters provide the historical setting and theoretical context to justify the research question investigated in this thesis by explaining the processes that contributed to changes in water policy development in Canada and to the creation of international water management norms. Chapter 3 addresses theories of federalism and decentralisation of power and how these processes have impacted upon Ontario's role in water policy in the GLSLR watershed. It also explores the federal and provincial areas of responsibility regarding water management and looks at the challenges of complex governance in this setting. Chapter 4 outlines theories of norms, soft law, regimes and internationalisation and chronicles how these concepts have contributed to an international water management policy regime.

Content Analysis

⁷³ Neuman, W. L., p. 29.

⁷⁴ Neuman, W. L., p. 29.

⁷⁵ Neuman, W. L., p. 97.

Content analysis is a multi-faceted research method that can be applied to numerous sources of data such as speeches, films, television, press releases, news records, written texts, etc. Proponents of this method advocate that “the variety of applications may be limited only by the analyst’s imagination, theory and resources.”⁷⁶ As it is so adaptable, content analysis studies have been published in scholarly journals of nutrition, psychology, economics, sociology, and political science.⁷⁷ The method can also be used towards different ends, such as providing description or testing theory-derived hypotheses and can be further divided between qualitative and quantitative approaches.⁷⁸

Neuman maintains that a review of past research projects assists with the choice of appropriate methodologies for a research project.⁷⁹ Thus, this thesis draws upon other comparative research focusing on water policy. The most relevant research project for the purposes of this paper was completed by Rahaman, Varis and Kajander who completed an assessment comparing the European Union Water Framework Directive (EU WFD) with four international conferences related to integrated water resources management. They found seven “mismatches” between the EU WFD and the outcome of the four conferences.⁸⁰ The researchers study both UN-led meetings and international forums of technical experts and practitioners in the field of water management because of the explicit focus on integrated water resources management. Their template is a useful starting point for this research; however, a serious weakness with Rahaman *et al.* is that it does not explain how the mismatches were detected.

Similar to Rahaman *et al.*, comparative research is conducted among different water policies. Qualitative content analysis is used for the comparison in order to uphold rigorous

⁷⁶ Riffe, D., S. Lacy and F. G. Fico, p. 17.

⁷⁷ Riffe, D., S. Lacy and F. G. Fico, p. 13.

⁷⁸ Riffe, D., S. Lacy and F. G. Fico, p. 17.

⁷⁹ Neuman, W. L., p. 96.

⁸⁰ Rahaman, M. M., O. Varis and T. Kajander, p. 573.

research standards, to allow for replicability and to ensure reliability. This method identifies overlaps and mismatches of the subnational policies and international declarations. The application of qualitative content analysis is suggested by other researchers who affirm that “textual data are typically explored inductively using content analysis to generate categories and explanations.”⁸¹

The following written documents are the primary data sources: the Great Lakes Charter, the Great Lakes Charter Annex, the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement, the Dublin Principles and the Bonn Keys. It has become widely accepted to utilize systematic analysis of documentary data as a research method in the social sciences.⁸² As such, this research contributes to a growing body of work that demonstrates the utility of content analysis focused on documentary data.

The study of textual data, in the form of written policies, is important for several reasons. First, written policies are the formal position adopted vis-à-vis other stakeholders involved with the issue. Second, policies need to be studied because, in theory (if not in always in practise), they precede on-the-ground implementation of government programs. Goertz distinguishes between words (written policies), which represent norms, and subsequent behaviour.⁸³ Thus, “communication content [i.e. textual data] also merits systematic examination because of its assumed role as cause or antecedent of a variety of individual processes, effects or uses people make of it.”⁸⁴ Written policies are an important part of governance that lays the foundation for other activities.

⁸¹ Pope, C., S. Ziebland and N. Mays, p. 114.

⁸² Hodson, R., p. 1.

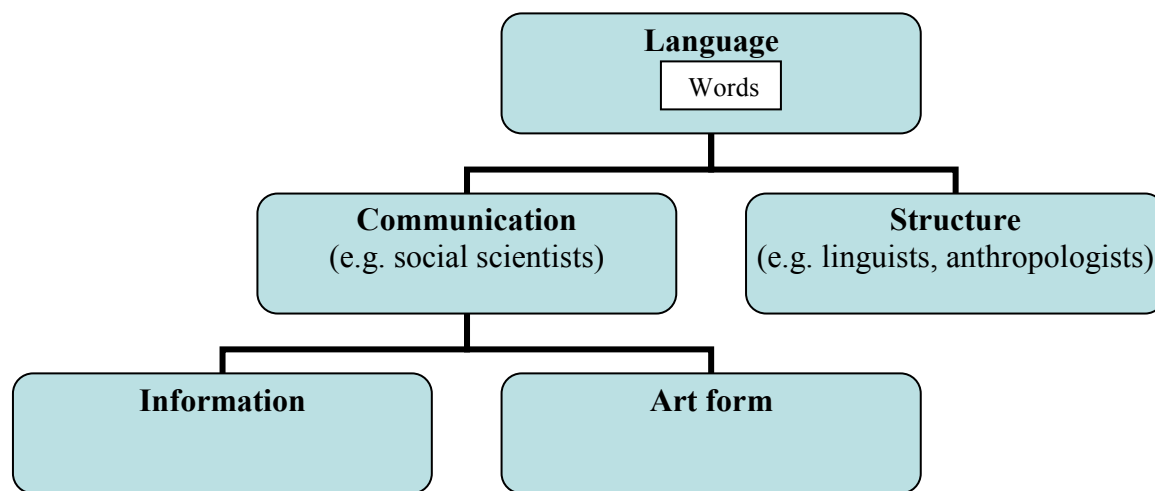
⁸³ Goertz, G., p. 46.

⁸⁴ Riffe, D., S. Lacy and F. G. Fico, p. 8.

Given the proposition that “there seems to be an increasing recognition that the water crises are mainly management and governance crises”⁸⁵ it is especially important to review the policies that are intrinsic components of management and governance. Policies are closely correlated with norms as the following definition illustrates: “I have defended the concept of a norm as a means of making decisions about actions.”⁸⁶ Policy is remarkably similar to Goertz’s conception of norms. If the management and governance crises (that so dramatically affect water availability, use and sustainability) are to be altered, it will be necessary to change current norms and policies. Indeed, Goertz argues that “institution change occurs when the norm— words—change. The more important the norm in the overall structure the more important the change.”⁸⁷

Words, as a component of language, can be studied in numerous ways. Figure 2.1 illustrates various approaches to the study of language. The research undertaken in this study falls into the category of words as information (see bottom left box of Figure 2.1).

Figure 2.1 How language is studied (visual depiction created from Tesch 1990: 56.)



⁸⁵ Jønch-Clausen, T. and J. Fugl, p. 501.

⁸⁶ Goertz, G., p. 46.

⁸⁷ Goertz, G., p. 49.

The use of words as the primary form of data lends itself to qualitative research. As Tesch states, “the term ‘qualitative’ will refer to words, and ‘qualitative research’ will mean those kinds of research that predominantly or exclusively use words as data.”⁸⁸ Qualitative research is also well-suited to this thesis because the area under study is pre-selected, rather than a random sample; it is typical for qualitative analysis to be conducted on “strategically selected case studies.”⁸⁹ In contrast, quantitative analysis relies on random sampling. There is also a significant difference in the results of each method. Quantitative analysis produces probabilistic inferences and conclusions about the generalisability of one’s findings⁹⁰ whereas qualitative analysis produces logical inferences that “yield conclusions about the universality of one’s theories.”⁹¹

Qualitative research is the most appropriate approach based on the object of study (i.e. text), the use of a specific case, and the advantages of the research process. Additionally, the goals of this study are best met by using qualitative analysis. Whereas quantitative research can yield confirmatory, statistical results, “qualitative methods are more inductive, nonstatistical, and explanatory.”⁹² Furthermore, qualitative analysis is used to describe relationships between phenomena and is embedded with a “rejection of standardization”⁹³ in favour of rich description. Thoughtful, analytical description is a much more useful approach for this study as it allows nuances to be explored. Thorough description can be achieved via qualitative research as it allows the researcher to explore the data, apply different classification systems, and discover which scheme fits the data.⁹⁴ This method is an iterative process that allows new findings

⁸⁸ Tesch, R., p. 56.

⁸⁹ Roberts, C. W., p. 3.

⁹⁰ Roberts, C. W., p. 3.

⁹¹ Roberts, C. W., p. 3.

⁹² Roberts, C. W., p. 2.

⁹³ Tesch, R., p. 4.

⁹⁴ Roberts, C. W., p. 2.

discovered during the analysis to guide the development of the research questions, data collection and hypothesis setting.

The documents that are compared in this study follow Hodson's recommendation that "the theoretical goals of the study play a leading role in determining the criteria for selecting cases."⁹⁵ Two sets of rejection criteria are used, one for subnational policies and the other set for international policies, to narrow the focus and to select the documents.

Rejection criteria for domestic policies

- Policy not focused on and co-created by the Province of Ontario
- Policies created before 1985
- Policies not explicitly focused on the Great Lakes and/or St Lawrence River watershed
- Policies not applicable to multi-party agreement

Rejection criteria for international policies

- Policy created by bodies other than the United Nations
- Policies created before 1985
- Policies not explicitly focused on management of the watershed
- Policies not intended for international agreement

Several stages of content analysis are referred to as unique research methods. For instance, "thematic analysis" is used to describe the process of coding data. Thematic analysis is especially appropriate for this research as it is focused on compiling qualitative description rather than calculating quantitative statistics. The researcher must maintain an open mind during the reading and coding of the data to effectively engage in thematic analysis. As Boyatzis explains, "toleration of ambiguity is a precursor to the type of openness discussed earlier as a desired characteristic of the researcher using thematic analysis."⁹⁶

Content analysis is often conducted with the use of computer packages that can be programmed by the analyst to detect certain words, phrases and/or organisational structures. This can be quite helpful for quantitative researchers who aim to enumerate frequencies and

⁹⁵ Hodson, R., p. 17.

⁹⁶ Boyatzis, R. E., p. 15.

statistical relationships, such as mode or deviance. In qualitative research, however, computer-based analysis is less beneficial. This is due to the inability of computer packages to distinguish an association between theory and data or to organize the analysis in a useful form.⁹⁷ More to the point, “to take the analysis beyond the most basic descriptive and counting exercise requires the researcher's analytical skills in moving towards hypotheses or propositions about the data.”⁹⁸ Heeding this advice, computer packages are not used to carry out the content analysis.

Many stages are involved in document-based content analysis. Hodson describes the steps as:

1. Selection of a topic
2. Identification and assembly of relevant documents
3. Specification of a set of themes of interest
4. Reading of documents and coding according to pre-determined themes⁹⁹

The first two steps have been previously addressed in this chapter. The third and fourth steps of the content analysis, theme identification and coding, are carried out in Chapter 5 to complete the comparative research. The third step, thematic analysis, will reveal the main themes in the Dublin Principles and the Bonn Keys. In order to be identified as a theme, the basic descriptors of who, what, where, when, why, and how must be communicated in unambiguous language. These theme words are drawn from Duraiappah and Bhardwaj’s instruction that, “policy coherence among two protocols or policies can be assessed in terms of goals (overall themes), instruments and decisions (ways to achieve the goals), and actors (institutions responsible) for achieving the desired integration.”¹⁰⁰ Based on this explanation, goals and instruments are represented by “what”, “where”, “why”, “how” and “when” and actors are represented by

⁹⁷ Pope, C., S. Ziebland and N. Mays, p. 115.

⁹⁸ Pope, C., S. Ziebland and N. Mays, p. 115.

⁹⁹ Hodson, R., p. 6.

¹⁰⁰ Duraiappah, A. and A. Bhardwaj, p. 4.

“who”. Unique descriptions that do not fall under these categories are recorded under miscellaneous (see Table 2.1).

Table 2.1 Template for thematic analysis of the Dublin Principles and Bonn Keys

	Principle 1	Principle 2	Principle 3	Principle 4	Principle 5 (BK only)
Who					
What					
Where					
When					
Why					
How					
Miscellaneous					

After this stage of analysis is completed for each of the Dublin Principles and Bonn Keys, each theme is given a representative code. Codes are an essential aspect of content analysis and can present different types of information such as “a list of themes; a complex model with themes, indicators, and qualifications that are causally related; or something in between these two forms.”¹⁰¹ They are used to assign “units of meaning to the descriptive or inferential information compiled during a study.”¹⁰² The researcher can attach codes to single words, phrases, sentences or paragraphs although they are usually applied to sentences or groups of sentences, rather than single words.¹⁰³ Furthermore, codes can be a straightforward category or an abstract, complex metaphor.¹⁰⁴

The codes for this thesis are produced from the descriptors generated from the thematic analysis of the international norms¹⁰⁵ and are created by consolidating the themes from the Dublin Principles and Bonn Keys. Therefore, the codes are who, what, where, why, how, when and miscellaneous; further, each code is assigned a number when there are multiple codes for each theme (e.g. who1, who2, who3, what1, where1, etc.). Table 2.2 shows the format for

¹⁰¹ Boyatzis, R. E., p. 161.

¹⁰² Miles, M. B. and A. M. Huberman, p. 56.

¹⁰³ Miles, M. B. and A. M. Huberman, p. 56.

¹⁰⁴ Miles, M. B. and A. M. Huberman, p. 56.

¹⁰⁵ This principle is Hodson’s fourth step of content analysis, creating codes and analysing documents based on those codes.

integrating the coded themes from the Dublin Principles and Bonn Keys to create codes representing international freshwater management norms.

Table 2.2 Template for code development of international norms

	Dublin Principles	Bonn Keys	International Codes
Who			
What			
Where			
When			
Why			
How			
Miscellaneous			

Coding is an important aspect of content analysis because it allows the researcher to demonstrate correlation among topics of interest by revealing regularities in data.¹⁰⁶ When the researchers code the prevalence of certain words, themes or ideas in a document, correlation across documents can be identified.¹⁰⁷ For the codes to have theoretical and practical relevance, they “should relate to one another in coherent, study-important ways; they should be part of a governing structure.”¹⁰⁸ Since these codes are developed to assess policy coherence among policies and norms, the governing structure is premised on Duraiappah’s and Bhardwaj’s instruction cited above.¹⁰⁹

Finally, in the fourth step, the codes produced from Table 2.2 are compared to the Great Lakes Charter, the Great Lakes Charter Annex and the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement to determine if the international norms are evident in the subnational agreements. Specifically, the “Purpose”, “Findings”, “Principles” and “Directives” of the Great Lakes Charter and Charter Annex and the “Preamble” and “Objectives” of the Sustainable Water Resources Agreement are analysed for consistencies. The “Implementation of Principles” from the Great Lakes Charter and items after “Chapter 1, Article

¹⁰⁶ Miles, M. B. and A. M. Huberman, p. 62.

¹⁰⁷ Hodson, R., p. 6.

¹⁰⁸ Miles, M. B. and A. M. Huberman, p. 62.

¹⁰⁹ See page 26.

100” from the Sustainable Water Resources Agreement are excluded as these sections are highly specific to application, rather than descriptive of general norms. To be counted, the text of the agreements must clearly align with the code by containing either matching language or clear-cut similarities. To ensure consistent identification, repetition of words and phrases will be coded the same way throughout each of the three agreements; indeed, certain words and phrases elicit particular codes¹¹⁰. This method reduces subjectivity of the analysis and enables replicability. The final results will show consistencies and divergences between subnational water policies and international norms.

¹¹⁰ When this occurs, it will be noted in the footnotes.

CHAPTER 3: COMPLEX GOVERNANCE AND THE ROLES OF ONTARIO AND CANADA IN THE GREAT LAKES-ST LAWRENCE RIVER WATERSHED

Water management in the Great Lakes-St Lawrence River watershed exemplifies that, “Canada has a patchwork of authorities and responsibilities inherited from days when water was taken for granted.”¹¹¹ Water policies applying to the GLSLR watershed arise from separate provincial and federal mandates and are developed and implemented by several other jurisdictions. As water can no longer be assumed to be abundant, it is increasingly concerning that water policy is carried out in such a disjointed manner.

This chapter illustrates the challenges of complex governance in which numerous actors with various responsibilities are simultaneously working to promote their respective interests. Specifically, complex governance highlights how integrated water resources management (IWRM), the primary water management approach of the international community and the Government of Canada, may be difficult to achieve if institutional arrangements are not sufficiently cooperative, coherent and comprehensive.

The source of much of the complexity of water management is the watershed itself. Thus, this chapter begins with a description of some of the political, environmental, societal, and economic features of the GLSLR watershed. The chapter then presents the history of water management and policy-making in the GLSLR basin, showing how institutional complexity has evolved and illustrating the ways in which the Governments of Ontario and Canada have adapted to changing political landscapes. It also clarifies the current roles of the province and the federal government in GLSLR basin water policy. Finally, the chapter demonstrates the primacy of Ontario in GLSLR basin water policy, thereby affirming the importance of evaluating provincial water policy with respect to international norms and principles.

¹¹¹ Campbell, I. (2004) p. 6.

The Great Lakes-St Lawrence River Watershed

The term watershed is used in several different ways. The following definition captures the hydrological aspects of a watershed:

[A watershed is] a catchment or drainage basin ... [that] is the total area of land that drains into a water body. It is usually a topographically delineated area that is drained by a stream system. River basins are large watersheds that contribute to water flow in a river. The watershed of a lake is the total land area that drains into the lake.¹¹²

In addition to this hydrological definition, the term is also used in water resources policy to refer to land management units identified as "...useful units of land for planning and managing multiple natural resources."¹¹³ Increasingly, water managers recognize that the river basin is also part of social and technological systems.¹¹⁴ In effect, watersheds are defined by hydrological, ecological, administrative, technological and social features.

In the GLSLR watershed, this definition is overlaid with political boundaries. The GLSLR watershed, as defined in the Great Lakes Charter and proceeding agreements, is "the watershed of the Great Lakes and the St Lawrence River upstream from Trois-Rivières, Quebec within the jurisdiction of the Parties."¹¹⁵ The Parties to the Agreement include the Canadian provinces of Ontario and Quebec and the eight "Great Lakes states" – Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin. Trois-Rivières, Quebec is singled out as a boundary because it is the approximate location where the St Lawrence River is affected by the tides of the Atlantic Ocean¹¹⁶ (see Figure 3.1). Various definitions of the GLSLR watershed illustrate the political (e.g. state and provincial boundaries), ecological and hydrological characteristics of a watershed.

¹¹² Brooks, K. N., p. 1095.

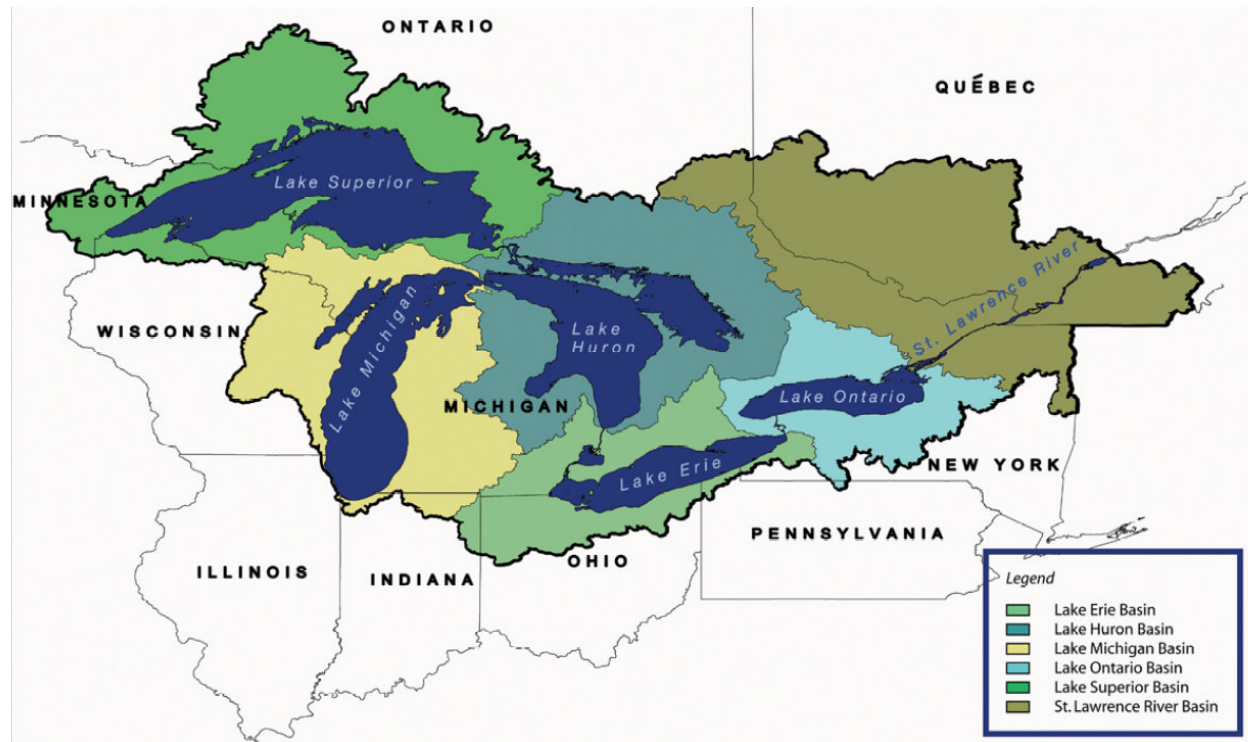
¹¹³ Brooks, K. N., p. 1095.

¹¹⁴ See, for example, U.S. Army Corps of Engineers.

¹¹⁵ Council of Great Lakes Governors (2005) p.4.

¹¹⁶ Waterlow, J., p. 7.

Figure 3.1 The Great Lakes-St Lawrence River Watershed (shown with sub-basin divisions)



Source: Council of the Great Lakes Governors. www.cglg.org/projects/water/docs/12-13-05/GLBasinMap.pdf. Accessed 30 March 2008.

The Great Lakes form “the largest system of inland lakes in the world” with a surface area of 244 000 square kilometres, and contain 20% of the world’s surface freshwater, a volume of 22 000 cubic kilometres.¹¹⁷ The GLSLR drainage basin measures approximately 1 610 000 square kilometres.¹¹⁸ The scale of the watershed is so large that it plays a significant role in the climate and ecology of the region.¹¹⁹ However, the amount of renewable water is only 1% of the total quantity in the Lakes (the remainder being non-renewable since it is not recharged by precipitation, rivers or groundwater).¹²⁰

In addition to the water resources of the watershed, the landscape of the area is also noteworthy for several reasons. It represents “the most fertile region [of Ontario] featuring

¹¹⁷ D’Itri, F. M., p. 475.

¹¹⁸ Environment Canada (2007a).

¹¹⁹ Environment Canada (2005b).

¹²⁰ Morris, T.J *et al.*, p. 11.

highly productive wetlands which support many species of plants, insects and birds including waterfowl, water birds, shorebirds and many songbirds.”¹²¹ The wetlands surrounding the Great Lakes attract millions of migrating birds each year, including the lesser scaup (*Aythya affinis*), the redhead (*Aythya Americana*) and the canvasback (*Aythya valisineria*).¹²² Despite the importance of this migratory staging habitat, 90% of the original wetland area in the GLSLR watershed has been lost, primarily due to urbanization, agricultural draining and recreation.¹²³

Along with wetlands, there are numerous large lakes and river systems as well as major urban centres, agricultural areas and forest cover in the GLSLR watershed. The forests are primarily found in the northern section of the watershed and contain “spruce, balsam fir and jack pines, which provide habitat for moose, beaver, deer, martens, weasels, porcupines, mink, wolves, bears, osprey and peregrine falcons.”¹²⁴ The remaining natural ecosystems are threatened by deforestation, acid rain, agricultural production, recreational development, climate change and urbanization.¹²⁵

The GLSLR watershed is immensely important to Canada’s economy, annually contributing \$180 billion to Canada-US trade.¹²⁶ Indeed, 45% of Canada’s industrial production and manufacturing occurs in the Great Lakes watershed.¹²⁷ Industries in the area, such as tourism, services, outdoor recreation, commercial and recreation fisheries, energy production and maritime transportation, support the regional economy.¹²⁸ The agricultural sector is also significant for the region’s economy as the fertile soils of the GLSLR watershed produce nearly

¹²¹ Environment Canada (2005a).

¹²² Banting, E., p. 36.

¹²³ Environment Canada (2005a).

¹²⁴ Government of Canada and Government of Ontario (2002). p. 2.

¹²⁵ Environment Canada (2005a).

¹²⁶ Morris, T.J *et al.*, p. 12.

¹²⁷ Government of Canada and Government of Ontario (2002). p. 3.

¹²⁸ Sproule-Jones, M., p. 839.

25% of all crops grown in Canada.¹²⁹ The region's crops include barley, wheat, oats, potatoes, corn, apples, and grapes, which are sold throughout North America and other parts of the world.¹³⁰ Despite economic successes to date, "challenges to the environmental quality of the basin directly affect the viability and vitality of this economic engine."¹³¹

Nearly all Ontarians, 95% of the province's population, reside in the GLSLR basin.¹³² In total, 16 million Canadians rely on freshwater from the Great Lakes basin for drinking water.¹³³ Despite the number of people reliant on the resource for basic needs, this source of water contains more than 360 chemical substances.¹³⁴ People also rely on the water resources for health, transportation, energy, economic, agricultural, and recreational uses.¹³⁵

Deteriorating environmental conditions are harmful to the quality of life for the millions of basin residents and for economic development. The various uses, and abuses, of the watershed have created pressing environmental problems to the extent that "we are slowly but surely killing the Lakes."¹³⁶ This situation is worsened by the enduring myth that the water resources of the Great Lakes are abundant and inexhaustible. For economic prosperity to continue through the twenty-first century, the GLSLR watershed must be protected.

Canadian Federalism

Federalism is "a system of government in which power is divided between a central authority and constituent political units."¹³⁷ Federal systems can exhibit different tendencies, such as toward a strong central government with nearly exclusive authority or alternatively,

¹²⁹ Banting, E., p. 30.

¹³⁰ Banting, E., pp. 7; 30.

¹³¹ Government of Canada and Government of Ontario (2002).

¹³² Conservation Ontario (2005).

¹³³ Conservation Ontario (2005).

¹³⁴ Waterlow, J., p. 43.

¹³⁵ Conservation Ontario (2005) and Environment Canada (2005b).

¹³⁶ Ashworth, W., p. 154.

¹³⁷ *The American Heritage Dictionary of the English Language*, 4th Edition. (2000). Houghton Mifflin Company.

toward a weak central government with important powers lying with sub-national governments. Because the locus of power in a federal system is flexible, each level of government tends to believe that “[its] level should be pre-eminent.”¹³⁸ The process of power shifting to a central government is called “centralisation” whereas power shifting away from the centre to other levels of government is known as “decentralisation”.

The Canadian federal system has changed dramatically since the founding of the country. The distribution of power has “... moved from the highly centralized political structure of 1867 to one of the most decentralized federal systems in the world.”¹³⁹ Decentralisation has alternated with moves toward a stronger central government during the country’s history. For instance, Pierre Trudeau is noted for having strengthened the powers of the federal government during his tenure as Prime Minister.¹⁴⁰ In recent years, however, decentralisation has been the primary trend. The decentralisation of power to provinces, territories and municipalities has occurred largely as a result of many years of custom and convention rather than specific policy. More recently, much of the decentralisation of authority occurred following the 1993 federal election when financial and governance arrangements initiated by the federal government “turned power back to the provinces.”¹⁴¹ For instance, changes were made to the transfer payment arrangements between the federal and provincial governments, specifically the Canada Health and Social Transfer. This resulted in increased responsibilities and financial authorities at the provincial level with a simultaneous decrease in the role of the federal government.¹⁴²

Landes explains that the Canadian federal system is characterised by the involvement of “both levels of government...in almost every major policy area. Such complexity requires a

¹³⁸ Landes, R. G., p. 79.

¹³⁹ Landes, R. G., p. 78.

¹⁴⁰ Landes, R. G., p. 78.

¹⁴¹ Landes, R. G., p. 78.

¹⁴² Landes, R. G., p. 84.

constant process of negotiation between the two levels of government in order to keep the federal system functioning.”¹⁴³ As decentralisation continues apace, the degree of cooperation between the federal and provincial levels must continue to improve.¹⁴⁴ Indeed, given the flux of power inherent in federal systems, the increasing number of challenges faced by all levels of government, and the intractability of many issues (e.g. climate change), mutual cooperation is of paramount importance.

The division of powers among federal and provincial governments originates from the *Constitution Act, 1867*. Although the Act is silent with regards to water management, it allocates exclusive legislative authority in several areas which impact upon water resources.

Consequently, water management policies, similar to decentralisation, have developed from convention and historical precedent. Water policy is affected by the exclusive legislative authority of the Parliament of Canada in the following areas: navigation and shipping; inland fisheries; federal and Aboriginal lands; and ferries between a province and any British or foreign country or between two provinces.¹⁴⁵ In addition, rivers and lake improvements are claimed to be the Property of Canada.¹⁴⁶ The provincial legislatures can affect water policy by their authority to make laws in relation to non-renewable natural resources, forestry resources, electrical energy and pollution regulation.¹⁴⁷ The current division of authority explicitly addressed by *The Constitution Act (1867)* with respect to freshwater is summarised in Table 3.1.

¹⁴³ Landes, R. G., p. 82.

¹⁴⁴ Davis, C.E. and J.P. Lester, p. 61.

¹⁴⁵ Section VI, 91: 10, 12, 13.

¹⁴⁶ The Third Schedule, 5.

¹⁴⁷ Section VI, 92.

Table 3.1 Division of Legislative Authority between Provincial and Federal Governments.

Level of Government	Areas of Legislative Authority
Federal	Navigable waters
	Fisheries
	International waters
	Water on First Nations and federal lands
Provincial	Management of non-renewable natural resources
	Pollution control

Federal Role in Water Policy and Management

Governance of the GLSLR was initially overseen solely by the Government of Canada. In 1909, the Governments of Canada and the United States signed the binding agreement the *Boundary Waters Treaty*. This led to the creation of legislation, such as the *International Boundary Waters Treaty Act*, which imposed a legal framework on Canada for all watercourses along the border. Following the enactment of this foundational legislation, the federal government passed additional acts that have influenced activities in the GLSLR watershed. These legislative acts include the *Canada Water Act*, *International River Improvements Act*, *Great Lakes Fisheries Conventions Act*, *Oceans Act*, *Canadian Environmental Protection Act*, *Government Organization Act*, *Canadian Environmental Assessment Act*, *Navigable Waters Protection Act*, *Canadian Shipping Act*, *Dominion Water Power Act*, etc.¹⁴⁸

The federal government conducts many water management activities. These roles include, “protecting water by collecting and distributing water and climatic information, regulating toxic substances, conducting water quality research, and promoting pollution prevention.”¹⁴⁹ It is also empowered to prohibit the bulk removal and diversion of water from

¹⁴⁸ Resource Library for the Environment and the Law.

¹⁴⁹ Environment Canada (2005c) p. 2.

Canadian boundary waters, such as in the GLSLR basin. However, this authority does not extend to diversions out of tributary rivers or groundwater.¹⁵⁰

To illustrate the diversity of the federal government's responsibilities, this section examines Canada's evolving role in water policy, specifically, the development of the *Boundary Waters Treaty* and the International Joint Commission, and the *Canada Water Act*, which provided the groundwork for increased provincial responsibility in water management policy. Current federal water policy, which supports integrated water resources management and its attempt to incorporate this position in the Great Lakes Action Plan 2000-2005, illustrates the decentralisation of power to Ontario. The continuing Canada-US relationship, as seen in the Canada-US Great Lakes Water Quality Agreement, is also explored.

Boundary Waters Treaty and International Joint Commission

The Canada-US *Boundary Waters Treaty*, which is widely regarded as a successful agreement, established the International Joint Commission of Canada and the United States (IJC) to assist in the management of boundary waters shared by Canada and the US by helping to prevent and resolve disputes and to provide advice on related matters. The IJC has played an important role in the management of the GLSLR watershed. It is an independent bi-national organisation consisting of two chairs and four Commissioners, equally divided among Canadian and US representatives. Although the IJC's mandate has expanded beyond water issues, there are four IJC councils which focus specifically on the GLSLR watershed. These are the Council of Great Lakes Research Managers, the Great Lakes Science Advisory Board, the Great Lakes Water Quality Board and the.¹⁵¹ While the six IJC Commissioners represent federal interests, the Councils occasionally include provincial representation.

¹⁵⁰ Ontario Ministry of Natural Resources (2005d) p. 4.

¹⁵¹ International Joint Commission (2008b).

Canada Water Act

The *Canada Water Act* was enacted in 1970 and describes the role of the federal government and circumstances in which the federal and provincial governments may enter into agreements. The following year, the Environment Canada (EC) was created and its Minister was made responsible for the *Canada Water Act*.¹⁵² Furthermore, EC, via its Inland Waters Directorate, was entrusted to provide national leadership on freshwater issues.

The Act begins by stating that it is, “an Act to provide for the management of the water resources of Canada, including research and the planning and implementation of programs relating to the conservation, development and utilization of water resources.”¹⁵³ This description reveals the fairly limited scope of this legislation in that it makes no reference to the connections among water resources and landscapes, society and/or economy that is prevalent in integrated water resources management (IWRM). Throughout the Act, reference is made to “waters” and “water resources”, however now-common water management terms such as “ecosystem” and “watershed” are conspicuously absent. It is readily apparent that more than 30 years have passed since this legislation was created as it does not reflect new knowledge from research and practice in the field of water management.

The *Canada Water Act* uses the phrase, “Comprehensive Water Resource Management,” to refer to the joint activities of the federal and provincial governments¹⁵⁴, thereby implying that water management that does not involve both levels of governments is a non-comprehensive approach. The Act provides the basis for the creation of federal-provincial arrangements, such as the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem. Paragraph 4 of the Act notes the unique geography of Canada and a desire to make optimum use of water

¹⁵² Environment Canada (2006b).

¹⁵³ Government of Canada, *Canada Water Act*.

¹⁵⁴ Government of Canada, *Canada Water Act*.

resources as reasons why the federal government may enter into power-sharing arrangements with sub-national bodies.¹⁵⁵ The primary responsibilities in these arrangements are to:

(i) maintain continuing consultation on water resource matters and to advise on priorities for research, planning, conservation, development and utilisation relating thereto;

(ii) advise on the formulation of water policies and programs; and

(iii) facilitate the coordination and implementation of water policies and programs.¹⁵⁶

The Great Lakes Water Quality Agreement between Canada and the United States (GLWQA)

EC identifies the GLWQA as one of “two key agreements ... in place to ensure cooperation, knowledge sharing, and action to protect and restore the Great Lakes ecosystem.”¹⁵⁷

The GLWQA was first signed in 1972, renewed in 1978, and amended by the addition of a Protocol in 1987. This federal initiative, led by EC, provides guidelines and objectives concerning the restoration and maintenance of “the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem.”¹⁵⁸ The Agreement affirms the importance of earlier legislation (i.e. the *Boundary Waters Treaty*), but moves beyond the limited notion of boundary waters.¹⁵⁹ The geographical area of interest is widened by focusing on the Great Lakes Basin Ecosystem as the main concept, thereby expanding the federal government’s area of responsibilities.

In August 2006, the IJC released a report calling for a renewed GLWQA¹⁶⁰, as the current Agreement has not been updated in nearly twenty years. The GLWQA deals with issues between the federal governments of Canada and the US. As part of their recommendations, the

¹⁵⁵ Government of Canada, *Canada Water Act*.

¹⁵⁶ Government of Canada, *Canada Water Act*.

¹⁵⁷ Environment Canada (2004b).

¹⁵⁸ Environment Canada (2006a).

¹⁵⁹ International Joint Commission (2008a).

¹⁶⁰ See International Joint Commission (August 2006).

IJC advises that a Binational Action Plan should also be created, signed and endorsed by the President and Prime Minister and the U.S. Congress and the Parliament of Canada. The IJC report illustrates the Commission's focus on federal initiatives and the lack of provincial emphasis.

Current Federal Water Policy

The current water management paradigm of the federal government is integrated water resources management (IWRM). The Department of Natural Resources (NRCan) associates the Canadian adoption of IWRM with the widespread international acceptance of this approach.¹⁶¹ Furthermore, EC makes reference to many global principles "...deemed important to achieving IWRM."¹⁶² However, the origins of these principles are not specified. Other evidence suggests that international principles guide Canadian water policy. For example, NRCan highlights Chapter 18 of the UN document Agenda 21¹⁶³ and also refers to the UN Millennium Development Goal #7¹⁶⁴ in its publication on freshwater.¹⁶⁵ The most conclusive confirmation of Canada's commitment to international norms is found in the following statement: "As a member of the global community, Canada is committed to achieving international goals for freshwater."¹⁶⁶

The federal government combines elements from sustainable development and environmental science in their description of IWRM:

IWRM is viewed as a multidisciplinary and iterative process that seeks to optimize the contribution of aquatic resources to the social, environmental, and

¹⁶¹ Natural Resources Canada, p. 2.

¹⁶² Environment Canada (2004c), p. 3.

¹⁶³ i.e. Protection of the Quality and Supply of Freshwater Resources: Application of Integrated Approaches to the Development, Management and Use of Water Resources

¹⁶⁴ i.e. Ensure environmental sustainability.

¹⁶⁵ Natural Resources Canada, p. 2.

¹⁶⁶ Natural Resources Canada, p. 2.

economic welfare of Canadians, while maintaining the integrity of aquatic ecosystems, both now and into the future.¹⁶⁷

Other definitions offered by federal departments refer to maximizing economic and social welfare.¹⁶⁸ These definitions clearly reveal the anthropocentric view that freshwater and its related ecosystems are to be protected first and foremost for human benefit. The prerogative is to develop water as a *resource* to its fullest potential without compromising the ability to do so in the future.

Years of applying this paradigm have provided new insights as the federal government has consciously re-evaluated programs and adjusted previous ideas in order to create new tools for the implementation of IWRM programs.¹⁶⁹ According to the government, the process of implementing IWRM in an effective manner requires a strong legal and regulatory framework and a mix of tools.¹⁷⁰ Canada lists the seven following guiding principles “being used to guide the design and application of IWRM approaches in Canada”:

1. Recognition of the values of water to environment, economy and society
2. Stakeholder representation, support, and involvement
3. Reflection on the relationship with land use, other environmental issues, and ecosystem linkages
4. Defining the right balance of actions for effective implementation
5. Clear focus and orientation toward results and evidenced-based decision-making
6. Basis in scientific principles, sustainable management, and precautionary approaches
7. Realistic performance evaluation and continuous environment.¹⁷¹

EC supports a partnership approach between the private sector and various levels of government in water management.¹⁷² One example that supports this and incorporates IWRM is the Great Lakes Action Plan 2000-2005. The Great Lakes Action Plan 2000-2005 focuses on the

¹⁶⁷ Environment Canada (2005c) p. 3.

¹⁶⁸ Natural Resources Canada, p. 2.

¹⁶⁹ Environment Canada (2005c), p. 1.

¹⁷⁰ Environment Canada (2005c), p. 6.

¹⁷¹ Environment Canada (2005c), p. 3.

¹⁷² Environment Canada (2006b).

roles and responsibilities of the eight departments/agencies¹⁷³ of the federal government which participate in delivering Canada's commitments in relation to the protection of the Great Lakes Basin ecosystem as defined by the Great Lakes Water Quality Agreement.

Canada's Great Lakes Action Plan has three main goals – healthy environment, healthy citizens, and sustainable communities.¹⁷⁴ These goals are very similar to the three aspects of sustainable development, namely, environmental, social and economic welfare. These goals also draw a parallel to the objectives of IWRM. To meet the goals of the Action Plan, the departments have identified specific actions to be undertaken in order to achieve particular results¹⁷⁵, thus fulfilling the federal commitment to the partnership.

Despite explicit recognition of the importance of an integrated ecosystem approach to water management, the federal government divides the GLSLR watershed into two separate management units. The federal government partners with Ontario via the Great Lakes Action Plan and with Quebec via the St. Lawrence Action Plan. Although the federal government has adopted IWRM as the primary strategy and guiding tenet of water management in Canada, the division of the management of the GLSLR watershed into two agreements belies their true commitment to integration. This inconsistency results in divisions based on political, rather than ecosystem, boundaries.

Ontario's Role in Water Policy and Management

Water resources policy making and regulation are administered by Canada's provincial and territorial authorities.¹⁷⁶ However, provincial autonomy of environmental management, such as water resources management, is dependent on both federal policy design and cooperation from

¹⁷³ The federal departments involved in Great Lakes Action Plan are: Fisheries and Oceans Canada, Environment Canada, Natural Resources Canada, Transport Canada, Health Canada, Parks Canada Agency, Agriculture and Agri-Food Canada, and Public Works and Government Services Canada.

¹⁷⁴ Environment Canada (2004a).

¹⁷⁵ Environment Canada (2004a).

¹⁷⁶ Natural Resources Canada, p. 4.

local levels of government, such as cities and towns.¹⁷⁷ In turn, provinces are empowered to delegate some water management responsibilities to municipalities and in Ontario, to watershed-based conservation authorities.¹⁷⁸

Ontario has enacted various pieces of legislation that impact upon water resources management. These include the: *Conservation Authorities Act*, *Ontario Water Resources Act*, *Planning Act*, *Public Lands Act*, *Environmental Protection Act*, *Municipal Act*, *Lakes and Rivers Improvement Act*, *Nutrient Management Act*, *Safe Drinking Water Act* and the *Sustainable Water and Sewage Treatment Act*.¹⁷⁹ Both the levels of public environmental awareness and internal party politics have affected the development of environmental policies in Ontario.¹⁸⁰ In addition to these provincial Acts, there are three good-faith Agreements Ontario has entered into with other sub-national jurisdictions, namely, the Great Lakes Charter, the Great Lakes Charter Annex and the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement. This section examines the decentralisation of water management responsibilities, including policy development, to the province of Ontario and the potential challenges created by this shift.

Ontario has several decades of experience in leading and designing policies for the protection of the water resources. For example, in 1946, Ontario enacted the *Conservation Authorities Act* which led to the creation of 36 conservation authorities. This Act deals with water management in that it seeks to “further the conservation, restoration, development and management of natural resources other than gas, oil, coal and minerals”¹⁸¹ on the basis of

¹⁷⁷ Davis, C.E. and J.P. Lester, p. 67.

¹⁷⁸ Environment Canada (2005c), p. 2.

¹⁷⁹ Canadian Environmental Law Association.

¹⁸⁰ Krajnc, A., p. 116.

¹⁸¹ *Conservation Authorities Act*, Section 20.

watershed boundaries.¹⁸² The creation of this Act demonstrated Ontario's commitment to responding to public concern about environmental issues.

Decentralisation of Responsibility

Over the years, there have been substantial changes to the provincial role in water policies applying to the GLSLR watershed. In the area of water policy, the decentralisation of power is enshrined in the Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (hereafter Canada-Ontario Agreement). This Agreement was first signed in 1971 and has been renewed seven times, most recently in 2007. Although many pieces of legislation touch on freshwater related issues, Environment Canada identifies the Canada-Ontario Agreement as one of two “key agreements”¹⁸³ of Great Lakes ecosystem management.¹⁸⁴ This statement demonstrates the federal government's acknowledgement of the importance of inter-governmental cooperation with provincial counterparts.

Environmental management has traditionally been divided with the federal government being responsible for new environmental policies and the provinces being responsible for the implementation and enforcement of national standards.¹⁸⁵ In more recent years, however, there has been a significant decentralisation of power to provincial bodies. Despite the high degree of decentralisation, the federal government continues to pursue further decentralisation of environmental duties by devolving significant responsibilities to the provinces.¹⁸⁶ In response to this decentralisation of power, many provinces are creating new water management policies and/or legislation.¹⁸⁷ De Loë and Kreutzwiser have observed that “the first years of the twenty-first century have seen a resurgence of the provincial role in water management in the form of

¹⁸² *Conservation Authorities Act*, Section 20.

¹⁸³ The other key agreement is the GLWQA (discussed earlier).

¹⁸⁴ Environment Canada (2004b).

¹⁸⁵ Krajnc, A., p. 125.

¹⁸⁶ Paehlke, R., p. 166.

¹⁸⁷ Environment Canada (2005c) p. 7.

new laws, regulations, and policies.”¹⁸⁸ Ontario, in particular, has a history of successfully engaging in environmental policy-making.¹⁸⁹ The challenge for the province will be to adapt quickly to the rapidly changing governance arrangement in a way that will ensure the sustainability of water resources.¹⁹⁰

In addition to the enhanced provincial role in water management, other aspects of provincial responsibility give rise to the importance of studying provincial water management policies in the GLSLR basin. First, Hocking maintains that the provinces “can materially affect the substance of those policies and the capabilities available to governments for the attainment of their objectives in the international system.”¹⁹¹ Thus, the effects of provincial actions extend beyond provincial borders and may even influence the federal government’s position in international relations. Second, within some provinces, the rights to withdraw water are shifting away from a doctrine of riparian rights to a system where water appropriation is regulated to protect public interests.¹⁹² After years of custom-based equal rights to the use of water, this is a substantial change. Third, game theory modelling suggests that the states and provinces are better able to prevent water diversions from the Great Lakes than the national governments of the US and Canada.¹⁹³ These three factors provide support for the need to carefully monitor Ontario’s water policies due to its ability to influence extra-provincial interests.

Relying solely on the provinces to manage water resources can have negative consequences. These consequences are far-reaching in scope as they impact upon the province, the nation, and international relations. For instance, from 1995 to 2003 the ruling Progressive

¹⁸⁸ de Loë, R. and R. Kreutzwiser, p. 99.

¹⁸⁹ Krajnc, A., p. 125.

¹⁹⁰ Environment Canada (2005c) p. 7.

¹⁹¹ Hocking, B., p. 1.

¹⁹² Becker, N. and K. W. Easter, p. 55.

¹⁹³ Becker, N. and K. W. Easter, p. 64.

Conservative Party of Ontario instituted drastic and unparalleled budget cuts to the Ministry of the Environment.¹⁹⁴ Consequently, concern were raised that these cutbacks increased “the likelihood of a long-term deterioration of the province’s environmental integrity.”¹⁹⁵ This future prospect is largely due to the greatly reduced capacity to conduct scientific research and analysis, implementation, enforcement and monitoring of environmental programs.¹⁹⁶

The cutbacks in the Ministry of the Environment targeted GLSLR watershed activities. Specifically, there were “severe cuts to participation in the remedial action plans associated with the Great Lakes Water Quality Agreement with the United States”¹⁹⁷, such as the termination of the coordinating staff responsible for the remedial action plans for the Areas of Concern.¹⁹⁸ The funding for the Great Lakes cleanup program was also eliminated.¹⁹⁹ The fact that these provincial cuts undermined Canada’s commitment to the United States demonstrates that Canada’s ability to meet its international environmental obligations are circumscribed by the budgetary constraints initiated by the province.²⁰⁰ Due to these concerns, environmental organisations are opposed to further decentralisation of responsibility for environmental management to the provinces.²⁰¹

Although past governments in Ontario have not succeeded in addressing the challenges of water sustainability in the GLSLR watershed, there have been recent advances in provincial policy. The newest policy, the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement, builds on previous policies such as the Great Lakes Charter and the Great Lakes Charter Annex. The creation of these policies arose from provincial and state leadership

¹⁹⁴ Pahlke, R. p. 167.

¹⁹⁵ Krajnc, A. p. 119.

¹⁹⁶ Krajnc, A. p. 112.

¹⁹⁷ Pahlke, R. p. 168.

¹⁹⁸ Ligeti 1997, pp. 59-60 in Krajnc, A. p. 118.

¹⁹⁹ Ligeti 1997, pp. 59-60 in Krajnc, A. p. 118.

²⁰⁰ Pahlke, R. p. 167.

²⁰¹ Pahlke, R. p. 173.

and a realisation of the shared duties and responsibilities to protect, conserve, and manage water resources in the Great Lakes Basin.²⁰²

Great Lakes Charter

The *Great Lakes Charter: Principles for Managing the Great Lakes Water Resources* (hereafter, Great Lakes Charter) was developed by the governments of Ontario, Quebec and the eight Great Lakes states, Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. It applies to the watershed of the Great Lakes and the St Lawrence River upstream from Trois-Rivières, Quebec and includes the geographic areas surrounding each body of water in which water drains toward the Great Lakes or the St Lawrence River.²⁰³

The Great Lakes Charter was signed on February 11, 1985, and established principles for the management of the Great Lakes water resources. In contrast to federal water policy existing at this time, such as the *Canada Water Act*, the Great Lakes Charter applies to the air, land, water (including groundwater), living organisms and humankind in the Basin.²⁰⁴ Similar to the Canada-Ontario Agreement, the Great Lakes Charter defines the relationship between the provinces, states and the two federal governments as a “partnership”.²⁰⁵

The Great Lakes Charter was a good faith agreement that relied on each of the parties to pass legislation to make the contents of it legally binding in their jurisdiction. In other words, there was no set enforcement mechanism to ensure the application of the Great Lakes Charter. As a result, some parties, including Ontario, did not take the necessary step of implementing provincial legislation that would make the Great Lakes Charter binding in their respective

²⁰² Council of Great Lakes Governors (1985) p. 3.

²⁰³ Ontario Ministry of Natural Resources (2004).

²⁰⁴ Council of Great Lakes Governors (1985) p. 9.

²⁰⁵ Council of Great Lakes Governors (1985) p. 3

jurisdictions.²⁰⁶ The good faith agreement did not appear to be an effective model for the management of the water resources of the GLSLR watershed.

There have been several criticisms regarding the effectiveness of the Great Lakes Charter. One major critique is its failure to prevent new large water withdrawals (i.e. more than 19 million litres per day) from the basin. Although the Great Lakes Charter required all parties to give prior notice and consultation for this amount of diversion or consumption²⁰⁷, “this gentlemen’s agreement was not always followed.”²⁰⁸ Additionally, the Great Lakes Charter was not able to overcome the culture of crisis management in the basin²⁰⁹, despite calling for “cooperative programs and practices”²¹⁰ and the formation of a “water resources management committee.”²¹¹ However, the Great Lakes Charter was able to establish information-sharing among the provinces and states on water use to assist in decision-making.²¹² Dissatisfaction with the Charter from many parties contributed to the negotiations and meetings that produced the 2001 Annex to the Great Lakes Charter.

Great Lakes Charter Annex

The Great Lakes Charter Annex: A Supplementary Agreement to The Great Lakes Charter (Charter Annex) was signed and entered into on June 18, 2001 by the same provinces and states involved in the Great Lakes Charter. The Charter Annex, which includes a series of Directives, “reinforced and built upon the principles of the Great Lakes Charter.”²¹³ The first directive states that the provinces and states must prepare Basin-wide binding agreement(s)

²⁰⁶ Miller, S., p. 6.

²⁰⁷ Council of Great Lakes Governors (1985) p. 4.

²⁰⁸ Miller, S., p. 6.

²⁰⁹ Miller, S., p. 6.

²¹⁰ Council of Great Lakes Governors (1985) p. 3.

²¹¹ Council of Great Lakes Governors (1985) p. 3.

²¹² Ontario Ministry of Natural Resources (2005a).

²¹³ Ontario Ministry of Natural Resources (2005a).

within three years of the Charter Annex entering in to force.²¹⁴ The binding agreements are to be based on a “new common, resource-based conservation standard.”²¹⁵

In order to carry out the commitments made in the Charter Annex, the provinces and states created a water management working group charged with drafting implementing agreements “that would offer more binding protections for Great Lakes waters.”²¹⁶ The working group was comprised of provincial government representatives, First Nations groups, experts, and other stakeholders in the Basin. This process included much greater public participation than the development of the Charter. Two draft implementing agreements (one designed for the eight states and one for the provinces and states combined) were released to the public for comments on July 19, 2004. There was substantial resistance to the draft implementing agreements from many fronts. For instance, the Canadian Environmental Law Association (CELA) found that components of the draft implementing agreements may be inconsistent with the *Boundary Waters Treaty* and U.S. federal legislation.²¹⁷ Despite participating in the development of the draft implementing agreements, in November 2004, Ontario declined to sign the draft implementing agreements. This decision was due to negative feedback from stakeholders, First Nations and the general public, who found that the draft implementing agreements did not contain adequate measures to protect the waters of the Great Lakes Basin.²¹⁸

Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement

After continuing negotiations on the draft implementing agreements, Ontario, Quebec, and the eight Great Lakes States signed the *Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement* (hereafter Sustainable Water Resources Agreement) on December

²¹⁴ Council of Great Lakes Governors (1985) p. 2.

²¹⁵ Council of Great Lakes Governors (1985) p. 1.

²¹⁶ Ontario Ministry of Natural Resources (2005a).

²¹⁷ See Miller, S., pp. 12-13.

²¹⁸ Ontario Ministry of Natural Resources (2005a).

13, 2005. This Agreement was accompanied by the Great Lakes Compact, which applies solely to the US states and is legally binding. These agreements were the results of the working group's efforts in the more than four years since the Charter Annex called for their development.

The Sustainable Water Resources Agreement adopts many new approaches to water management in the GLSLR watershed. First, it applies to "all surface and underground water." Second, it "is founded on the principles of ecosystem protection, precautionary approach, recognition of cumulative impacts, and climate change uncertainties." Third, it provides the opportunity for provinces and states to seek a judicial review concerning water withdrawals from the Basin that are subject to the new environmental standard.²¹⁹ First and foremost, the Sustainable Water Resources Agreement establishes a framework for each of the participants to follow in their adoption of binding legislation.²²⁰

The Great Lakes Charter, Charter Annex, and Sustainable Water Resources Agreement cumulatively represent Ontario's water management policy for the GLSLR watershed. These sub-nationally initiated policies are important tools for the protection of the watershed. Ontario's interests in the preservation and sustainable management of the water resources in the basin are closely aligned with Quebec and the eight Great Lakes states. In contrast, parties outside of the basin are interested in increasing water diversions and consumption that will negatively affect the watershed. If a bi-national approach was followed, negotiations between the federal governments would result in increased competition for the water resources of the basin and "conflict-of-use scenario[s] become even more complicated."²²¹ As a result, the representation

²¹⁹ Ontario Ministry of Natural Resources (2005b).

²²⁰ Ontario Ministry of Natural Resources (2005c).

²²¹ Wouters, P., p. 171.

of Ontario's interests would be significantly weakened. Thus, Ontario is better served by provincial-led policy than by federally initiated bi-national treaties.²²²

Complex Governance in Canada

Water policy in Canada is an excellent example of the intricacy of complex governance. As stated in Chapter 1, complex governance is characterised by national-level governments sharing power with international organisations and sub-national governments. As well, the structure of complex governance arrangements is continually shifting and involves multiple layers.²²³ The nature of Canada's federal system lends itself to complex governance while the many activities related to water management increases the number of actors involved in the process of governance. In addition, water policy is increasingly affected by numerous stakeholders with overlapping and/or potentially competing claims to water, and the growing influence of local and international pressures.

Much of the complexity concerning the division of powers among the provincial and federal governments stems from the *Constitution Act, 1867*. At the time the constitution was drafted, neither environmental nor freshwater management were primary concerns. As a result, the management of water is not exclusively addressed in the Act. Thus, the current arrangement with respect to freshwater has developed out of convention and customs and is "effectively a concurrent jurisdiction"²²⁴ of both levels of government. The Ontario Ministry of Natural Resources has clarified that, "neither the federal nor the provincial governments have exclusive jurisdiction, but the provinces are responsible for the general management of waters within their borders."²²⁵

²²² Ontario Ministry of Natural Resources (2005d) p. 3.

²²³ Hughes, B. B., p. 224

²²⁴ Anderson, G., p. 51.

²²⁵ Ontario Ministry of Natural Resources (2005d) p. 3.

Depending on the nature of water usage or the specific body of water, federal and/or provincial legislation may apply.²²⁶ Therefore, it is not surprising that a historical examination of water policy development in Canada shows that both levels of government have tended to be involved in every major policy area and are continually engaged in ongoing negotiations.²²⁷ The federal government maintains that “because Canada is a federation, it is essential that all jurisdictions collaborate to address water issues and challenges.”²²⁸ One rationale for inter-jurisdictional collaboration is because all of Canada’s 14 jurisdictions (i.e. the federal government, 3 territorial governments, and 10 provincial governments) have responsibilities for water and watersheds that extend beyond their borders.²²⁹ Another reason cooperation is important is because “full partnership” among all stakeholders is necessary to create the “enabling environment that encourages action and creates expectations for results.”²³⁰ The legislation pertaining to the management of the GLSLR watershed, developed by numerous jurisdictions, must be cooperative in nature in order to effectively conserve the quantity and quality of water resources in the watershed.

The numerous actors in Canadian water policy are arranged in vertical and horizontal networks. The Canadian federal government, in particular, is “massively horizontal” with respect to freshwater.²³¹ There are 20 federal departments and agencies with responsibilities for some aspect of freshwater management, although the GLSLR watershed involves only eight. Provincial interests in the watershed are represented by the Ministry of Natural Resources, the Ministry of the Environment, and the Ministry of Agriculture, Food and Rural Affairs.²³² Water

²²⁶ Natural Resources Canada, p. 4.

²²⁷ Landes, R. G., p. 82.

²²⁸ Government of Canada, p. 2.

²²⁹ Government of Canada, p. 2.

²³⁰ Government of Canada, p. 4.

²³¹ Policy Research Initiative, p. 3.

²³² Canada-Ontario Agreement, p. 1.

management in the GLSLR basin is also shared with the International Joint Commission as well as the aforementioned levels of government.²³³ Finally, other actors in the basin include conservation authorities, municipalities, fishers and anglers, environmental non-governmental organisations, boaters, academics, among others.

The various roles of the provinces in environmental policy are recognised by the federal government and have earned them representation at some international environmental meetings. For instance, representatives from Ontario and Quebec attended the International Conference on Freshwater in Bonn, Germany in 2001.²³⁴ A common occurrence at these conferences, however, is that provinces are only granted frequent updates and are not always present during key negotiations.²³⁵ Canada allows for contributions from the provinces “but the federal government retains its ultimate prerogative to enter into agreements.”²³⁶ In the GLSLR watershed, where Ontario and Quebec are responsible for water management, the absence of provincial input could have significant consequences.²³⁷

The importance of provincial participation can be seen when examining the governance arrangements with respect to the Water Quality Agreement and the Canada-Ontario Agreement. These two legislative mandates create a situation where the federal government of Canada has agreed to certain standards with the Government of the United States in the Water Quality Agreement, but has placed much of the responsibility for carrying out these commitments with the government of Ontario via the Canada-Ontario Agreement.²³⁸ The United States Environmental Protection Agency clarifies the relationship between these documents stating that

²³³ Ontario Ministry of Natural Resources (2005d), p. 3.

²³⁴ International Conference on Freshwater, pp. 3-4.

²³⁵ Anderson, G., p. 51.

²³⁶ Ibid.

²³⁷ Ontario Ministry of Natural Resources (2005d), p. 3.

²³⁸ United States Environmental Protection Agency (2006).

“The Canada/Ontario Agreement provides for joint work on activities required by the Great Lakes Water Quality Agreement.”²³⁹ In effect, the Canadian federal government committed Ontario to meeting environmental standards with the United States. Unfortunately, overlapping jurisdictions “sometimes...do not march to the same drummer”²⁴⁰ leading to conflict and antagonism, and resulting in a potential barrier to the protection of water resources.

In addition to multiple legislative mandates which address the GLSLR watershed, there are multiple information systems. In Canada, information regarding water resources is not centrally located. In fact, numerous databases are managed by many agencies across the country.²⁴¹ For instance, Natural Resources Canada’s Groundwater Program holds one database for this information²⁴² while surface water information is collected by Ontario’s Ministry of the Environment.²⁴³ That multiple actors are engaged in similar, if not the same, tasks of accumulating and coordinating water resources data illustrates another aspect of complex governance in the management of water resources in the basin. Given the nature of the hydrological cycle, and the ultimate “connectedness” of all water resources, the sharing of information is critical to the ability of multiple actors to effectively manage water resources.

Conclusion

The nearly 100 years of Canada-US and state-provincial initiatives and legislation in the watershed greatly influence current arrangements. The long-established history of water management policy in the GLSLR watershed creates obstacles for improving upon the current situation. Goertz finds that “governments...do not like to go against established policy even if there are strong (domestic) interests pushing them to do so....It is difficult and often undesirable

²³⁹ United States Environmental Protection Agency (2006).

²⁴⁰ Litteljohn, B. and G. G. Beck, p. 13.

²⁴¹ Environment Canada (2005c).

²⁴² Natural Resources Canada, p. 14.

²⁴³ Ontario Ministry of Environment (2008).

for a government to stray from well entrenched policies.”²⁴⁴ Thus, in addition to transboundary complexities and institutional limitations, traditions also contribute to the difficulties of water management in the basin and reduce the flexibility available to policy-makers, making the watershed an interesting case study of these multiple challenges.

Within Canada, management of the GLSLR watershed has changed dramatically since the *Boundary Waters Treaty Act*. Although the provincial government has taken on much of the policy-making and management responsibilities in the watershed, history has shown that this arrangement can shift with time. Therefore, the current status quo cannot be seen as a permanent situation due to the nature of Canada’s federal system of government. Furthermore, sub-provincial agencies in Ontario have considerable influence with respect to water management as a result of the *Conservation Authorities Act*. Whether they will receive more power is questionable, however, as the provinces are reticent to relinquish any of their powers to local levels of government.²⁴⁵ International pressures are also exerted in this forum. Given Ontario’s lead role in this complex situation, its water policies for the watershed are of the utmost importance.

Some question Ontario's position in the water management of GLSLR watershed and argue that the appropriate role of each level of government in transboundary water governance has yet to be determined.²⁴⁶ The prominent water management theory of subsidiarity promotes decentralisation whereas internationalisation promotes governance at supra-national levels. There are unresolved issues about the effects of cooperation among departments (horizontal integration) and between levels of government (vertical integration) in transboundary water

²⁴⁴ Goertz, G., p. 9.

²⁴⁵ Landes, R. G., p. 56.

²⁴⁶ Royal Society of Canada (2006).

management.²⁴⁷ As well, many questions remain unanswered with respect to who should direct transboundary water governance (i.e. the federal or provincial governments).²⁴⁸ Keeping in mind “the extent to which the international agenda is penetrating more deeply into areas of domestic law”²⁴⁹, the next chapter examines the international water resources management paradigm.

²⁴⁷ Royal Society of Canada (2006).

²⁴⁸ Royal Society of Canada (2006).

²⁴⁹ Anderson, G., p. 53.

CHAPTER 4: INTERNATIONAL WATER NORMS, SOFT LAW AND REGIMES

This chapter demonstrates the importance of international norms and principles and presents a case for how they can have an impact upon domestic policies through the process of norm diffusion. The international norms originating from the United Nations conferences and associated declarations from Dublin (1992) and Bonn (2001) are representative of the international water management paradigm. The concepts of norms, soft law and regimes are essential to understand the effects of international influences on subnational water policies in the Great Lakes-St Lawrence River watershed. Furthermore, the importance of these non-traditional political influences serves to strengthen subnational actors, thereby enhancing Ontario's primary role in water policy for the GLSLR watershed.

Internationalisation

Domestic politics and policy have increasingly become intertwined with international levels of governance. This process is known as internationalisation, which is defined as “the phenomenon whereby polices within domestic jurisdictions face increased scrutiny and participation from actors and/or institutions outside of those jurisdictions.”²⁵⁰

Environmental governance has been greatly affected by internationalisation. For instance, policy formation and the implementation of policies regarding environmental initiatives have shifted from being issues of local or national importance to international concerns.²⁵¹ In recent years, however, the role of the state as the sole actor in the domestic arena has been confronted by the growing role of international forces. For instance, some environmental agreements of the 1990s included “internationally defined obligations and the presence of

²⁵⁰ Bernstein, S. and B. Cashore, p. 213.

²⁵¹ Economy, E. and M. A. Schreurs, p.2.

shifting mosaics of governance players exerting a greater pull on governments.”²⁵² An effect of this internationalisation of environmental politics is that relationships among actors within states, and among different countries, are being transformed.²⁵³

Research has persuasively demonstrated that the internationalisation of environmental politics has an impact upon domestic policy-making, and that domestic environmental policy-making processes have been altered by international influences.²⁵⁴ These findings reflect the “growing awareness of the significance of linkages between more remote levels of social organization.”²⁵⁵ As environmental law has developed at the international level, so has international water law, such that international water law can be viewed as a component of international water law, and many similarities can be found between the two.²⁵⁶

One way governments have responded to internationalisation is by supporting new initiatives within the international forum in an attempt to exert greater control beyond their borders.²⁵⁷ International organisations provide an arena in which environmental policy-making and international laws can be cooperatively addressed.²⁵⁸ These efforts, coupled with the ability of international obligations to influence domestic government, lead to the conclusion that “transnational environmental problems pose real problems for established notions about the nature and limits of state sovereignty.”²⁵⁹ As such, transnational environmental problems must be addressed in the framework of international governance. International environmental

²⁵² Boardman, R., p. 191.

²⁵³ Economy, E. and M. A. Schreurs, p. 2.

²⁵⁴ Economy, E. and M. A. Schreurs, pp. 2-3.

²⁵⁵ Young, O. R., p. 84.

²⁵⁶ Beaumont, P., p. 478.

²⁵⁷ Howlett, M. and J. Rayner, p. 252.

²⁵⁸ Birnie, P. and A. Boyle, p. 32.

²⁵⁹ Greene, O. p. 393.

governance depends on national governments for innovation and competence and on the international system for policy diffusion and coordination.²⁶⁰

There are several reasons why water policy in the GLSLR watershed is an international issue. First, there is only so much freshwater in the world (barring interventions such as desalinisation) and as such, water is part of the global commons, “resources shared by all members of the international community.”²⁶¹ Second, the watershed crosses political borders thereby becoming a transnational issue. Third, degradation and over-exploitation of water resources can have wide-ranging international effects due to the functioning of the hydrological system. Additionally, degradation and over-exploitation are closely associated with the political economy of the region, and are connected to many factors such as population growth, industrialisation, poverty, the generation and distribution of wealth, power, knowledge, and affluence.²⁶²

Water policy in Canada, as with many environmental issues worldwide, is greatly influenced by international norms and principles. The international influence exerted on water policy in Canada is not unique; indeed, it is a global phenomenon. Ken Conca states that

the world’s water is subject to deeply and increasingly transnational forms of governance. We have been witnessing the development, proliferation, and growing embeddedness of rules, roles, and practices that shape water-related policy decisions and political struggles all over the world.²⁶³

Water policy in the basin serves to demonstrate how internationalisation is partly propagated through norms, soft law and regimes. The Guiding Principles of the Dublin Statement and the Bonn Keys are the most germane international water norms to illustrate this phenomenon.

²⁶⁰ Jänicke, M., p. 160.

²⁶¹ Greene, O., p. 388.

²⁶² Greene, O., p. 388

²⁶³ Conca, K., p.5.

Norms

Norms are defined as “a principle of right action binding upon the members of a group and serving to guide, control, or regulate proper and acceptable behaviour.”²⁶⁴ For the purpose of this paper, this definition requires further clarification. As a principle, a norm is fundamental and comprehensive. A norm determines what actions are acceptable in a social context and influences group members to the extent that it guides, controls or regulates. Indeed, “many norms by definition have a social character.”²⁶⁵ Finally, “binding” is used to takes on the meaning of being obligated by threat of social consequences, rather than being constrained by legal authority.

Norms are variously described as the “best way to achieve a goal”²⁶⁶, part of the “rules of the game”²⁶⁷, and “emerging practices, principles, and value”²⁶⁸. They are closely intertwined with policy; in order to get policy right you must account for norms and laws.²⁶⁹ Norms “can be put together to build an institutional structure.”²⁷⁰ Therefore, norms are an important component of governance in that governance “involves the establishment and operation of social institutions.”²⁷¹

At its foundation, a norm is a syllogism which expresses an “if...then” sequence of events, which is the same logical structure of principles, rules, and decision-making procedures.²⁷² Thus, differentiation among these terms is inconsistent with the identical

²⁶⁴ Merriam-Webster Dictionary.

²⁶⁵ Goertz, G., p. 31.

²⁶⁶ Goertz, G., p. 53.

²⁶⁷ Eliadis, P., p. 34.

²⁶⁸ Eliadis, P., p. 30.

²⁶⁹ Eliadis, P., p. 30.

²⁷⁰ Goertz, G., p. 15.

²⁷¹ Young, O. R., (1994) p. 15.

²⁷² Goertz, G., p. 46; 38.

composition of each concept.²⁷³ This paper focuses exclusively on norms and accepts the other terms as being equivalent to a norm.

Given that policy expresses common interests and goals, and beliefs about how to achieve these, it can be seen as the state expression of accepted norms. Goertz maintains that “norms at the government level [are described] as policies”²⁷⁴, an understanding that also applies to subnational policies. The state development and propagation of a policy is important in and of itself, and is a separate issue from whether states comply with policies. However, state compliance with norms is illustrative of the fact that the moral imperative arising from the obligations inherent in norms is merely one aspect of norm compliance; self-interest is another major consideration.²⁷⁵

The value of norms in international relations is challenged by those who point to the existence of diverse norms as evidence that they are essentially incoherent and inconsistent.²⁷⁶ In fact, norms arise from different sources and can vary from being strongly embraced by some actors to being entirely disregarded by others. Goertz explains that, “as a general state of affairs we *almost always* have conflicting norms. However, this does not merit the adjective “contradictory” norms.”²⁷⁷ Conflicts between norms can be resolved by either prioritizing so that some norms are more significant than others; or, alternatively, by developing “exception rules” to modify the norm itself. Thus, in dealing with originally conflicting norms, new norms are created which adopt forms such as: 1) “X” norm is most important, “Y” norm is subsequent to “X” norm; and 2) “X” norm is universal *except* in certain locations, at certain times, or under certain conditions, where “Y” is the rule. These articulations of norms are consistent with the

²⁷³ Goertz, G., p. 38.

²⁷⁴ Goertz, G., p. 128.

²⁷⁵ Goertz, G., p. 9.

²⁷⁶ See for example, Stephen Krasner.

²⁷⁷ Goertz, G., p. 103. Original italics.

original definition of norms, which specifies the comprehensive, social and obligatory nature of norms.

The recent signing of the Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement represents the decisions of the ten participating governments to adopt new norms regarding water management. This is interesting because the adoption of new norms often represents a shift in goals and the means necessary to achieve those goals. It can also signal change and extensive experimentation in the policy process.²⁷⁸ In addition, international norms, such as those expressed in bi-national, multi-party water policy, are important because they increase the likelihood that sanctions or penalties will be applied when the norm is violated.²⁷⁹ For this reason, analysing the contents of the Sustainable Water Resources Agreement can reveal underlying interests and how policy has changed over time since earlier policies, such as the Great Lakes Charter and Charter Annex, were drafted.

As a result of internationalisation, Scholte maintains that “norms that govern our lives...have acquired a supraterritorial rather than a country-specific character.”²⁸⁰ As international consensus about norms develops, societies have shown a predilection for formal articulation of norms through a variety of instruments, some of which may have legal effect.²⁸¹ An interesting expression of norms, particularly related to water policy, is found in soft law.

²⁷⁸ Goertz, G., p. 51.

²⁷⁹ Goertz, G., p. 9.

²⁸⁰ Scholte, J. A., p. 16.

²⁸¹ Eliadis, P., p. 31.

Soft Law

The vast range of beliefs, values and standards expressed in international norms are often espoused in “soft law”, which is “by its nature the articulation of a ‘norm’ in written form.”²⁸² It includes declarations, resolutions, agreements, standards of international and regional bodies²⁸³, codes of practice, recommendations, and guidelines.²⁸⁴ Although soft law is somewhat controversial among legal scholars, “the term does at least usefully encapsulate an increasingly used methodology of either moving more slowly towards the formalization of obligations or of setting goals for conduct that though informal, are intended to have some authoritative status.”²⁸⁵ Soft law is increasingly used due to the slow development of hard law and the inherent advantages of this approach, discussed below.²⁸⁶

International norms regarding environmental sustainability that are expressed in soft law “manifest general consent to certain basic principles that are acceptable and practicable for both developed and developing countries.”²⁸⁷ While soft law is an important aspect of international governance, “hard law” forms the basis of the international legal system. Unlike soft law, hard law is legally binding between the consenting parties and gives legal recourse for parties to pursue violators of these binding agreements. At the international level, this includes treaties that are legally binding based on the Vienna Convention on the Law of Treaties (1969).

There are many advantages that make soft law appealing to governments engaged in international relations. According to Birnie and Boyle, one advantage is that the creation, acceptance, and dissemination of soft law can be considerably easier to manage than hard law:

²⁸² Birnie, P. and A. Boyle, p. 27.

²⁸³ Eliadis, P., p. 31.

²⁸⁴ Birnie, P. and A. Boyle, p. 27.

²⁸⁵ Birnie, P. and A. Boyle, p. 30.

²⁸⁶ Birnie, P. and A. Boyle, p. 10; p. 17.

²⁸⁷ Birnie, P. and A. Boyle, p. 30.

Soft-law agreements are often a good way to avoid the lengthy process of negotiating binding agreements. They do not require enforcement mechanisms and can sometimes depend on the adherence of networks of bureaucrats who share similar views of the problem.²⁸⁸

Another advantage of using soft law to deal with international environmental issues is that it allows the dissemination of common aims and standards in situations where political, cultural, and religious differences would prevent treaty creation and ratification.²⁸⁹ Moreover, because the degree of compliance is left to states to decide “a ‘soft law’ form may enable them [states] to formulate the obligations in a precise and restrictive form that would not be acceptable in a binding treaty.”²⁹⁰ An additional benefit of soft law is the flexibility it offers states to adopt innovative initiatives to collectively address challenges without restricting their future ability to act.²⁹¹

Soft law is important for policy-making because it is a component of the foundation for how societies order themselves.²⁹² It is particularly integral to international environmental law as this field is evolving and growing at such a fast pace.²⁹³ As such, the new issues dealt with by soft law help to fill in gaps in the international legal system.²⁹⁴ It has even been argued that

international environmental law can be assumed to be the aggregate of all the rules and principles aimed at protecting the global environment and controlling activities within national jurisdiction that may affect another state’s environment or areas beyond national jurisdiction.²⁹⁵

This statement clarifies the important role of soft law in international environmental law, which complements its political applications.

²⁸⁸ Porter, G., J. W. Brown and P. S. Chasek, p. 49.

²⁸⁹ Birnie, P. and A. Boyle, pp. 26-27.

²⁹⁰ Birnie, P. and A. Boyle, p. 27.

²⁹¹ Birnie, P. and A. Boyle, p. 28.

²⁹² Eliadis, P., p. 30.

²⁹³ Birnie, P. and A. Boyle, p. 30.

²⁹⁴ Ku, C. and P. F. Diehl.

²⁹⁵ Birnie, P. and A. Boyle, p. 9.

In the context of transboundary governance challenges, there is “some agreement that there is a need to shift to forms of “soft” accountability whereby jurisdictional leaders shame and pressure other jurisdictions using external standards and pressures from constituents.”²⁹⁶ By focusing normative forces on states, and enabling domestic and international actors to pressure governments to honour international commitments²⁹⁷, soft law encourages certain behaviours and dissuades states from undertaking actions that would violate accepted norms, despite the fact that they are not ratified in treaties or other legally binding texts.²⁹⁸ As a result, numerous scholars note the efficacy of soft law.²⁹⁹ For example, in response to the Rio Principles, a set of norms for sustainable development established by participating states at the 1992 UN Conference on Environment and Development, “many actions [were] undertaken at various administrative levels to adapt policies as well as law in response to the call for sustainable development.”³⁰⁰ This example illustrates the effectiveness of soft law in setting the agenda for a program of action for the international community.³⁰¹

In some cases, soft law becomes hard law after a period of acceptance and international entrenchment. For instance, developments in marine law and the creation of the United Nations Convention on the Law of the Sea (UNCLOS) demonstrate the transition from soft law to hard law. Initially, “exclusive economic zones” were claimed and respected (soft law) by many nations prior to the ratification of the UNCLOS (hard law), which brought about legal recognition of these coastal regions. This example illustrates how “principles included in a soft-law agreement may become so widely regarded as the appropriate norms for a problem that they

²⁹⁶ Royal Society of Canada.

²⁹⁷ Conca, K., p. 11.

²⁹⁸ Porter, G., J. W. Brown and P. S. Chasek, p. 50.

²⁹⁹ Birnie, P. and A. Boyle, p. 26.

³⁰⁰ Hilderling, A., p. 13.

³⁰¹ Hilderling, A., p. 13.; Porter, G., J. W. Brown and P. S. Chasek, p. 45.

are ultimately absorbed into treaty law.”³⁰² Legally binding agreements that arise after soft law has been in place are strengthened by the requirement for mandatory compliance and can be negotiated more easily due to agreements reached in earlier discussions and negotiations.

A potential drawback of soft law agreements is that they can be hampered by the lack of enforcement mechanisms, which can result in poor compliance. Thus, states may insist that soft law become legally binding because some believe that “regimes based on legal instruments are usually far more effective.”³⁰³ However, it has been found that

enforcement is a marginal factor in compliance calculations. Most members of social systems comply with the dictates of prevailing institutions most of the time for reasons having little or nothing to do with their expectations regarding the imposition of sanctions.³⁰⁴

In the absence of overriding enforcement concerns, one of the motivations to comply with soft law may be the recognition that any immediate benefits resulting from violations are far outweighed by the cumulative costs over time.³⁰⁵ Another incentive for compliance is to maintain reputable standing among the international community.³⁰⁶

An additional potential weakness of soft law results from its genesis. Oftentimes, when non-binding agreements are created in an effort to avoid binding requirements, “the norms agreed on may be less stringent.”³⁰⁷ In other words, the contents of a non-binding agreement may be so minimal as to have little practical effect due to the fear that soft law will be pushed towards hard law. In this situation, compliance with soft law has little impact due to the laxity of the norms it embodies.

³⁰² Porter, G., J. W. Brown and P. S. Chasek, p. 49.

³⁰³ Porter, G., J. W. Brown and P. S. Chasek, pp. 14; 49.

³⁰⁴ Young, O. R. (1989), p. 71.

³⁰⁵ Young, O. R. (1989), p. 74.

³⁰⁶ Conca, K., p. 11.

³⁰⁷ Porter, G., J. W. Brown and P. S. Chasek, p. 49.

Soft law impacts upon governmental policy development to the extent that the recognition of internationally accepted norms guides domestic policy-making.³⁰⁸ Within Canada, soft law created at the international level, primarily via the participation of the federal government, must be disseminated to the provinces to become effective because of provincial jurisdiction in many issues. Wolf has noted the role of soft law with respect to water management principles.³⁰⁹ Thus, soft law as it applies in the GLSLR watershed stems from United Nations (UN) conferences in Dublin and Bonn which impact upon domestic water policies in the watershed.

Regimes

“Regime” has been used to represent numerous concepts. Stephen Krasner’s seminal definition is often used as a starting point in discussions of regimes. He states that regimes are “sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors’ expectations converge in a given area of international relations.”³¹⁰ However, the previous section on norms showed that the distinction between rules, principles and norms is based more on semantics than substantive content. As such, Goertz accuses Krasner of incoherence in his “hierarchy of norms and rules” and demands that it “must be tossed onto the scrap heap.”³¹¹ Thus, other definitions of regime are necessary to provide insight on how the concept of regimes can be usefully applied in this research.

Regimes can be defined in both broad and narrow terms. A narrowly-defined regime, in which the scope of activities and outcomes are limited, exhibits the following characteristics: a codified character, intentionality of states in the creation of the regime, explicit intentional

³⁰⁸ Eliadis, P., p. 33.

³⁰⁹ Wolf, A. T. (1997), p. 336.

³¹⁰ Krasner, S. D., p. 2.

³¹¹ Goertz, G., p. 108.

exercises in rule making, and rules of interstate cooperation.³¹² These types of regimes are likely to be expressed in binding agreements or other legal instruments.³¹³

In contrast, Conca explains that broadly defined regimes include “emergent patterned behaviour in international relations that seemed to express shared norms.”³¹⁴ The outcomes can either be formally codified or informally understood and may be state-based or include a diverse array of actors.³¹⁵ Given that soft law supports the importance of norms in international relations, this paper adopts the broad definition of regimes because it similarly recognizes the importance of norms.

Thus, a regime is “a structure of norms and rules”³¹⁶ and is also referred to as an institution in some of the literature. The norms in a regime are a patterned and interrelated collection rather than discrete and separate parts.³¹⁷ These patterns are recognizable in either international organisations and/or international agreements, both of which are viewed as regimes.³¹⁸ Regimes operate without centralized oversight; thus, they are “instruments of governance without government.”³¹⁹ According to Young, regimes are “governance systems intended to deal with a more limited set of issues or a single issue area.”³²⁰ To further clarify, Young states that a governance system is “an institution that specializes in making collective choice on matters of common concern to the members of a distinct group.”³²¹ Finally, Young explains that institutions are “a set of rules or conventions (both formal and informal) that define a social practice, assign roles to individual participants in the practice, and guide interactions

³¹² Conca, K., p. 62.

³¹³ Porter, G., J. W. Brown and P. S. Chasek, p. 13.

³¹⁴ Conca, K., p. 62.

³¹⁵ Conca, K., p. 62.

³¹⁶ Goertz, G., p. 15.

³¹⁷ Kegley, C. W. and G. A. Raymond, p. 14.

³¹⁸ Stevis, D., V. J. Assetto and S. P. Mumme, p. 308.

³¹⁹ Conca, K., p. 11.

³²⁰ Young, O. R. (1994), p. 26.

³²¹ Young, O. R. (1994), p. 26.

among the occupants of these roles.”³²² To summarize, a broadly-defined regime is a system of norms that apply to specific collective issues.

Given that a regime is fundamentally a system of norms, it is “methodologically and theoretically prior to behaviour.”³²³ It is therefore rational to study the content of regimes as this provides the framework for action by giving instructions about how to behave in certain conditions.³²⁴ Although regimes are an aspect of how actors behave in international relations, the behavioural compliance with regimes is a separate issue. Thus, a regime can be considered weak when there are numerous exceptions to its fundamental norms, and strong when it applies to a variety of situations.³²⁵ The analysis of the strength or weakness of a regime evaluates only the contents of the regime, not the resultant behaviours. For this reason, this thesis does not address the behaviours associated with the norms expressed in subnational GLSLR water policies, the Dublin Principles or the Bonn Keys. The analysis of informal and formal cooperative arrangements, referred to as regime analysis, is useful in understanding how and why states are involved in voluntary institutions based on norms.³²⁶

Environmental regimes have several unique features. The establishment of such regimes relies on the collective identification of an environmental problem and the acceptance of scientific knowledge to determine the extent, effects of, and solutions to, that problem. It also indicates a growing body of accepted knowledge and that outstanding scientific certainties are minimal.³²⁷ In reaching these common understandings, environmental regimes illustrate how institutional interplay and the interaction among numerous actors can affect the results of the

³²² Young, O. R. (1994), p. 26.

³²³ Goertz, G., p. 50.

³²⁴ Goertz, G., p. 26.

³²⁵ Goertz, G., p. 50.

³²⁶ Jägerskog, A. and D. Phillips, p. 16.

³²⁷ Conca, K., p. 52.

regime.³²⁸ In addition, environmental governance and decision-making are largely influenced by environmental regimes³²⁹, particularly when the regime is comprised of international non-binding agreements, which disseminate norms that, in turn, influence state behaviour.³³⁰

Although regimes do not have a central authority or formal legal status, they tend to endure in the international system. One explanation for this occurrence is because “in the typical case, the members of international society cannot expect to be able to discard existing institutions whenever they seem inconvenient or troublesome and they cannot afford to violate the dictates of these arrangements on a casual basis.”³³¹ Another factor in the endurance of regimes is that they are often created due to the actions of proponents who have an abiding interest in the area affected by the regime. These actors continue to be involved in the regime after its creation. This is apparent in the international freshwater regime, which has largely developed due to an active group of concerned participants. There is also flexibility in the form of water management regimes, such as: “(i) legal authorities with regulatory powers; (ii) cooperative agreements serving a policy function; and (iii) public–private partnerships and non-government organizations that primarily serve [a] coordination function.”³³²

The international freshwater regime is an example of the “epistemic communities” model of regime formation. Porter, Brown and Chasek maintain that this model “emphasizes international learning, primarily on the basis of scientific research on a given problem, as a factor influencing the evolution of regimes.”³³³ The epistemic community, which includes technical experts, managers, government bureaucrats and ministers, is extremely active with regular

³²⁸ Young, O. R. (2002), p. 84.

³²⁹ Adger *et al.*, p. 8.

³³⁰ Porter, G., J. W. Brown, and P. S. Chasek, p. 14.

³³¹ Young, O. R. (1989), p. 80.

³³² Borre, L., D. Barker and L. Duker, p. 205.

³³³ Porter, G., J. W. Brown and P. S. Chasek, p. 18.

meetings of the World Water Forum, UN conferences, and contributions to numerous journals and publications. The epistemic community is seen to be particularly influential in addressing the relationship between policy, science, and knowledge.³³⁴ Due to the influence of the epistemic community, the international freshwater regime emphasizes the importance of continued research in order to improve water resources decision-making.

In addition to the role of the epistemic community, international environmental regime formation is affected by the interplay between the domestic and international spheres of political influence. Domestic political pressures are often the decisive factor in the creation or strengthening of regimes.³³⁵ At the same time, international norms impact upon domestic policy, as described in previous paragraphs. Therefore, “a theoretical model of regime formation and strengthening... should link international political dynamics with domestic politics, viewing the whole as a ‘two-level game.’”³³⁶

The international freshwater regime referred to herein is in line with the broad definition of regime. There are several considerations to keep in mind as to why this is an appropriate description. First, Conca explains that the narrow definition of regimes is particularly ineffective with respect to freshwater as the governance of water is challenging due to “the struggles over authority, the deterritorial character of nature, and the multiple ways of knowing that surround such environmental problems.”³³⁷ As a result, treaties such as the United Nations Non-Navigational Watercourses Treaty have not been successful. Second, narrowly defined regimes would not recognize that “new kinds of structures and relationships are augmenting control over

³³⁴ Greene, O., p. 399.

³³⁵ Porter, G., J. W. Brown and P. S. Chasek, p. 19.

³³⁶ Porter, G., J. W. Brown and P. S. Chasek, p. 19.

³³⁷ Conca, K., p. 68.

water through modern nation-states and large bureaucratic structures.”³³⁸ Third, water, watersheds and rivers “are likely to impose severe limits on conventional regimelike institution building.”³³⁹

Due to the importance of norms and soft law with respect to environmental regimes, and the shortcomings of narrowly defined regimes for water governance, the broad definition of regime is the appropriate description of water regimes. It is also consistent with Goertz’s observation that “we can already see new institutional forms emerging and shaping water-related behavior on a broad and expanding scale.”³⁴⁰ However, what comprises an international water regime is a matter of interpretation. Given that the creation of regimes is policy formation at the international level,³⁴¹ and that policies are essentially equivalent to norms, the soft law declarations of the UN with respect to watershed management are the best representation of an international freshwater regime. These are the Guiding Principles of the Dublin Statement (1992) and the Bonn Keys (2001).

The United Nations

This section provides a brief review of important milestones in the history of the UN’s involvement with international water management. It also supports the study of the Dublin Principles and the Bonn Keys and explains why the Non-Navigational Watercourses Treaty is of less importance in the context of subnational water policies in the GLSLR watershed. Furthermore, this section validates the leadership role of the UN in international water management, as opposed to other organisations.

³³⁸ Blatter, J., H. Ingram and P. M. Doughman, p. 3.

³³⁹ Conca, K., p. 71. See pp. 70-71 for reasons why territory, authority, knowledge.

³⁴⁰ Conca, K., p. 7.

³⁴¹ Goertz, G., p. 169.

Goertz maintains that international norms regarding watershed management are extremely important because of the amount of water resources in multi-country basins:

The world's 263 international river basins account for nearly one-half of the earth's land surface, generate roughly 60% of global freshwater flow and are home to approximately 40% of the world's population...A total of 145 countries contribute territory to international basins.³⁴²

International river basins are characterised by complex political, social and environmental conditions that contribute to the difficulty of managing shared water systems.³⁴³ Recognizing these challenges, the international community, largely guided by the UN, "has developed guiding principles and laws for international freshwater management."³⁴⁴

The UN first convened a conference on water in Mar del Plata, Argentina in 1977. This conference raised awareness about the assessment of water resources and water use and efficiency.³⁴⁵ Following this conference, the UN continued to provide leadership with respect to water issues through agencies such as the World Meteorological Organization (WMO), United Nations Environment Programme (UNEP), United Nations Council on Economic Development (UNCED), United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations Human Rights Council (UNHRC). To encourage countries to address water issues, the UN General Assembly declared the period from 1981-1990 the International Drinking Water and Sanitation Decade. In addition to ministerial meetings held throughout the 1980s and 1990s, the UN convened international conferences in Dublin, Ireland in 1992 and Bonn, Germany in 2001. Each of these conferences produced widely supported principles and recommendations.³⁴⁶

³⁴² Giordano, M. A. and A. T. Wolf, p. 2.

³⁴³ Giordano, M. A. and A. T. Wolf, p. 2.

³⁴⁴ Giordano, M. A. and A. T. Wolf, p. 4.

³⁴⁵ UNESCO (2006).

³⁴⁶ UNESCO (2006).

Taylor explains that by the late 1990s, “the United Nations had become involved in a multi-layered system of governance sometimes working with states, sometimes alongside them, and sometimes apart from them.”³⁴⁷ Its role has grown from organizing conferences to carrying out many functions of legitimate government.³⁴⁸ Furthermore, the resolutions and declarations produced at UN conferences have grown in significance in that “they authorize, even if they do not oblige, states to act upon the basis of the principles concerned; they are, to put it another way, ‘directly enforceable in interstate relations.’”³⁴⁹

In addition to the UN, other international organizations are involved with water issues. Two prominent examples are the World Water Council (WWC) and the International Water Association (IWA). Both hold regular conferences and attract international membership. After being created by resolution from the International Water Resources Association (IWRA) in 1994, the WWC has held World Water Forums on a tri-annual basis. The IWRA also holds frequent international meetings, deemed the World Water Congress. The WWC primarily focuses on political initiatives and stakeholder involvement whereas the IWA concentrates on the role of water professionals in creating solutions for the global water problem.³⁵⁰ The concurrent functioning of the WWC, IWRA and the IWA illustrates divisions in the international community regarding the preferred approach to water management. The divergences between these non-governmental organizations and the restricted focus of each suggest that they can only be seen as limited international freshwater regimes. In contrast, the UN brings together the many elements of water management, thus representing a more comprehensive international water regime.

³⁴⁷ Taylor, P., p. 340.

³⁴⁸ Taylor, P., p. 339.

³⁴⁹ Birnie, P. and A. Boyle, p. 21.

³⁵⁰ International Water Association and World Water Council.

The World Water Assessment Program lists 18 international conferences between 1972 and 2003 as milestones with regards to water resources management. In addition to water-focused meetings, “several recent international conferences have highlighted ‘water’ as the emerging, most critical environmental issue of the 21st century.”³⁵¹ Beaumont contends that the evolution of these meetings has produced “...the now readily identifiable and globally endorsed water agenda – both top-down and bottom-up in its genesis...”³⁵² This global water agenda further supports the norms endorsed by the UN and helps to establish the need for international and local participation in water management.

Formal attempts to create a narrowly defined international water regime have been largely unsuccessful, despite the general international acceptance of water-related norms and the effects of soft law. A brief review of the 1997 UN Convention on the Law of Non-navigational Uses of International Watercourses demonstrates the failure of this approach to international water management, in contrast to the successes of the preceding and proceeding UN conferences.

The Watercourses Convention was modeled after the International Law Association’s 1966 “Helsinki Rules” which articulate customary water laws, such as equitable use, for international, transboundary water.³⁵³ The Convention accepted by the UN General Assembly as a framework convention on July 8, 1997.³⁵⁴ The acceptance of the Convention was possibly due to the fact that “it tries to take every factor into account.”³⁵⁵ The all-encompassing nature of the document has led some to describe it as “vague and sometimes contradictory”³⁵⁶ and a careful reading reveals tensions and contradictions throughout. For instance, the difficulty of trying to

³⁵¹ Falkenmark, M., p. 275.

³⁵² Wouters, P., p. 169.

³⁵³ Conca, K., p. 101.

³⁵⁴ Beaumont, P., p. 476.

³⁵⁵ Beaumont, P., p. 494.

³⁵⁶ Giordano, M. A. and A. T. Wolf, p. 5.

determine the meaning of some phrases in the Convention “would keep academics in discussion for years.”³⁵⁷ Imprecise definitions of fundamental concepts, such as ‘vital human needs’ and ‘adequate’ protection of ecosystems, are examples of the vagueness that ultimately diminishes the usefulness of the Convention.³⁵⁸ There are also several instances where different objectives are advocated which are unlikely to be achievable simultaneously.³⁵⁹ Further reducing its usefulness is that as a framework convention, it will be necessary for detailed supplemental agreements concerning specific watercourses to be negotiated at some time in the future.³⁶⁰ As well, the creation of the Convention took many years and as a result, the expression “international watercourses” used throughout it is outdated terminology. Currently, the phrase “transboundary rivers” is utilized and indeed, was included in the UN Economic Commission for Europe Convention in 1992.³⁶¹ This does not reflect well on the ability of the Convention to remain up-to-date. Given these numerous shortcomings, “the UN Convention’s ultimate practicality has been called into question.”³⁶² Finally, only seven countries have ratified the Convention, far less than the necessary 35; thus, it has not entered into force.³⁶³

In contrast, the UN Declarations at the Dublin and Bonn Conferences have received extensive support from governments, non-governmental organizations, and water experts. The creation of these declarations was accomplished with public involvement, in contrast to the government-drafted 1997 UN Convention on Non-Navigational Watercourses. The Bonn Conference developed a new model for stakeholder involvement by bringing together farmers, unionists, NGOs, business and social groups with government representatives, a first in global

³⁵⁷ Beaumont, P., p. 482.

³⁵⁸ Beaumont, P., pp. 483; 485.

³⁵⁹ Beaumont, P., pp. 482; 483.

³⁶⁰ McCaffrey, S., p. 257.

³⁶¹ Beaumont, P., p. 479.

³⁶² Giordano, M. A. and A. T. Wolf, p. 5.

³⁶³ International Water Law Project (as of 9 January 2008).

water meetings.³⁶⁴ The Principles and Keys recognize the multiple values and uses of water, and water is portrayed in a broader context than just international watercourses in each, yet there is also a greater focus on specific items. As explained previously in this chapter, international declarations, such as the Guiding Principles of the Dublin Statement and the Bonn Keys, are integral to environmental governance in that they represent widely held norms and constitute an international water regime. As a regime, the declarations “then matter because they can enter into the policy or decision making process.”³⁶⁵

The Dublin Principles

In January 1992, as a precursor to the 1992 Earth Summit, the International Conference on Water and the Environment (ICWE) was convened by the UN in Dublin, Ireland. Participants at the conference represented 114 countries, 28 UN agencies and 58 international and nongovernmental organizations.³⁶⁶ One of the end products of this conference was the Dublin Statement which covers environmental, social, political, and economic issues related to water management. This Statement was presented to government leaders in June 1992 at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil. At the time of presentation, the ICWE conference participants “urge[d] all governments to study carefully the specific activities and means of implementation recommended in the Conference Report, and to translate those recommendations into urgent action programmes for water and sustainable development.”³⁶⁷ The Dublin Statement articulated the following four Guiding Principles³⁶⁸:

PRINCIPLE NO. 1 – “FRESH WATER IS A FINITE AND VULNERABLE RESOURCE, ESSENTIAL TO SUSTAIN LIFE, DEVELOPMENT AND THE ENVIRONMENT.”

³⁶⁴ Conca, K., p. 163.

³⁶⁵ Goertz, G., p. 2.

³⁶⁶ Conca, K., p. 140.

³⁶⁷ United Nations (1992).

³⁶⁸ The full text of each principle is found in Chapter 5.

PRINCIPLE NO. 2 – “WATER DEVELOPMENT AND MANAGEMENT SHOULD BE BASED ON A PARTICIPATORY APPROACH, INVOLVING USERS, PLANNERS AND POLICY-MAKERS AT ALL LEVELS.”

PRINCIPLE NO. 3 – “WOMEN PLAY A CENTRAL PART IN THE PROVISION, MANAGEMENT AND SAFEGUARDING OF WATER.”

PRINCIPLE NO. 4 – “WATER HAS AN ECONOMIC VALUE IN ALL ITS COMPETING USES AND SHOULD BE RECOGNIZED AS AN ECONOMIC GOOD.”³⁶⁹

Essentially, the first principle emphasizes environmental aspects of water management, the second and third principles address social and political factors, and the fourth principle covers economic considerations. Of course, there is also overlap between each of these considerations (e.g. the economic valuation of water requires political will and has social and environmental effects). That the principles touch upon these numerous elements is reflective of the growing impact of sustainability in water management circles.

The Bonn Keys

The UN International Conference on Freshwater was held in Bonn, Germany in December 2001 and nearly ten years after the Dublin Conference. As with the Dublin Conference, it was arranged prior to an international conference on sustainable development, and focused specifically on the role of water in sustainable development, including ways to improve implementation of best practices. Participants at the conference represented 118 countries, 47 international organizations and 73 organizations representing civil society and major stakeholders.³⁷⁰ One of the products of the Bonn conference was the Bonn Keys, which were designed to provide clear guidelines for actions on water management. The Keys are³⁷¹:

KEY NO. 1 – “THE FIRST KEY IS TO MEET THE WATER SECURITY NEEDS OF THE POOR.”

³⁶⁹ United Nations (1992).

³⁷⁰ Rahaman, M. M. O. Varis and T. Kajander, p. 567.

³⁷¹ The full text of each key is found in Chapter 4.

KEY NO. 2 – “DECENTRALISATION IS KEY. THE LOCAL LEVEL IS WHERE NATIONAL POLICY MEETS COMMUNITY NEEDS.”

KEY NO. 3 – “THE KEY TO BETTER WATER OUTREACH IS NEW PARTNERSHIPS.”

KEY NO. 4 – “THE KEY TO LONG-TERM HARMONY WITH NATURE AND NEIGHBOUR IS COOPERATIVE ARRANGEMENTS AT THE WATER BASIN LEVEL, INCLUDING ACROSS WATERS THAT TOUCH MANY SHORES.”

KEY NO. 5 – “THE ESSENTIAL KEY IS STRONGER, BETTER PERFORMING GOVERNANCE ARRANGEMENTS.”³⁷²

As with the Dublin Principles, the Bonn Keys aim to involve many stakeholders in the management of water resources. The recommendations in the Bonn Keys move beyond this position, however, in that they advocate for the decentralisation of power to the local level. It is interesting, then, that Canada’s eight government delegates included two participants from the provincial ministries and six from federal departments.³⁷³ The list of participants illustrates Canada’s recognition that effective water policy must be developed and implemented with far-reaching participation from subnational stakeholders.

The Bonn Keys also introduce a new concept – water security. This provision of water, as articulated in the first key, touches upon political, social and economic considerations. The remaining keys focus primarily on political characteristics. Environmental protection is less clearly stated than in the Dublin Principles, with only an allusion to it in the fourth key which references harmony between people and nature.

Conclusion

The concepts of norms, soft law, and regimes are helpful in establishing the importance of non-legal instruments, such as the Dublin Principles and the Bonn Keys. These declarations

³⁷² The Bonn Keys.

³⁷³ International Conference on Freshwater.

therefore contribute to the evolving model of international water policy. As there is a growing recognition of the interplay between international and domestic policy-making³⁷⁴, as well as other governance functions, it is essential to evaluate whether the Guiding Principles and Bonn Keys are reflected in domestic water policies. Thus, the next chapter will assess if, and to what extent, subnational water policies for the GLSLR watershed are consistent with the aforementioned international declarations.

³⁷⁴ See, for example, Conca, K., p. 103.

CHAPTER 5: COMPARISON OF SUBNATIONAL GREAT LAKES-ST LAWRENCE RIVER WATER MANAGEMENT POLICIES AND INTERNATIONAL FRESHWATER MANAGEMENT NORMS

The deterioration of environmental conditions and increasing threats to the water resources of the basin have compelled the provinces and states of the Great Lakes-St Lawrence River watershed to create subnational policies intended to protect and conserve the water resources. As Goertz explains, “government policy as well as international institutions are responses (not the only possible ones) to a perceived problem. Policies propose solutions to those problems: the function of policy is problem-solving.”³⁷⁵ Seeing as both subnational GLSLR water management policies and international institutions (i.e. regimes) are working toward the sustainable management of water resources, it is important that these efforts are not conflicting. In order to do so, one “*must begin with a description of the rules and norms that compose the institution.*”³⁷⁶ There has been considerable research to ascertain that recent subnational GLSLR watershed management policies do not conflict with the 1909 *Boundary Waters Treaty* (notably by the Canadian Environmental Law Association) but similar studies have not been undertaken to determine if these are inconsistent with UN declarations concerning watershed management. Discovering inconsistencies between the subnational and international policies is valuable because it highlights areas for improvement in future policies and for implementation activities.

This chapter presents the findings of qualitative content analysis to determine the consistency of the international declarations and subnational policies. Similar to previous studies, it is assumed that the presence of similar objectives is indicative of policy coherence.³⁷⁷

³⁷⁵ Goertz, G., p. 10.

³⁷⁶ Goertz, G., p. 45. Italics original.

³⁷⁷ See, for example, Duraiappah, A. K. and A. Bhardwaj (2007).

Thematic Content Analysis of the Dublin Principles (1992)

PRINCIPLE NO. 1 – “FRESH WATER IS A FINITE AND VULNERABLE RESOURCE, ESSENTIAL TO SUSTAIN LIFE, DEVELOPMENT AND THE ENVIRONMENT.

Since water sustains life, effective management of water resources demands a holistic approach, linking social and economic development with protection of natural ecosystems. Effective management links land and water uses across the whole of a catchment area or groundwater aquifer.”

PRINCIPLE NO. 2 – “WATER DEVELOPMENT AND MANAGEMENT SHOULD BE BASED ON A PARTICIPATORY APPROACH, INVOLVING USERS, PLANNERS AND POLICY-MAKERS AT ALL LEVELS.

The participatory approach involves raising awareness of the importance of water among policy-makers and the general public. It means that decisions are taken at the lowest appropriate level, with full public consultation and involvement of users in the planning and implementation of water projects.”

PRINCIPLE NO. 3 – “WOMEN PLAY A CENTRAL PART IN THE PROVISION, MANAGEMENT AND SAFEGUARDING OF WATER.

This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women’s specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them.”

PRINCIPLE NO. 4 – “WATER HAS AN ECONOMIC VALUE IN ALL ITS COMPETING USES AND SHOULD BE RECOGNIZED AS AN ECONOMIC GOOD.

Within this principle, it is vital to recognize first the basic right of all human beings to have access to clean water and sanitation at an affordable price. Past failure to recognize the economic value of water has led to wasteful and environmentally damaging uses of the resource. Managing water as an economic good is an important way of achieving efficient and equitable use, and of encouraging conservation and protection of water resources.”

Table 5.1 Compilation of Themes in the Dublin Principles

	Principle 1	Principle 2	Principle 3	Principle 4
Who	Ø	all levels of users, planners, policy-makers	women	everyone
What	effective management	participatory water development and management	provision, management and safeguarding of water; institutional arrangements	basic right to affordable water; economic value of water
Where	whole catchment area or aquifer	lowest level appropriate	Ø	Ø
When	Ø	Ø	Ø	Ø
Why	water sustains life; water is finite and vulnerable	Ø	women are providers and users of water and guardians of the living environment	to eliminate wasteful and environmentally damaging uses; achieve efficient and equitable use; encourage conservation and protection
How	holistic approach; link social and economic development with ecosystem protection	raise awareness of the importance of water among policy-makers and general public, full public consultation and involvement of users in planning and implementation	positive policies to address women's specific needs; equip and empower women to participate at all levels including decision-making and implementation, in ways defined by them	recognize water as an economic good
Misc.	Ø	Ø	Ø	Ø

Thematic Content Analysis of the Bonn Keys (2001)

KEY NO. 1 – “THE FIRST KEY IS TO MEET THE WATER SECURITY NEEDS OF THE POOR.

For livelihoods, health and welfare, production and food security and reducing vulnerability to disasters. Pro-poor water policies focus on listening to the poor about their priority water security needs. It is time now to build on the national and international commitment on drinking water with the determination also to halve the number of those who do not have access to sanitation.”

KEY NO. 2 – “DECENTRALISATION IS KEY. THE LOCAL LEVEL IS WHERE NATIONAL POLICY MEETS COMMUNITY NEEDS.

Local authorities – if delegated the power and the means, and if supported to build their capacities – can provide for increased responsiveness and transparency in water management, and increase the participation of women and men, farmer and fisher, young and old, town and country dweller.”

KEY NO. 3 – “THE KEY TO BETTER WATER OUTREACH IS NEW PARTNERSHIPS.

From creating water wisdom, to cleaning up our watersheds, to reaching into communities – we need new coalitions. Energized, organized communities will find innovative solutions. An informed citizenry is the frontline against corruption. New technologies can help; so can

traditional techniques and indigenous knowledge. This Bonn stakeholder dialogue is part of the process.”

KEY NO. 4 – “THE KEY TO LONG-TERM HARMONY WITH NATURE AND NEIGHBOUR IS COOPERATIVE ARRANGEMENTS AT THE WATER BASIN LEVEL, INCLUDING ACROSS WATERS THAT TOUCH MANY SHORES.

We need integrated water resource management to bring all water users to the information sharing and decision making tables. Although we have great difficulty with the legal framework and the form agreements might take, there is substantial accord that we must increase cooperation within river basins, and make existing agreements more vital and valid.”

KEY NO. 5 – “THE ESSENTIAL KEY IS STRONGER, BETTER PERFORMING GOVERNANCE ARRANGEMENTS.

National water management strategies are needed now to address the fundamental responsibilities of Governments: laws, rules and standard setting; the movement from service delivery to the creator and manager of an effective legal and regulatory framework. Effective regulatory arrangements that are transparent and can be monitored are the way to effective, responsive, financially sustainable services. Within these we will welcome both improved public sector and private sector delivery arrangements.”

Table 5.2 Compilation of Themes in the Bonn Keys

	Key 1	Key 2	Key 3	Key 4	Key 5
Who	the poor	local authorities; variety of people based on gender, occupation, age, location of residence	citizenry; communities	Ø	national governments
What	water security needs; pro-poor water policies; halve amount of people w/o access to sanitation	decentralisation	better water outreach	long-term harmony with nature and neighbour; integrated water resources management	stronger, better performing governance arrangements
Where	Ø	local level	Ø	basin level	Ø
When	now	Ø	Ø	Ø	Ø
Why	livelihoods, health and welfare, production and food security, reduced vulnerability	meet community needs; increase responsiveness and transparency in water management; increase participation	create water wisdom; clean up watersheds; reach into communities; frontline against corruption; find innovative solutions	Ø	effective, responsive, financially sustainable services
How	listen to poor; build on national and international commitments	delegate power and means; support capacities	new partnerships and coalitions; new technologies; traditional techniques; indigenous knowledge	cooperative arrangements for transboundary water; make existing agreements more vital and valid; increase cooperation; bring all water users to the information sharing and decision making tables	move from service delivery to creator and manager of effective improved public sector and private sector delivery arrangements; address laws, rules and standard setting
Misc.	Is the “first”	Ø	Bonn stakeholder dialogue is part of this process	Ø	Is “essential”

Table 5.3 Compilation of themes of the international freshwater management norms

	Dublin	Bonn	International
Who	1D: all levels of users, policy-makers and planners 2D: women 3D: everyone	1B: the poor 2B: local authorities 3B: variety of people based on gender, occupation, age, location of residence 4B: citizenry 5B: communities 6B: national governments	1I: all levels of users, policy-makers and planners 2I: women 3I: everyone 4I: the poor 5I: local authorities 6I: variety of people based on gender, occupation, age, location of residence 7I: citizenry 8I: communities 9I: national governments
What	1D: effective management 2D: participatory water development and management 3D: provision, management and safeguarding of water 4D: institutional arrangements 5D: basic right to affordable water 6D: economic value of water	1B: water security needs 2B: pro-poor water policies 3B: halve amount of people w/o access to sanitation 4B: decentralisation 5B: better water outreach 6B: long-term harmony with nature and neighbour 7B: integrated water resources management 8B: stronger, better performing governance arrangements	1I: effective management 2I: participatory water development and management 3I: provision, management and safeguarding of water 4I: basic right to affordable water 5I: economic value of water 6I: water security needs 7I: pro-poor water policies 8I: halve amount of people w/o access to sanitation 9I: decentralisation 10I: better water outreach 11I: long-term harmony with nature and neighbour 12I: integrated water resources management 13I: stronger, better performing institutional arrangements (8B + 4D)
Why	1D: water sustains life 2D: water is finite and vulnerable 3D: women are providers and users of water and guardians of the living environment 4D: to eliminate wasteful and environmentally damaging uses 5D: achieve efficient and equitable use 6D: encourage conservation and protection	1B: livelihoods, health and welfare, production and food security, reduced vulnerability 2B: meet community needs 3B: increase responsiveness and transparency in water management 4B: increase participation 5B: create water wisdom 6B: clean up watersheds 7B: reach into communities 8B: frontline against corruption 9B: find innovative solutions 10B: effective, responsive, financially sustainable services	1I: water sustains life 2I: water is finite and vulnerable 3I: women are providers and users of water and guardians of the living environment 4I: to eliminate wasteful and environmentally damaging uses 5I: achieve efficient and equitable use 6I: encourage conservation and protection 7I: livelihoods, health and welfare, production and food security, reduced vulnerability 8I: meet community needs 9I: increase responsiveness and transparency in water management 10I: create water wisdom 11I: clean up watersheds 12I: reach into communities 13I: frontline against corruption 14I: find innovative solutions 15I: effective, responsive, financially sustainable services

Table 5.3 (cont'd). Compilation of themes of the international freshwater management norms

	Dublin	Bonn	International
Where	1D: whole catchment area or aquifer 2D: lowest appropriate level	1B: local level 2B: basin level	1I: whole basin (1D + 2B) 2I: local level 3I: lowest appropriate level
When		1B: now	1I: now
How	1D: holistic approach 2D: link social and economic development with ecosystem protection 3D: raise awareness of the importance of water among policy-makers and general public 4D: full public consultation and involvement of users in planning and implementation 5D: positive policies to address women's specific needs 6D: equip and empower women to participate at all levels including decision-making and implementation, in ways defined by them 7D: recognize water as an economic good	1B: listen to poor 2B: build on national and international commitments 3B: delegate power and means 4B: support capacities 5B: new partnerships and coalitions 6B: new technologies 7B: traditional techniques 8B: indigenous knowledge 9B: cooperative arrangements for transboundary water 10B: make existing agreements more vital and valid 11B: increase cooperation 12B: bring all water users to the information sharing and decision making tables 13B: move from service delivery to creator and manager of effective improved public sector and private sector delivery arrangements 14B: address laws, rules and standard setting	1I: holistic approach 2I: link social and economic development with ecosystem protection 3I: raise awareness of the importance of water among policy-makers and general public 4I: full involvement of all water users in information sharing, planning, decision-making and implementation (4D + 12B) 5I: positive policies to address women's specific needs 6I: equip and empower women to participate at all levels including decision-making and implementation, in ways defined by them 7I: recognize water as an economic good 8I: move from service delivery to creator and manager of effective improved public sector and private sector delivery arrangements 9I: address laws, rules and standard setting 10I: listen to poor 11I: build on national and international commitments 12I: delegate power and means 13I: support capacities 14I: new partnerships and coalitions 15I: new technologies 16I: traditional techniques 17I: indigenous knowledge 18I: cooperative arrangements for transboundary water 19I: make existing agreements more vital and valid 20I: increase cooperation (why4B + how11B)
Misc.		1B: "first" 2B: conference stakeholder dialogue is part of process 3B: "essential"	1I: first 2I: conference stakeholder dialogue is part of process 3I: essential

Although the Dublin Principles and the Bonn Keys dealt with many of the same issues, there was little consistency in the language used between the two declarations. The coded themes from each declaration overlap only in a few areas, namely, cooperation, the need for all water users to be involved in all aspects of water management, and that water must be managed along watershed/basin boundaries. Since these three aspects are repeated by the international community nearly ten years apart, it is reasonable to assume that they are priority issues. On the other hand, elements that were highlighted at Dublin in 1992, and are less prominent in the Bonn Keys in 2001, such as the role of women, raise questions about the level of commitment to these principles. The Bonn Keys also differ from the Dublin Principles in that it prioritizes among the Keys by containing the proviso that meeting the needs of the poor is the first Key and it must be acted on “now”. The Bonn Keys also state that better performing, stronger governance arrangements are “essential” which indicates that the other Keys are somehow less significant or non-essential. Ultimately, the two declarations complement each other by highlighting different areas while maintaining the same focus.

Qualitative Content Analysis of the Great Lakes Charter

The following tables present the results of the content analysis comparing the coded international norms with three sections of the Great Lakes Charter: “Findings”, “Purpose” and “Principles”. These sections contain the most relevant information for this study; following these sections is detailed information about implementation and measurement indicators, legalese about the rights of each party as well as a brief section of definitions.

Table 5.4 Raw content analysis results for the Great Lakes Charter

"Findings"	
Paragraph 1	where1I
Paragraph 2	who9I; what5I; how18I
Paragraph 3	what5I; why7I; why8I; where1I; how2I
Paragraph 4	what3I; why2I; why4I; why6I; why7I
Paragraph 5	who7I; what1I; what3I; what13I; why2I; why5I; why6I; why8I; where1I; how9I; how18I; how20I
Paragraph 6	who3I; what1I; why6I; where1I; how9I; how11I; how18I; how19I
"Purpose"	
Paragraph 1	what3I; why6I; why8I; where1I; how2I; how18I; how20I
"Principles"	
Principle 1	what12I; where1I; how1I
Principle 2	who5I; who9I; what3I; where1I; how18I
Principle 3	who7I; what3I; what13I; why4I; why6I; why8I; where1I; how9I; how18I
Principle 4	what3I; where1I; how18I
Principle 5	what1I; what13I; why10I; how13I; how18I; how20I

Table 5.5 Areas of agreement between international norms and the Great Lakes Charter

Who	What	Why	Where	When	How	Misc
who3I: 1 who5I: 1 who7I: 2 who9I: 2	what1I: 3 what3I: 6 what5I: 2 what12I: 1 what13I: 3	why2I: 2 why4I: 2 why5I: 1 why6I: 5 why7I: 2 why8I: 4 why10I: 1	where1I: 9	[no areas of agreement]	how1I: 1 how2I: 2 how9I: 3 how11I: 1 how13I: 1 how18I: 8 how19I: 1 how20I: 3	[no areas of agreement]

In total, there are 67 occurrences where subnational policy matches international norms in 25 categories. The codes which are repeated throughout the Great Lakes Charter deal with cooperative arrangements (how18I) and management at the basin level (where1I). This is not surprising given that both of these norms have a long history in Ontario, indeed, throughout the basin, where they are legally addressed by the *Boundary Waters Treaty* (1909). The next most prevalent international norm is provision, management and safeguarding of water (what3I).³⁷⁸ Receiving equal attention was a similar theme, encourage conservation and protection (why6I), which was not tied to diversions and consumption, but was applied more broadly to mean avoidance of environmental harm, and also more narrowly, when either “conserve” or “protect”

³⁷⁸ To ensure consistency with coding the other agreements, each instance relating to diversions and consumption was associated with code what3I.

was explicitly mentioned. Again, this standard carries through in the content analysis of the Charter Annex and the Sustainable Water Resources Agreement. There are a fair number of international norms represented in each category, although significant gaps exist each (e.g. what6I – what11I, why11I – why15I, etc.)

Qualitative Content Analysis of the Great Lakes Charter Annex

The following tables present the results of the content analysis comparing the coded international norms with three sections of the Great Lakes Charter Annex: “Findings”, “Purpose” and “Directives”. These sections represent the bulk of the Charter Annex, with only an additional paragraph about legal implications and a section of definitions.

Table 5.6 Raw content analysis results for the Great Lakes Charter Annex

“Findings”	
Paragraph 1	what13I; why6I; why11I; how9I; how18I; how19I
Paragraph 2	why2I; why4I; why6I; why11I; where1I; how1
“Purpose”	
Paragraph 1	what1I; what13I; why6I; why11I; where1I; how18I; how19I
Paragraph 2	what3I; what13I; why6I; where1I; how9I; how11I; how18I; how20I
“Directives”	
Directive 1	what13I; why6I; why11I; where1I; how9I; how11I; how18I; how20I
Directive 2	who7I; what2I; what10I; what13I; why9I; why12I; how4I; how9I
Directive 3	what3I; why2I; why4I; why6I; why15I; where1I; how1I; how2I; how9I; how11I; how18I
Directive 4	what3I; why5I; how9I; how18I; how19I
Directive 5	who9I; what13I; why10I; how13I; how18I; how19I; how20I
Directive 6	what1I; what3I; why5I; why6I; why10I; why11I; where1I; how1I; how9I; how13I; how18I; how20I

Table 5.7 Areas of agreement between international norms and the Great Lakes Charter Annex

Who	What	Why	Where	When	How	Misc
who7I: 1 who9I: 1	what1I: 2 what2I: 1 what3I: 4 what10I: 1 what13I: 6	why2I: 2 why4I: 2 why5I: 2 why6I: 7 why9I: 1 why10I: 2 why11I: 5 why12I: 1 why15I: 1	where1I: 6	[no areas of agreement]	how1I: 3 how2I: 1 how4I: 1 how9I: 7 how11I: 3 how13I: 2 how18I: 8 how19I: 4 how20I: 4	[no areas of agreement]

In total, there are 78 occurrences in 26 categories where subnational policy matches international norms. The Great Lakes Charter Annex continues to support cooperative arrangements for transboundary waters (how18I), conservation and protection of water resources (why6I), and watershed-based management (where1I). In addition, the Charter Annex has greater focus on some areas mentioned briefly in the Charter, such as laws, rules and standard-setting (how9I), as well as stronger, better performing institutional arrangements (what13I). The concurrent emphasis on these norms shows their inherent interdependence, as each is largely reliant on the other. In other words, one would need strong institutional arrangements to enact new laws and standards combined with new rules and laws to strengthen existing institutional arrangements. Notably, the Charter Annex introduces strong support for restoration and improvements to watersheds, eliciting the application of code why11I (clean up watersheds). The Charter Annex also introduces the concept of public participation in water management, thus introducing norms that focus on communities (what10I; why12I); participation in all water management processes (what2I; how4I); as well as transparency (why9I).

Qualitative Content Analysis of the Sustainable Water Resources Agreement

The following tables present the results of the content analysis comparing the coded international norms with two sections of the Sustainable Water Resources Agreement: “Preamble” and “Chapter 1, Article 100, Objectives”. The Agreement also contains numerous pages dealing with definitions, and specific rules about diversions, exceptions, implementation, etc. The Sustainable Water Resources Agreement is a much longer document than the previous agreements, containing nearly four pages of definitions alone.

Table 5.8 Raw content analysis results for the Sustainable Water Resources Agreement

"Preamble"	
Paragraph 1	why2I; why6I; where1I
Paragraph 2	where1I
Paragraph 3	why6I; why11I; where1I; misc3I
Paragraph 4	why6I; why11I; where1I
Paragraph 5	who3I; what3I; what5I; why1I; why7I; where1I; how2I
Paragraph 6	what12I; why7I; how2I
Paragraph 7	why2I; why11I; where1I
Paragraph 8	why2I; why6I; where1I
Paragraph 9	why2I; why4I; why6I; how9I
Paragraph 10	what11I; where1I; how18I
Paragraph 11	how19I
Paragraph 12	who9I; where1I
Paragraph 13	who9I; how11I
Paragraph 14	what1I; how18I
"Chapter 1, Article 100, Objectives"	
1.a.	why6I; why11I; where1I; how9I; how18I
1.b.	what1I; why6I; why11I; where1I; how18I; how20I
1.c.	what3I; what13I; how9I; how18I; how20I
1.d.	what13I; how18I; how20I
1.e.	where1I; how18I
1.f.	what3I; what13I; why10I; how13I; how18I; how20I
1.g.	what3I; why2I; why4I; where1I
1.h.	why10I; where1I; how9I
2.	∅

Table 5.9 Areas of agreement between international norms and the Sustainable Water Resources Agreement

Who	What	Why	Where	When	How	Misc
who3I: 1 who9I: 2	what1I: 2 what3I: 4 what5I: 1 what11I: 1 what12I: 1 what13I: 3	why1I: 1 why2I: 5 why4I: 2 why6I: 7 why7I: 2 why10I: 2 why11I: 5	where1I: 14	[no areas of agreement]	how2I: 2 how9I: 4 how11I: 1 how13I: 1 how18I: 8 how19I: 1 how20I: 4	misc3I: 1

In total, there are 75 occurrences within 24 different categories where the subnational policy matches international norms. The consistencies with international norms were strongest with reference to the basin being the appropriate level (where1I). There was also strong support for cooperative arrangements for transboundary water (how18I) and the need for increased cooperation (how20I). Within this Agreement, there is also a focus on environmental conditions in the basin, as seen by the numerous mentions of watershed restoration (why11I), the need to

conserve and protect water (why6I), as well as the recognition of the vulnerability of the water resources (why2I).

The Sustainable Water Resources Agreement is unusual in that it was the first subnational policy focused on the management of the GLSLR watershed to espouse international freshwater management norms nearly verbatim. The Sustainable Water Resources Agreement employs the phrase “sustainable development and *harmony with nature and neighbours require cooperative arrangements...*”³⁷⁹ This specific wording was used four years earlier in Bonn Key #4 which begins, “the key to long-term *harmony with nature and neighbour is cooperative arrangements* at the water basin level, including across waters that touch many shores.” It is incongruous that exact language is drawn from an international norm at the same time that international norms, which were previously enshrined in subnational policy, were removed.

Trends over Time

Between 1985 and 2005, there are several principles which became firmly entrenched in the water policies of the GLSLR watershed, as evidenced by the numerous mentions in all three agreements. Specifically, conservation, protection, safeguarding and provision of water (why6I, what3I), basin-level management (where1I), and increased cooperation through transboundary agreements (how18I, how20I) are highlighted on multiple occasions in all three agreements. The prevalence of these norms is unsurprising. An impetus for these agreements was a desire on the part of states and provinces in the watershed to protect and safeguard the water resources of the GLSLR basin. Likewise, given that the agreements are transboundary and for the express purpose of increasing cooperation, it is understandable that these themes are repeated throughout.

A chronological comparison reveals interesting changes over time. Although cleanup of watersheds (why11I) was not mentioned in the 1985 Great Lakes Charter, restoration of

³⁷⁹ Preamble, Para. 10. Italics added.

watersheds becomes a central theme in the 2001 Charter Annex and the 2005 Sustainable Water Resources Agreement. Similarly, after only being raised on two occasions each in the Charter and the Charter Annex, the idea that water is finite and vulnerable (why2I) was detected five times in the Sustainable Water Resources Agreement. This evolution suggests that subnational governments have become increasingly sensitive to the limitations of water as a resource. An aspect to which these governments pay less attention is meeting community needs (why8I), which is not raised in the Charter Annex and the Sustainable Water Resources Agreement after being highlighted in the Charter on several occasions. Notably, the disappearance of this theme coincides with the fact that local authorities (who5I) are also only mentioned in the Charter. However, both the Charter Annex and the Sustainable Water Resources Agreement explicitly reaffirm the preceding agreement(s), indicating that there is a cumulative trend and strengthening of previously stated beliefs.

The Sustainable Water Resources Agreement was developed based upon the Charter Annex and several years of consultations and negotiations; moreover, it explicitly reaffirms the directives of the Charter Annex. Despite widespread public and stakeholder contribution to the creation of the Agreement, several norms espoused in the Charter Annex are conspicuously absent from the Sustainable Water Resources Agreement. The majority of these missing norms touch upon aspects related to public participation in water resources management. Excluded from the Agreement are: citizenry (who7I); participatory water development and management (what2I); better water outreach (what10I); achieve efficient and equitable use (why5I); meet community needs (why8I); increase responsiveness and transparency (why9I); reach into communities (why12I); and full involvement of all water users in information-sharing, planning,

decision-making and implementation (how4I).³⁸⁰ This shift is discussed in greater detail in Chapter 6.

In contrast to this move away from public participation in the subnational agreement, the second Dublin Principle, which stresses the importance of a “participatory approach”, is greatly expanded upon in the Bonn Keys. Of the five keys, the second, third and fourth provide further instruction about how to accomplish the second principle described nine years earlier. The second key calls for decentralization; the third, for new partnerships; and the fourth, for basin level cooperative arrangements and strengthened agreements. Each of these are important elements of the participatory approach in that they call for power to be devolved to lower levels of government, to include new partners and/or have and watershed-based cooperation.

³⁸⁰ The other Charter Annex norms absent in the SWRA are: effective, responsive financially sustainable services (why15I) and holistic approach (how1I).

CHAPTER 6: DISCUSSION AND CONCLUSIONS

The inductive research approach adopted for the literature review and qualitative content analysis, as well as associated steps such as theme identification and coding, reveal chronological changes, idiosyncrasies, and strengths and weaknesses of each of the five documents under review. It also confirms that water policy must address a diverse array of issues, including: who will implement policies; who will be affected by those policies; what the purpose of the policy is; how to achieve goals; and why certain actions are preferred. To begin, this chapter expands upon the assessment of consistencies and inconsistencies among the subnational GLSLR watershed policies and international norms. Following this section is a discussion about the roles and responsibilities of other actors in the watershed as well as other international aspects of interest. It is also necessary to discuss the limitations of policy coherence before concluding with comments on the successes of the subnational level in the GLSLR watershed.

Comparative Findings

Consistencies Among International Norms and Subnational Agreements

This thesis reveals that the provinces and states of the GLSLR watershed have adopted many norms supported by international freshwater declarations in their policies for the watershed. Of the various aspects of water management, the GLSLR watershed policies appear most consistent with the international norms with regards to “why” the policies and norms are espoused. In total, twelve of the fifteen “why” codes are mentioned in at least one of the subnational water policies. There is unambiguous agreement in all three of the subnational agreements and both international declarations that water management must achieve the protection and conservation of water resources (why6I). This concurrence stems from the oft-repeated recognition that water is finite and vulnerable (why2I). Furthermore, the vulnerable,

finite nature of water is also implicitly acknowledged in the subnational policies' growing commitment to clean up watersheds (why11I), eliminate wasteful and environmentally damaging uses (why4I), and to safeguard and manage water (what3I). Ultimately, due to past (and ongoing) harm to the GLSLR watershed, it follows that protection and restoration are equally necessary and logically concurrent activities. This consistency is encouraging as it indicates that there is a common viewpoint on the importance of water resources.

Similarly, strong support is found in the GLSLR basin water policies for the notion that watersheds are the appropriate level for water management (where1I). Indirectly, basin-level management is also robustly supported in the recurring norm calling for cooperative arrangements for transboundary water (how18I). In the context of the GLSLR watershed, watershed-based management expressly requires transboundary arrangements; thus, it is sensible—indeed necessary—that these norms are expressed simultaneously.

The three GLSLR watershed policies also reiterate a desire to address laws, rules and standard-setting (how9I), indicating a recognition that current mechanisms are inadequate. In combination with a solid commitment to increase cooperation (how20I), it seems that the parties to the agreements are prepared to work collaboratively to achieve the basin-level protection of water resources. Starting from this common position will assist in managing the differences about “who” will be involved and “how” to achieve protection and conservation of water, as well as other related issues.

Inconsistencies Among International Norms and Subnational Agreements

The Dublin Principles and Bonn Keys touch upon several themes which are not included in the subnational policies. The international norms most notably absent from the GLSLR watershed policies include: indigenous knowledge (how17I); the crucial role of women in water

management (who2I, why3I, how5I, how6I); the importance of acting now (when1I) and the basic right to affordable water (what4I).

A large component of the Sustainable Water Resources Agreement addresses the need to improve the exchange of data and scientific knowledge. It is noteworthy, then, that the Agreement does not refer to indigenous knowledge as a central component of these efforts despite the fact that the Agreement “[acknowledges] the commitment of these peoples [Aboriginals] to preserve and protect the waters of the Basin.”³⁸¹ In Article 504, “First Nations and Tribes Consultation”³⁸², the Agreement instructs that “appropriate Parties shall seek to establish mutually agreed upon mechanisms to facilitate on-going scientific and technical interaction and data exchange...” However, in a preceding section (Article 302 “Science”³⁸³), Parties are instructed to develop a strategy to strengthen the scientific basis of decision-making, a much more direct command. By incorporating indigenous knowledge into subnational watershed management policies, the GLSLR provinces and states could demonstrate respect for Aboriginal peoples, enhance participatory processes, and become aligned with international norms which recognise the contributions of indigenous knowledge to water management.³⁸⁴ It would also enrich the data collected about the basin and provide additional information about the ecosystem.

A recurring theme in the Dublin Principles and Bonn Keys are the important roles and needs of women in water management. First, women are recognized as being providers and users of water and guardians of the living environment. Second, the declarations call for positive

³⁸¹ Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement, Preamble, Para. 12.

³⁸² Article 504 was not included in the content analysis as it is not part of the introductory principles of the Agreement.

³⁸³ Article 302 was not included in the content analysis as it is not part of the introductory principles of the Agreement.

³⁸⁴ The Bonn Keys, Key #3.

policies that address women's specific needs. Third, they also stipulate that women must be equipped and empowered to participate in all levels of water management, including decision-making and implementation. However, all three of the subnational agreements are silent on the topic of women in water management. This omission is interesting because there is not a common consensus as to whether women should be specifically recognized in the context of developed world water management, as there is with the situation of women in the developing world.³⁸⁵ Nevertheless, the international norms were developed and agreed to by developed countries; thus, the roles and needs of women needs to be closely examined to determine the relevance of these norms in the GLSLR watershed. Although this issue has yet to be addressed, women are already playing a role in water management in the GLSLR basin, as evidenced by the Anishinabek Nation's appointment of a Women's Water Commission "to advise the Union of Ontario Indians on water issues and Great Lakes management issues."³⁸⁶ This model may prove to be a viable example for the Council of Great Lakes Governors and Premiers to introduce at the watershed level.

Unfortunately, none of the subnational agreements commit to an immediate course of action by using phrasing such as "now", which is found in the Bonn Keys (when II). This instruction to act immediately became a part of international norms after nearly ten years of inaction since the Dublin Principles were pronounced. Given the urgent needs to improve water conditions, and to protect the water against ongoing and future threats, a stronger approach that advocates for quick intervention should be included in the policies for the GLSLR watershed.

Although *The Safeguarding and Sustaining Ontario's Water Act*, which is meant to put into

³⁸⁵ See, for example, United Nations Development Program (2006), *Mainstreaming Gender in Water Management Resource Guide*, for a comprehensive explanation of the importance of gender considerations in water management in less developed countries.

³⁸⁶ The Union of Ontario Indians.

practice the policies outlined in the Sustainable Water Resources Agreement, received royal assent in June 2007, the effectiveness of the Agreement relies on the legislative actions of all 10 parties. A clear, quick timeline would have strengthened the Agreement. Fortunately, progress has continued fairly quickly as all of the Great Lakes states have now ratified the associated Great Lakes-St. Lawrence Sustainable Water Resources Compact.

International norms assert that all human beings have a basic right to clean water and sanitation at an affordable price³⁸⁷ (what4I) and that “the first key is to meet the water security needs of the poor.”³⁸⁸ The GLSLR watershed policies, however, do not recognize this right. Although the Great Lakes are described in the subnational watershed management policies as “a bi-national public treasure”³⁸⁹, a “shared public treasure”³⁹⁰ and as “precious public natural resources”³⁹¹, the implications of these statements are not addressed. For instance, given the shared, public nature of the resource, do the people of the watershed each have an equal right to the water? Likewise, what are the public responsibilities for the shared resource? Based on the shared public nature of the water resources in the GLSLR basin, and the international norms outlining universal rights to affordable water, equity issues must be included in subnational water policies for the watershed. Stating that “accessible and adequate water supplies for the people and the economy are of vital importance”³⁹² does not provide enough clarity about what constitutes “accessible and adequate” to properly provide water security for the needs of all people. Also, as the climate changes, reduced water availability will lead to increased

³⁸⁷ Guiding Principles of the Dublin Statement, Principle #4.

³⁸⁸ The Bonn Keys, Key #1.

³⁸⁹ The Great Lakes Charter Annex, Findings, Para. 1.

³⁹⁰ Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement, Preamble, Para. 1.

³⁹¹ The Great Lakes Charter, Para. 1.

³⁹² Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement, Para. 5.

competition among uses, and the Agreement does not address how competing interests will be evaluated (only that they are of “vital importance”).

Implications and Questions Raised

In addition to the level of consistency between the international norms and the GLSLR basin water management policy, the analysis brings many other issues to light. In particular, the roles and responsibilities of various actors, including citizenry, aboriginal people and international bodies, prompt further discussion.

People and Water Management

PUBLIC PARTICIPATION

The exclusion of nearly all norms related to public participation in the Sustainable Water Resources Agreement was a startling shift, so closely following the participatory-centric Charter Annex. As mentioned in the previous chapter, although the Sustainable Water Resources Agreement confirms the importance of the Annex and stemmed from a public consultation process, the Agreement nearly abandons support for public involvement, which is a crucial element in both the Dublin Principles and Bonn Keys. Public participation is excluded in the front section, which contains the main principles of the Agreement, and is given scant attention in a later section (Article 503) that focuses exclusively on providing opportunity to comment on proposals. Indeed, commenting on proposals is portrayed as “adequate public participation” and instructs Regional Bodies to hold public meetings and consider comments before issuing a finding. These measures are far weaker than the “ongoing public input in the ... implementation of the binding agreement(s) call for in this Annex.”³⁹³ This alarming trend is perhaps not

³⁹³ The Great Lakes Charter Annex, Directive 2.

surprising given that the provinces have been reticent about devolving power to sub-provincial authorities, which are a vital element in improving public participation.³⁹⁴

In the field of water management, public participation is often promoted and defined as subsidiarity. Subsidiarity “calls for governmental functions to be pushed down to the lowest level at which they can efficiently be performed.”³⁹⁵ For instance, because water engenders powerful emotional and symbolic connections, community participation is seen as an essential element in its management.³⁹⁶ As well, operating at a more local level can allow all stakeholders to be identified and mobilised, which assists in defining the objectives and actions that comprise water policy.³⁹⁷ As seen in the analysis of the international declarations, community involvement in water policy has become an established norm.

There are challenges associated with public participation that do not present easy solutions. Provinces are reluctant to devolve any of their power to local governments, while at the same time, demanding further powers from the federal government.³⁹⁸ As the provinces are largely dependent on federal funds, their ability to carry out additional or even existing policies is constrained by federal jurisdiction over transfer payments. Despite these obstacles, a move towards localisation in the GLSLR watershed is clearly supported by international bodies.

ABORIGINALS

Language that is not present in the subnational GLSLR watershed agreements pertains largely to rights to water. More so than other norms, rights infer legal obligations and duties. As the subnational policies are good-faith agreements, and thus legally unenforceable, this omission is understandable. However, as Ontario moved to enact *The Safeguarding and Sustaining*

³⁹⁴ As discussed in Chapter 4.

³⁹⁵ Hughes, B. B., p. 224

³⁹⁶ Blatter, J. and H. Ingram, p. xv.

³⁹⁷ Jønch-Clausen, T. and J. Fugl, p. 507.

³⁹⁸ Landes, R. G., p. 56.

Ontario's Water Act to implement the Sustainable Water Resources Agreement, it signed three Memoranda of Understanding with the Anishinabek Nation, to develop mutually agreeable solutions for the protection of the Great Lakes water, based on principles of co-management.³⁹⁹ The Sustainable Water Resources Agreement also recognizes established treaty rights, but does not explicitly extend rights to Aboriginals to water resources in the basin.

The international water norms do not recognize or refer to aboriginal people's rights with respect to water. The omission of the rights of aboriginal people from the international norms implies that the international community either does not recognise the importance of aboriginal rights or has not achieved consensus on the issue. Considering that the years 1995-2004 were the United Nations International Decade of the World's Indigenous People, clearly overlapping with the Bonn Conference, it seems a glaring oversight that this consideration has not become part of international water norms.

International Considerations

In addition to the Dublin Principles and Bonn Keys, other international bodies are advancing new paradigms for transboundary water management. If the federal government had a coordinated, proactive position on water policy, best practises could be drawn from these examples and adapted for the Canadian situation. For example, the European Union Water Framework Directive has been in effect for nearly eight years, providing potentially important lessons about the implementation of river basin water management. There are also many UN initiatives and business-led policies to improve the management of water. Similarly, Ontario could look to international models to emulate in GLSLR watershed policies. However, given its greater role in international relations, the federal government is best situated to draw upon the numerous international policies to create a better water policy for Canada.

³⁹⁹ Ontario Ministry of Natural Resources (2007).

Cooperation between Canada and the United States is fundamental to Canadian water resources management, international trade and national security.⁴⁰⁰ These two countries share almost 300 aquifers and waterways⁴⁰¹ and have co-managed boundary waters for nearly 100 years under the *Boundary Waters Treaty*. Unfortunately, mutual cooperation and historical consensus have not ensured sustainable management of transboundary waters.⁴⁰² Adding to this failure are new and emerging challenges that demand innovative solutions.⁴⁰³ Consequently, “the most important current environmental issue between our two countries is Great Lakes watershed management.”⁴⁰⁴ It follows, then, that the role of the International Joint Commission becomes an important issue.

The future role of the International Joint Commission (IJC) in the GLSLR watershed needs to be carefully considered by all parties involved in the management of these water resources. The IJC has a long pedigree of successfully facilitating Canadian-American management of boundary waters. Given this history, it seems odd that initiatives created to improve transboundary water management would not include this agency in some fashion. It must be noted, however, that provinces are prohibited from making official references to the IJC.⁴⁰⁵ Thus, a potentially powerful integrative entity is not provided an opportunity to expand its role in the basin.

One way to bolster the IJC would be for the federal government to make greater use of the Commission to achieve some of the objectives laid out by GLSLR provinces and states in the Sustainable Water Resources Agreement. Alternatively, the IJC could be adapted to work with

⁴⁰⁰ Jøneh-Clausen, T. and J. Fugl, p. 507.

⁴⁰¹ Environment Canada (2005c) p. 3.

⁴⁰² Royal Society of Canada.

⁴⁰³ Royal Society of Canada.

⁴⁰⁴ The American Assembly, p. 9.

⁴⁰⁵ Morris, T.J. *et al.* p. 41.

regional, rather than federal representatives, thereby giving the provinces and states greater input vis-à-vis federal participation. As the situation currently stands,

nothing in the agreements is intended to affect the application of the *Boundary Waters Treaty* of 1909, whose requirements continue to apply with respect to boundary waters between Canada and the United States in addition to the requirements of the agreements.⁴⁰⁶

Despite this assurance, the possible duplication between jurisdictions can lead to situations where a problem is everyone's—and no one's—responsibility. Thus, better coordination between provinces and the IJC will help to ensure that the water resources of the GLSLR basin are sustainably managed. Furthermore, a strengthened relationship between provinces/states and the IJC would recognize the expanding role of subnational bodies in international affairs.

Conclusion

The importance of water in Canada, including the GLSLR basin, cannot be overemphasized, seeing as water is “a critically important strategic national resource.”⁴⁰⁷ Many efforts have been made to protect these resources; this thesis contributes to this essential undertaking by evaluating the policy coherence of the most relevant GLSLR watershed management policies (i.e., those developed to forge agreement among the provinces and states in the watershed) and the UN declarations concerning freshwater management. In the context of the GLSLR basin, consistent policies are seen to correspond to better integrated watershed management.⁴⁰⁸

Policies are an essential tool to ensure the sustainable use of water resources in the GLSLR watershed. However, there are several characteristics of the policy-making process in Canada that hinder substantial changes to public policy. For instance, public policy tends to

⁴⁰⁶ Great Lakes-St. Lawrence River Water Resources Regional Body.

⁴⁰⁷ Pentland, Ralph quoted in Morris, T.J. *et al.*, p. 21.

⁴⁰⁸ Churchill, J. L., G. Hoover, A. Howatson and J. Roberts, p. 10.

evolve incrementally, as policies and practices build upon existing institutions and customs, giving the process a conservative nature. Also, most policy is not ideology-driven and transformation of public policy is unlikely.⁴⁰⁹ However, policy-making is a constantly evolving practise as new stakeholders enter the scene, agreement coalesces around certain ideas, and previous positions are replaced. VanNijnatten states that due to the political culture in Canada, “policy has tended to emerge from a relatively closed network of relations between higher-level departmental officials, Cabinet ministers, and particular societal interests.”⁴¹⁰ An outcome of this arrangement is that the greatest challenges facing water managers are policy-related, rather than technological difficulties, which arise from the inability to identify clear policy goals for a watershed.⁴¹¹

The findings of this thesis reveal that there is concurrence on numerous goals for water management between the international declarations and the subnational GLSLR watershed policies. There is also depth to this concurrence in that consistencies have continued over a twenty-year time period, and appear to be strengthening in some areas (e.g. by replication in language). However, the coherence of subnational policies with widely accepted international standards is only one stage of comparative analysis. Another important area of inquiry is coherence between policies and implementation. Although the analysis in this paper does not extend to the stage of implementation, a few comments on this subject are necessary.

The implementation of water policies is an ongoing challenge due to complex jurisdictional arrangements, competing priorities and public sector fiscal restraints.⁴¹² Picciotto maintains that the evaluation of the coherence of policy with implementation measures is

⁴⁰⁹ Landes, R. G., p. 131.

⁴¹⁰ VanNijnatten, D. L., p. 270.

⁴¹¹ Churchill, J. L., G. Hoover, A. Howatson and J. Roberts, p. 4.

⁴¹² Bakker, K. p. 4.

essential because the “coherence of outcomes cannot be guaranteed *ex-post* even when it has been secured *ex-ante*: sound policy design does not necessarily lead to coherence in implementation since, in the real world, a variety of obstacles may stand in the way of achieving results.”⁴¹³ In the GLSLR basin, future studies should evaluate the consistency among the subnational agreements, especially the most recent Sustainable Water Resources Agreement, with the legislation created to enact this Agreement in each of the ten parties’ jurisdictions. Following that step, it will be necessary to determine if any inconsistencies discovered reflect an absence of some components or if there are opposing goals in the implementing legislation.

Although policy coherence is an important aspect of policy studies, it does not evaluate whether policies appropriately address the issue under examination.⁴¹⁴ In other words, bad policies, ill-suited to the problem at hand, can exhibit a high degree of policy coherence. Whether or not policies for the GLSLR watershed are “good” is a different question, requiring different evaluation tools. Although greater coherence does not guarantee better policies, it is important because “the consistency of policy goals is in itself a potentially powerful integrative force.”⁴¹⁵ This integration explains why coherence among policies is seen as demonstrating a “whole of government” approach to public policy.⁴¹⁶ As well, a common language is employed when there is a high degree of policy coherence that binds together actors involved in the policy process and creates a shared understanding of issues, challenges and opportunities.⁴¹⁷ While the evaluation of policy coherence between international norms and subnational policies is not the only measure needed to protect the water resources of the basin, “coherence in public affairs is

⁴¹³ Picciotto, R., p. 6.

⁴¹⁴ May, P. J., J. Sapotichne and S. Workman, p. 400.

⁴¹⁵ May, P. J., J. Sapotichne and S. Workman, p. 384.

⁴¹⁶ Picciotto, R., p. 5.

⁴¹⁷ May, P. J., J. Sapotichne and S. Workman, p. 384.

an ideal well worth striving for.”⁴¹⁸ Therefore, the inconsistencies identified in this thesis (e.g., relating to indigenous knowledge, roles and responsibilities of women, etc.) provide a useful indication of how to improve policy for the protection of the water resources of the GLSLR basin.

Knowledge regarding domestic policy choices and processes allows water professionals to better understand why nations pursue international policies.⁴¹⁹ This thesis has confirmed that domestic policy is affected by international norms, and that an iterative relationship exists whereby international declarations influence domestic policy-making, which, in turn, set international standards through bodies such as the UN. The expanding influence of international norms presents challenges to policy-making in Canada; indeed, “the growing importance of international law as a driver of domestic policy... [has] changed the normative framework within which we operate and develop policy, especially in the last decade.”⁴²⁰ In this shifting environment, all jurisdictions should remain cognizant of international developments in water policy and move towards greater integration of these ideas. This would be a considerable departure from the federal government’s current position, which does not require departments to set international standards as a national benchmark or to meet these norms.⁴²¹

The inconsistencies identified in this thesis between subnational policies and international norms can be seen as justification for the federal government to more strongly exert its jurisdictional powers to advance international norms throughout Canada, and in the GLSLR watershed more specifically. De Loë and Kreutzwiser also argue that despite growing subnational and international influences, “the state remains a central player in Canadian water

⁴¹⁸ Picciotto, R., p. 6.

⁴¹⁹ Jägerskog, A. and D. Phillips, p. 23.

⁴²⁰ Eliadis, P., p. 32.

⁴²¹ Eliadis, P., p. 33.

management.”⁴²² In combination with this assertion, neither international declarations nor local reports⁴²³ highlight the role of provincial (or state) actors. However, despite the lack of rhetorical support, the subnational level (i.e. provinces and states) has been most effective at creating watershed-based management regimes for the GLSLR basin. This situation is interesting because it suggests that what is needed to protect water resources is serious commitment, rather than constitutionally defined obligations or internationally accepted norms. In the absence of strong federal leadership, and Canada’s failure to commit to meeting international standards, the provinces and states of the GLSLR watershed have accomplished significant achievements in establishing policies designed to protect and conserve water resources, safeguard against diversions, and restore past damages. This finding confirms Johns, O’Reilly and Inwood’s assertion that “provinces and territories seem to be developing interprovincial strategies and niche approaches in certain policy areas to counter the federal system’s lack of capacity.”⁴²⁴ Thus, the role of Ontario as the lead jurisdiction in Canada-Ontario water relations is clearly evident and supported by this research.

⁴²² de Loë, R. and R.Kreutzwiser, p. 91.

⁴²³ e.g. Churchill, J. L., G. Hoover, A. Howatson and J. Roberts; Morris, T.J *et al.*

⁴²⁴ Johns, C. M., O’Reilly, P. L. and G. J. Inwood, p. 643.

APPENDIX A – THE GREAT LAKES CHARTER

THE GREAT LAKES CHARTER

PRINCIPLES FOR THE MANAGEMENT OF GREAT LAKES WATER RESOURCES

FINDINGS

THE GOVERNORS AND PREMIERS OF THE GREAT LAKES STATES AND PROVINCES JOINTLY FIND AND DECLARE THAT:

The water resources of the Great Lakes Basin are precious public natural resources, shared and held in trust by the Great Lakes States and Provinces.

The Great Lakes are valuable regional, national and international resources for which the federal governments of the United States and Canada and the International Joint Commission have, in partnership with the States and Provinces, and important, continuing an abiding role and responsibility.

The waters of the Great Lakes Basin are interconnected and part of a single hydrologic system. The multiple uses of these resources for municipal, industrial and agricultural water supply; mining; navigation; hydroelectric power and energy production; recreation; and the maintenance of fish and wildlife habitat and a balanced ecosystem are interdependent.

Studies conducted by the International Joint Commission, the Great Lakes States and Provinces, and other agencies have found that without careful and prudent management, the future development of diversions and consumptive uses of the water resources of the Great Lakes Basin may have significant adverse impacts on the environment, economy, and welfare of the Great Lakes region.

As trustees of the Basin's natural resources, the Great Lakes States and Provinces have a shared duty to protect, conserve, and manage the renewable but finite waters of the Great Lakes Basin for the use, benefit, and enjoyment of all their citizens, including generations yet to come. The most effective means of protecting, conserving, and managing the water resources of the Great Lakes is through the joint pursuit of unified and cooperative principles, policies and programs mutually agreed upon, enacted and adhered to by each and every Great Lakes State and Province.

Management of the water resources of the Basin is subject to the jurisdiction, rights and responsibilities of the signatory States and Provinces. Effective management of the water resources of the Great Lakes requires the exercise of such jurisdiction, rights, and responsibilities in the interest of all the people of the Great Lakes Region, acting in a continuing spirit of comity and mutual cooperation. The Great Lakes States and Provinces reaffirm the mutual rights and obligations of all Basin jurisdictions to use, conserve, and protect Basin water resources, as expressed in the Boundary Waters Treaty of 1909, the Great Lakes Water Quality Agreement of 1978, and the principles of other applicable international agreements.

PURPOSE

THE PURPOSES OF THIS CHARTER are to conserve the levels and flows of the Great Lakes and their tributary 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.

PRINCIPLES FOR THE MANAGEMENT OF GREAT LAKES WATER RESOURCES

IN ORDER TO ACHIEVE THE PURPOSES OF THIS CHARTER, THE GOVERNORS AND PREMIERS OF THE GREAT LAKES STATES AND PROVINCES AGREE TO THE FOLLOWING PRINCIPLES:

Principle I Integrity of the Great Lakes Basin

The planning and management of the water resources of the Great Lakes Basin should recognize and be founded upon the integrity of the natural resources and ecosystem of the Great Lakes Basin. The water resources of the Basin transcend political boundaries within the Basin, and should be recognized and treated as a single hydrologic system. In managing Great Lakes Basin waters, the natural resources and ecosystem of the Basin should be considered as a unified whole.

Principle II Cooperation Among Jurisdictions

The signatory States and Provinces recognize and commit to a spirit of cooperation among local, state, and provincial agencies, the federal governments of Canada and the United States, and the International Joint Commission in the study, monitoring, planning, and conservation of the water resources of the Great Lakes Basin.

Principle III Protection of the Water Resources of the Great Lakes

The signatory States and Provinces agree that new or increased diversions and consumptive uses of Great Lakes Basin water resources are of serious concern. In recognition of their shared responsibility to conserve and protect the water resources of the Great Lakes Basin for the use, benefit, and enjoyment of all their citizens, the States and Provinces agree to seek (where necessary) and to implement legislation establishing programs to manage and regulate the diversion and consumptive use of Basin water resources. It is the intent of the signatory States and Provinces that diversions of Basin water resources will not be allowed if individually or cumulatively they would have any significant adverse impacts on lake levels, in-basin uses, and the Great Lakes Ecosystem.

Principle IV Prior Notice and Consultation

It is the intent of the signatory States and Provinces that no Great Lakes State or Province will approve or permit any major new or increased diversion or consumptive use of the water resources of the Great Lakes Basin without notifying and consulting with and seeking the consent and concurrence of all affected Great Lakes States and Provinces.

Principle V

Cooperative Programs and Practices

The Governors and Premiers of the Great Lakes States and Provinces commit to pursue the development and maintenance of a common base of data and information regarding the use and management of the Basin water resources, to the establishment of a systematic arrangements for the exchange of water data and information, to the creation of a Water Resources Management Committee, to the development of a Great Lakes Water Resources Management Program, and to additional and concerted and coordinated research efforts to provide improved information for future water planning and management decisions.

IMPLEMENTATION OF PRINCIPLES

Common Base of Data

THE GREAT LAKES STATES AND PROVINCES WILL PURSUE THE DEVELOPMENT AND MAINTENANCE OF A COMMON BASE OF DATA AND INFORMATION regarding the use and management of Basin water resources and the establishment of systematic arrangements for the exchange of water data and information. The common base of data will include the following:

1. Each State and Province will collect and maintain, in comparable form, data regarding the location, type, and quantities of water use, diversion, and consumptive use, and information regarding projections of current and future needs.
2. In order to provide accurate information as a basis for future water resources planning and management, each State and Province will establish and maintain a system for the collection of data on major water uses, diversions, and consumptive uses in the Basin. The States and Provinces, in cooperation with the Federal Governments of Canada and the United States and the International Joint Commission, will seek appropriate vehicles and institutions to assure responsibility for coordinated collation, analysis, and dissemination of data and information.
3. The Great Lakes States and Provinces will exchange on a regular basis plans, data, and other information on water use, conservation, and development, and will consult with each other in the development of programs and plans to carry out these provisions.

Water Resources Management Committee

A WATER RESOURCES MANAGEMENT COMMITTEE WILL BE FORMED, COMPOSED OF REPRESENTATIVES APPOINTED BY THE GOVERNORS AND PREMIERS OF EACH OF THE GREAT LAKES STATES AND PROVINCES. Appropriate agencies of the federal governments, the International Joint Commission, and other interested and expert organizations will be invited to participate in discussions of the Committee.

The Committee will be charged with responsibility to identify specific common water data needs; to develop and design a system for the collection and exchange of comparable water resources management data; to recommend institutional arrangements to facilitate the exchange and maintenance of such information; and to develop procedures to implement the prior notice and consultation process established in this Charter. The Committee will report its findings to the Governors and Premiers of the Great Lakes States and Provinces within 15 months of the appointment of the Committee.

Consultation Procedures

THE PRINCIPLE OF PRIOR NOTICE AND CONSULTATION WILL APPLY TO ANY NEW OR INCREASED DIVERSION OR CONSUMPTIVE USE OF THE WATER RESOURCES OF THE GREAT LAKES BASIN which exceeds 5,000,000 gallons (19 million litres) per day average in any 30-day period.

The consultation process will include the following procedures:

1. The State or Province with responsibility for issuing the approval or permit, after receiving an application for such diversion or consumptive use, will notify the Offices of the Governors and Premiers of the respective Great Lakes States and Provinces, the appropriate water management agencies of the Great Lakes States and Provinces and, where appropriate, the International Joint Commission.
2. The permitting State or Province will solicit and carefully consider the comments and concerns of the other Great Lakes States and Provinces, and where applicable the International Joint Commission, prior to rendering a decision on an application.
3. Any State or Province which believes itself to be affected may file a written objection to the proposed diversion or consumptive use. Notice of such objection stating the reasons therefore will be given to the permitting State or Province and all other Great Lakes States and Provinces.
4. In the event of an objection to a proposed diversion or consumptive use, the permitting State or Province will convene a consultation process of the affected Great Lakes States and Provinces to investigate and consider the issues involved, and to seek and provide mutually agreeable recommendations to the permitting State or Province.
5. The permitting State or Province will carefully consider the concerns and objections expressed by other Great Lakes States and Provinces, and the recommendations of any consultation process convened under this Charter.
6. The permitting State or Province will have lead responsibility for resolution of water management permit issues. The permitting State or Province will notify each affected Great Lakes State or Province of its final decision to issue, issue with conditions, or deny a permit.

The prior notice and consultation process will be formally initiated following the development of procedures by the Water Resources Management Committee and approval of those procedures by the Governors and Premiers. During the interim period prior to approval of formal procedures, any State or Province may voluntarily undertake the notice and consultation procedure as it deems appropriate.

Basin Water Resources Management Program

IN ORDER TO GUIDE THE FUTURE DEVELOPMENT, MANAGEMENT, AND CONSERVATION OF THE WATER RESOURCES OF THE GREAT LAKES BASIN, THE SIGNATORY STATES AND PROVINCES COMMIT TO THE DEVELOPMENT OF A COOPERATIVE WATER RESOURCES MANAGEMENT PROGRAM FOR THE GREAT LAKES BASIN.

Such a program should include consideration of the following elements:

1. An inventory of the Basin's surface and groundwater resources;

2. An identification and assessment of existing and future demands for diversions, into as well as out of the Basin, withdrawals, and consumptive uses for municipal, domestic, agricultural, manufacturing, mining, navigation, power production, recreation, fish and wildlife, and other uses and ecological considerations;
3. The development of cooperative policies and practices to minimize the consumptive use of the Basin's water resources; and
4. Recommended policies to guide the coordinated conservation, development, protection, use, and management of the water resources of the Great Lakes Basin.

Research Program

THE GREAT LAKES STATES AND PROVINCES RECOGNIZE THE NEED FOR AND SUPPORT ADDITIONAL RESEARCH in the area of flows and lake levels required to protect fisheries and wildlife, a balanced aquatic environment, navigation, important recreational uses, and the assimilative capacity of the Great Lakes system. Through appropriate state, provincial, federal and international agencies and other institutions, the Great Lakes States and Provinces will encourage coordinated and concerted research efforts in these areas, in order to provide improved information for future water planning and management decisions.

PROGRESS TOWARD IMPLEMENTATION

THE GOVERNORS AND PREMIERS OF THE GREAT LAKES STATES AND PROVINCES COMMIT TO THE COORDINATED IMPLEMENTATION OF THIS CHARTER. To this end, the Governors and Premiers shall, no less than once per year, review progress toward implementation of this Charter and advise one another on actions taken to carry out the principles of the Charter together with recommendations for further action or improvements to the management of the Great Lakes Basin water resources.

The signatory States and Provinces consider each of the principles and implementing provisions of this Charter to be material and interdependent. The rights of each State and Province under this Charter are mutually dependent upon the good faith performance by each State and Province of its commitments and obligations under the Charter.

The following sequence will be adhered to by the Great Lakes States and Provinces in implementing the provisions of this Charter:

1. The Water Resources Management Committee will be appointed by the Governors and Premiers within 60 days of the effective date of this Charter and will submit its recommendations to the Governors and Premiers of the Great Lakes States and Provinces within 15 months of the appointment of the Committee.
2. Upon the signing of the Charter, and concurrent with the activities of the Water Resources Management Committee, the Great Lakes States and Provinces will commence collecting and assembling existing Great Lakes water use data and information. The water use data collected and assembled by the States and Provinces will include, but not be limited to, the data and information specified under the "Common Base of Data" provisions of the Charter.

Copies of the data and information collected and assembled by the States and Provinces will be submitted to the Water Resources Management Committee. The Great Lakes States and Provinces will pursue: the collection of data and information on the use and management of Basin water resources; the establishment of systematic arrangements for the exchange of water data and information on a continuing basis as enabled by existing state and provincial data

collection and regulatory programs; and where necessary, the enactment of water withdrawal registration and diversion and consumptive use management and regulatory programs pursuant to the provisions of the Charter.

3. To assist in the ongoing collection of Great Lakes water use data and information, and in the development of the Basin Water Resources Management Program, States and Provinces will pursue the enactment of legislation where it is needed for the purpose of gathering accurate and comparable information on any new or increased withdrawal of Great Lakes Basin water resources in excess of 100,000 gallons (380,000 litres) per day average in any 30-day period.
4. The prior notice and consultation process will be formally initiated following the development of procedures by the Water Resources Management Committee and approval of those procedures by the Governors and Premiers. Any State or Province may voluntarily undertake additional notice and consultation procedures as it deems appropriate. However, the right of any individual State or Province to participate in the prior notice and consultation process, either before or after approval of formal procedures by the Governors and Premiers, is contingent upon its ability to provide accurate and comparable information on water withdrawals in excess of 100,000 gallons (380,000 litres) per day average in any 30-day period and its authority to manage and regulate water withdrawals involving a total diversion or consumptive use of Great Lakes Basin water resources in excess of 2,000,000 gallons (7,600,000 litres) per day average in any 30-day period.
5. Development of the Basin Water Resources Management Program will commence upon receipt and formal approval by the Great Lakes Governors and Premiers of the recommendations of the Water Resources Management Committee.

RESERVATION OF RIGHTS

THE GREAT LAKES STATES AND PROVINCES MUTUALLY RECOGNIZE THE RIGHTS AND STANDING OF ALL GREAT LAKES STATES AND PROVINCES TO represent and protect the rights and interests of their respective jurisdictions and citizens in the shared water and other natural resources of the Great Lakes region.

Each Great Lakes State and Province reserves and retains all rights and authority to seek, in any state, provincial, federal, or other appropriate court or forum, adjudication or protection of its rights in and to Basin water resources, in such manner as may now or hereafter be provided by law.

In entering into this Charter, no Great Lakes State or Province shall be deemed to imply its consent to any diversion or consumptive use of Great Lakes Basin water resources now or in the future.

DEFINITIONS

FOR PURPOSES OF THIS CHARTER:

Withdrawal means the removal or taking of water from surface or groundwater.

Consumptive use means that portion of water withdrawn or withheld from the Great Lakes Basin and assumed to be lost or otherwise not returned to the Great Lakes Basin due to evaporation, incorporation into products, or other processes.

Diversion means a transfer of water from the Great Lakes Basin into another watershed, or from the watershed of one of the Great Lakes into that of another.

Interbasin diversion means a transfer of water from the Great Lakes Basin into another watershed.

Great Lakes Basin means the watershed of the Great Lakes and the St. Lawrence River upstream from Trois Rivieres, Quebec.

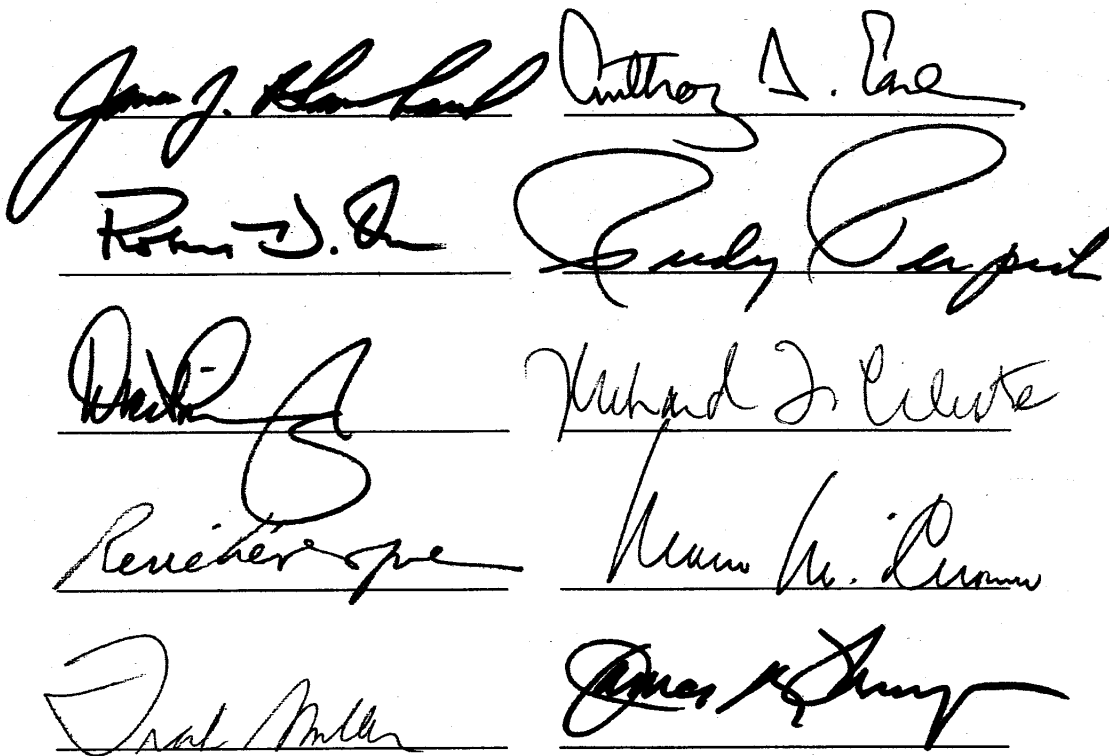
Great Lakes Basin water resources means the Great Lakes and all streams, rivers, lakes, connecting channels, and other bodies of water, including tributary groundwater, within the Great Lakes Basin.

Great Lakes Basin Ecosystem means the interacting components of air, land, water, and living organisms, including humankind, within the Great Lakes Basin.

Great Lakes States and Provinces means the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, and Wisconsin, the Commonwealth of Pennsylvania, and the Provinces of Ontario and Quebec.

Great Lakes Region means the geographic region comprised of the Great Lakes States and Provinces.

Signed and entered into the 11th of February 1985.



James J. Blanchard, Governor of Michigan
Robert D. Orr, Governor of Indiana
Dick Thornburgh, Governor of Pennsylvania
René Lévesque, Premier of Quebec
Frank Miller, Premier of Ontario

Anthony S. Earl, Governor of Wisconsin
Rudy Perpich, Governor of Minnesota
Richard F. Celeste, Governor of Ohio
Mario M. Cuomo, Governor of New York
James R. Thompson, Governor of Illinois

APPENDIX B – THE GREAT LAKES CHARTER ANNEX

THE GREAT LAKES CHARTER ANNEX

A SUPPLEMENTARY AGREEMENT TO THE GREAT LAKES CHARTER

June 18, 2001

FINDINGS

The Great Lakes are a bi-national public treasure and are held in trust by the Great Lakes States and Provinces. For the last sixteen years, the Great Lakes Governors and Premiers have followed a set of principles to guide them in developing, maintaining, and strengthening the regional management regime for the Great Lakes ecosystem. Protecting, conserving, restoring, and improving the Great Lakes is the foundation for the legal standard upon which decisions concerning water resource management should be based.

There has been significant progress in restoring and improving the health of the ecosystem of the Great Lakes Basin. However, the Waters and Water-Dependent Natural Resources of the Basin remain at risk of damage from pollution, environmental disruptions, and unsustainable water resource management practices which may individually and cumulatively alter the hydrology of the Great Lakes ecosystem.

PURPOSE

In agreeing to this Annex, the Great Lakes Governors and Premiers reaffirm their commitment to the five broad principles set forth in the Great Lakes Charter, and further reaffirm that the provisions of the Charter will continue in full force and effect. The Governors and Premiers commit to further implementing the principles of the Charter by developing an enhanced water management system that is simple, durable, efficient, retains and respects authority within the Basin, and, most importantly, protects, conserves, restores, and improves the Waters and Water-Dependent Natural Resources of the Great Lakes Basin.

State and Provincial authorities should be permanent, enforceable, and consistent with their respective applicable state, provincial, federal, and international laws and treaties. To that end, and in order to adequately protect the water resources of the Great Lakes and the Great Lakes ecosystem, the Governors and Premiers commit to develop and implement a new common, resource-based conservation standard and apply it to new water withdrawal proposals from the Waters of the Great Lakes Basin. The standard will also address proposed increases to existing water withdrawals and existing water withdrawal capacity from the Waters of the Great Lakes Basin.

DIRECTIVES

The Governors and Premiers put forward the following DIRECTIVES to further the principles of the Charter.

DIRECTIVE #1

Develop a new set of binding agreement(s).

The Governors and Premiers agree to immediately prepare a Basin-wide binding agreement(s), such as an interstate compact and such other agreements, protocols or other arrangements between the States and Provinces as may be necessary to create the binding agreement(s) within three years of the effective date of the Annex. The purpose of the agreement(s) will be to further the Governors' and Premiers' objective to protect, conserve, restore, improve, and manage use of the Waters and Water-Dependent Natural Resources of the Great Lakes Basin. The agreement(s) will 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 the various governmental organizations within the Great Lakes Basin.

DIRECTIVE #2

Develop a broad-based public participation program.

The Governors and Premiers commit to continue a process that ensures ongoing public input in the preparation and implementation of the binding agreement(s) called for in this Annex. Included in this process will be periodic progress reports to the public.

DIRECTIVE #3

Establish a new decision making standard.

The new set of binding agreement(s) will establish a decision making standard that the States and Provinces will utilize to review new proposals to withdraw water from the Great Lakes Basin as well as proposals to increase existing water withdrawals or existing water withdrawal capacity.

The new standard shall be based upon the following principles:

- Preventing or minimizing Basin water loss through return flow and implementation of environmentally sound and economically feasible water conservation measures; and
- No significant adverse individual or cumulative impacts to the quantity or quality of the Waters and Water-Dependent Natural Resources of the Great Lakes Basin; and
- An Improvement to the Waters and Water-Dependent Natural Resources of the Great Lakes Basin; and
- Compliance with the applicable state, provincial, federal, and international laws and treaties.

DIRECTIVE #4

Project review under the Water Resources Development Act of 1986, §1109, 42 U.S.C. §1962d-20 (1986) (amended 2000).

Pending finalization of the agreement(s) as outlined in Directive #1, the Governors of the Great Lakes States will notify and consult with the Premiers of Ontario and Quebec on all proposals subject to the U.S. Water Resources Development Act of 1986, §1109, 42 U.S.C. §1962d-20 (1986) (amended 2000) (WRDA), utilizing the prior notice and consultation process established in the Charter. In doing so, the Governors and

Premiers recognize that the Canadian Provinces are not subject to, or bound by, the WRDA, nor are the Governors statutorily bound by comments from the Premiers on projects subject to the WRDA.

DIRECTIVE #5

Develop a decision support system that ensures the best available information.

The Governors and Premiers call for the design of an information gathering system to be developed by the States and Provinces, with support from appropriate federal government agencies, to implement the Charter, this Annex, and any new agreement(s). This design will include an assessment of available information and existing systems, a complete update of data on existing water uses, an identification of needs, provisions for a better understanding of the role of groundwater, and a plan to implement the ongoing support system.

DIRECTIVE #6

Further commitments.

The Governors and Premiers of the Great Lakes States and Provinces further commit to coordinate the implementation and monitoring of the Charter and this Annex; seek and implement, where necessary, legislation establishing programs to manage and regulate new or increased withdrawals of Waters of the Great Lakes Basin; conduct a planning process for protecting, conserving, restoring, and improving the Waters and Water-Dependent Natural Resources of the Great Lakes Basin; and identify and implement effective mechanisms for decision making and dispute resolution. The Governors and Premiers also commit to develop guidelines regarding the implementation of mutually agreed upon measures to promote the efficient use and conservation of the Waters of the Great Lakes Basin within their jurisdictions and develop a mechanism by which individual and cumulative impacts of water withdrawals will be assessed. Further, the Governors and Premiers commit to improve the sources and applications of scientific information regarding the Waters of the Great Lakes Basin and the impacts of the withdrawals from various locations and water sources on the ecosystem, and better understand the role of groundwater in the Great Lakes Basin by coordinating their data gathering and analysis efforts. Finally, the Governors and Premiers commit to develop in the new binding agreement(s) the water withdrawal rates at which regional evaluations are conducted and criteria to assist in further defining acceptable measures of Improvement to the Waters and Water-Dependent Natural Resources of the Great Lakes Basin.

FINAL PROVISIONS

This Annex shall come into force on the day that all signatures are executed. The Parties have signed the present agreement in duplicate, in English and French, both texts being equally authentic.

DEFINITIONS

Waters of the Great Lakes Basin (also termed in the Great Lakes Charter as “Water Resources of the Great Lakes Basin”) means the Great Lakes and all streams, rivers, lakes, connecting channels, and other bodies of water, including tributary groundwater, within the Great Lakes Basin.

Water-Dependent Natural Resources means the interacting components of land, water, and living organisms affected by the Waters of the Great Lakes Basin.

Improvement to the Waters and Water-Dependent Natural Resources of the Great Lakes Basin means additional beneficial, restorative effects to the physical, chemical, and biological integrity of the Waters

and Water-Dependent Natural Resources of the Basin, resulting from associated conservation measures, enhancement or restoration measures which include, but are not limited to, such practices as mitigating adverse effects of existing water withdrawals, restoring environmentally sensitive areas or implementing conservation measures in areas or facilities that are not part of the specific proposal undertaken by or on behalf of the withdrawer.

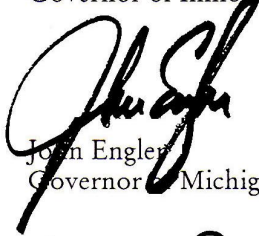
Signed and entered into the 18th day of June 2001.



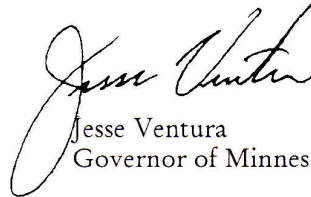
George H. Ryan
Governor of Illinois



Frank O'Bannon
Governor of Indiana



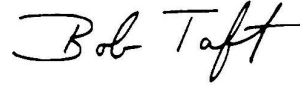
John Engler
Governor of Michigan



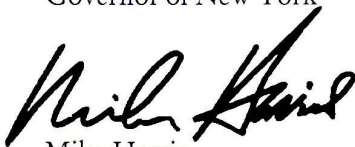
Jesse Ventura
Governor of Minnesota



George E. Pataki
Governor of New York



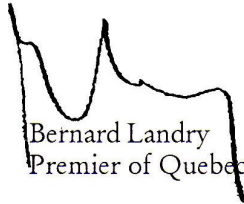
Bob Taft
Governor of Ohio



Mike Harris
Premier of Ontario



Tom Ridge
Governor of Pennsylvania



Bernard Landry
Premier of Quebec



Scott McCallum
Governor of Wisconsin

**APPENDIX C – THE GREAT LAKES-ST LAWRENCE RIVER BASIN
SUSTAINABLE WATER RESOURCES AGREEMENT**

DECEMBER 13, 2005

**GREAT LAKES—ST. LAWRENCE RIVER BASIN SUSTAINABLE WATER
RESOURCES AGREEMENT**

The State of Illinois,

The State of Indiana,

The State of Michigan,

The State of Minnesota,

The State of New York,

The State of Ohio,

The Province of Ontario,

The Commonwealth of Pennsylvania,

The Government of Québec,

The State of Wisconsin,

Recognizing that,

The Waters of the Basin are a shared public treasure and the States and Provinces as stewards have a shared duty to protect, conserve and manage these renewable but finite Waters;

These Waters are interconnected and form a single hydrologic system;

Protecting, conserving, restoring, and improving these Waters is the foundation of Water resource management in the Basin and essential to maintaining the integrity of the Basin Ecosystem;

Managing to conserve and restore these Waters will improve them as well as the Water Dependent Natural Resources of the Basin;

Continued sustainable, accessible and adequate Water supplies for the people and economy of the Basin are of vital importance;

The States and Provinces must balance economic development, social development and environmental protection as interdependent and mutually reinforcing pillars of sustainable development;

Even though there has been significant progress in restoring and improving the health of the Basin Ecosystem, the Waters and Water Dependent Natural Resources of the Basin remain at risk;

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;

Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;

Sustainable development and harmony with nature and among neighbours require cooperative arrangements for the development and implementation of watershed protection approaches in the Basin;

Reaffirming,

The principles and findings of the Great Lakes Charter and the commitments and directives of the Great Lakes Charter Annex 2001;

Acknowledging,

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 or from the 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, and acknowledging the commitment of these peoples to preserve and protect the waters of the Basin;

The continuing and abiding roles of the United States and Canadian federal governments under the Boundary Waters Treaty of 1909 and other applicable international agreements, that continue unaffected by this agreement, and the valuable contribution of the International Joint Commission;

Effective management is dependent upon all Parties acting in a continuing spirit of comity and mutual cooperation;

Agree as follows:

**CHAPTER 1
GENERAL PROVISIONS**

**ARTICLE 100
OBJECTIVES**

1. The objectives of this Agreement are:
 - a. To act together to protect, conserve and restore the Waters of the Great Lakes—St. Lawrence River Basin because current lack of scientific certainty should not be used as a reason for postponing measures to protect the Basin Ecosystem;
 - b. To facilitate collaborative approaches to Water management across the Basin to protect, conserve, restore, improve and efficiently and effectively manage the Waters and Water Dependent Natural Resources of the Basin;
 - c. To promote co-operation among the Parties by providing common and regional mechanisms to evaluate Proposals to Withdraw Water;
 - d. To create a co-operative arrangement regarding Water management that provides tools for shared future challenges;
 - e. To retain State and Provincial authority within the Basin under appropriate arrangements for intergovernmental cooperation and consultation;
 - f. To facilitate the exchange of data, strengthen the scientific information upon which decisions are made, and engage in consultation on the potential effects of Withdrawals and losses on the Waters and Water Dependent Natural Resources of the Basin;
 - g. To prevent significant adverse impacts of Withdrawals and losses on the Basin Ecosystem and its watersheds; and,
 - h. To promote an Adaptive Management approach to the conservation and management of Basin Water resources, which recognizes, considers and provides adjustments for the uncertainties in, and evolution of, scientific knowledge concerning the Basin's Waters and Water Dependent Natural Resources.
2. The Parties shall interpret and apply the provisions of this Agreement to achieve these objectives.

**ARTICLE 101
SCOPE OF APPLICATION**

This Agreement applies to the Waters of the Basin within the Parties' territorial boundaries.

**ARTICLE 102
GENERAL COMMITMENT**

Each Party to this Agreement shall seek to adopt and implement Measures that may be required to give effect to the commitments embodied within this Agreement.

ARTICLE 103
GENERAL DEFINITIONS

In this Agreement,

“Adaptive Management” means a Water resources management system that provides a systematic process for evaluating, monitoring and learning from the outcomes of operational programs and adjustment of policies, plans and programs based on experience and the evolution of scientific knowledge concerning Water resources and Water Dependent Natural Resources.

“Agreement” means this Agreement.

“Applicant” means a Person who is required to submit a Proposal that is subject to management and regulation under this Agreement. **“Application”** has a corresponding meaning.

“Basin” or **“Great Lakes—St. Lawrence River Basin”** means the watershed of the Great Lakes and the St. Lawrence River upstream from Trois-Rivières, Québec within the jurisdiction of the Parties.

“Basin Ecosystem” or **“Great Lakes—St. Lawrence River Basin Ecosystem”** means the interacting components of air, land, Water and living organisms, including humankind, within the Basin.

“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.

“Compact” means the Great Lakes—St. Lawrence River Basin Water Resources Compact.

“Consumptive Use” means that portion of Water Withdrawn or withheld from the Basin that is lost or otherwise not returned to the Basin due to evaporation, incorporation into Products, or other processes.

“County” means the largest territorial division for local government in a State. In Québec, County means a regional county municipality (municipalité régionale de comté - MRC). The County boundaries shall be defined as those boundaries that exist as of the signing date of this Agreement.

“Cumulative Impacts” mean the impact on the Great Lakes—St. Lawrence River Basin Ecosystem that results from incremental effects of all aspects of a Withdrawal, Diversion or Consumptive Use in addition to other past, present, and reasonably foreseeable future Withdrawals, Diversions and Consumptive Uses regardless of who undertakes the other Withdrawals, Diversions and Consumptive Uses. Cumulative Impacts can result from

individually minor but collectively significant Withdrawals, Diversions and Consumptive Uses taking place over a period of time.

“Diversión” means a transfer of Water from the Basin into another watershed, or from the watershed of one of the Great Lakes into that of another by any means of transfer, including but not limited to a pipeline, canal, tunnel, aqueduct, channel, modification of the direction of a watercourse, a tanker ship, tanker truck or rail tanker but does not apply to Water that is used in the Basin or Great Lakes watershed to manufacture or produce a Product that is then transferred out of the Basin or watershed. **“Divert”** has a corresponding meaning.

“Environmentally Sound and Economically Feasible Water Conservation Measures” mean those measures, methods, technologies or practices for efficient water use and for reduction of water loss and waste or for reducing a Withdrawal, Consumptive Use or Diversion that i) are environmentally sound, ii) reflect best practices applicable to the water use sector, iii) are technically feasible and available, iv) are economically feasible and cost effective based on an analysis that considers direct and avoided economic and environmental costs and v) consider the particular facilities and processes involved, taking into account the environmental impact, age of equipment and facilities involved, the processes employed, energy impacts and other appropriate factors.

“Exception” means a transfer of Water that is excepted under Article 201 from the prohibition against Diversions.

“Exception Standard” means the standard to be used for Exceptions that is established under Article 201.

“Intra-Basin Transfer” means the transfer of Water from the watershed of one of the Great Lakes into the watershed of another Great Lake.

“Measures” means any legislation, law, regulation, directive, requirement, guideline, program, policy, administrative practice or other procedure.

“New or Increased Diversion” means a new Diversion, an increase in an existing Diversion, or the alteration of an existing Withdrawal so that it becomes a Diversion.

“New or Increased Withdrawal or Consumptive Use” means a new Withdrawal or Consumptive Use or an increase in an existing Withdrawal or Consumptive Use.

“Originating Party” means the Party within whose jurisdiction an Application is made.

“Party” means a State or Province that enters into this Agreement.

“Person” means a human being or a legal person, including a government or a non-governmental organization, including any scientific, professional, business, non-profit, or

ARTICLE 103
GENERAL DEFINITIONS

In this Agreement,

“Adaptive Management” means a Water resources management system that provides a systematic process for evaluating, monitoring and learning from the outcomes of operational programs and adjustment of policies, plans and programs based on experience and the evolution of scientific knowledge concerning Water resources and Water Dependent Natural Resources.

“Agreement” means this Agreement.

“Applicant” means a Person who is required to submit a Proposal that is subject to management and regulation under this Agreement. **“Application”** has a corresponding meaning.

“Basin” or **“Great Lakes—St. Lawrence River Basin”** means the watershed of the Great Lakes and the St. Lawrence River upstream from Trois-Rivières, Québec within the jurisdiction of the Parties.

“Basin Ecosystem” or **“Great Lakes—St. Lawrence River Basin Ecosystem”** means the interacting components of air, land, Water and living organisms, including humankind, within the Basin.

“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.

“Compact” means the Great Lakes—St. Lawrence River Basin Water Resources Compact.

“Consumptive Use” means that portion of Water Withdrawn or withheld from the Basin that is lost or otherwise not returned to the Basin due to evaporation, incorporation into Products, or other processes.

“County” means the largest territorial division for local government in a State. In Québec, County means a regional county municipality (municipalité régionale de comté - MRC). The County boundaries shall be defined as those boundaries that exist as of the signing date of this Agreement.

“Cumulative Impacts” mean the impact on the Great Lakes—St. Lawrence River Basin Ecosystem that results from incremental effects of all aspects of a Withdrawal, Diversion or Consumptive Use in addition to other past, present, and reasonably foreseeable future Withdrawals, Diversions and Consumptive Uses regardless of who undertakes the other Withdrawals, Diversions and Consumptive Uses. Cumulative Impacts can result from

“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.

“Technical Review” means a detailed review conducted to determine whether or not a Proposal that requires Regional Review under this Agreement meets the Exception Standard following procedures and guidelines as set out in this Agreement.

“Water” means ground or surface water contained within the Basin.

“Water Dependent Natural Resources” means the interacting components of land, Water and living organisms affected by the Waters of the Basin.

“Waters of the Basin or Basin Water” means the Great Lakes and all streams, rivers, lakes, connecting channels and other bodies of water, including tributary groundwater, within the Basin.

“Withdrawal” means the taking of water from surface water or groundwater.

“Withdraw” has a corresponding meaning.

CHAPTER 2 PROHIBITION OF DIVERSIONS, EXCEPTIONS AND MANAGEMENT AND REGULATION OF WITHDRAWALS

ARTICLE 200 PROHIBITION OF DIVERSIONS AND MANAGEMENT AND REGULATION OF WITHDRAWALS

1. The Parties shall adopt and implement Measures to prohibit New or Increased Diversions, except as provided for in this Agreement.
2. The Parties shall adopt and implement Measures to manage and regulate Exceptions in accordance with this Agreement.
3. The Parties shall adopt and implement Measures to manage and regulate Withdrawals and Consumptive Uses in accordance with this Agreement.

ARTICLE 201 EXCEPTIONS TO THE PROHIBITION OF DIVERSIONS

Straddling Communities

1. A Proposal to transfer Water to an area within a Straddling Community but outside the Basin or outside the source Great Lake Watershed shall be excepted from the prohibition against Diversions and be managed and regulated by the Originating Party provided that, regardless of the volume of Water transferred, all the Water so

transferred shall be used solely for Public Water Supply Purposes within the Straddling Community, and:

- a. All Water Withdrawn from the Basin 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;
 - iii. Maximizes the portion of water returned to the Source Watershed as Basin Water and minimizes the surface water or groundwater from outside the Basin;
- b. If the Proposal results from a New or Increased Withdrawal of 100,000 gallons per day (379,000 litres per day) or greater average over any 90-day period, the Proposal shall also meet the Exception Standard; and,
- c. If the Proposal results in a New or Increased Consumptive Use of 5 million gallons per day (19 million litres per day) or greater average over any 90-day period, the Proposal shall also undergo Regional Review.

Intra-Basin Transfers

2. A Proposal for an Intra-Basin Transfer that would be considered a Diversion under this Agreement, and not already excepted pursuant to paragraph 1 of this Article, shall be excepted from the prohibition against Diversions, provided that:
 - a. If the Proposal results from a New or Increased Withdrawal less than 100,000 gallons per day (379,000 litres per day) average over any 90-day period, the Proposal shall be subject to management and regulation at the discretion of the Originating Party;
 - b. If the Proposal results from a New or Increased Withdrawal 100,000 gallons per day (379,000 litres per day) or greater average over any 90-day period and if the Consumptive Use resulting from the Withdrawal is less than 5 million gallons per day (19 million litres per day) average over any 90-day period:
 - i. The Proposal shall meet the Exception Standard and be subject to management and regulation by the Originating Party, except that the Water may be returned to another Great Lake watershed rather than the Source Watershed;
 - ii. The Applicant shall demonstrate that there is no feasible, cost effective and environmentally sound water supply alternative within the Great Lake watershed to which the Water will be transferred, including conservation of existing water supplies; and,
 - iii. The Originating Party shall provide notice to the other Parties prior to making any decision with respect to the Proposal.
 - c. If the Proposal results in a New or Increased Consumptive Use 5 million gallons per day (19 million litres per day) or greater average over any 90-day period:

- i. The Proposal shall be subject to management and regulation by the Originating Party and shall meet the Exception Standard, ensuring that Water Withdrawn shall be returned to the Source Watershed;
- ii. The Applicant shall demonstrate that there is no feasible, cost effective and environmentally sound water supply alternative within the Great Lake watershed to which the Water will be transferred, including conservation of existing water supplies;
- iii. The Proposal undergoes Regional Review; and,
- iv. If the Originating Party is a State, the Proposal is approved pursuant to the Compact.

Straddling Counties

3. A Proposal to transfer Water to a Community within a Straddling County that would be considered a Diversion under this Agreement shall be excepted from the prohibition against Diversions, provided that it satisfies all of the following conditions:
 - a. The Water shall be used solely for the Public Water Supply Purposes of the Community within a Straddling County that is without adequate supplies of potable water.
 - b. The Proposal meets the Exception Standard, with particular emphasis upon ensuring that:
 - i. All Water Withdrawn from the Basin shall be returned, either naturally or after use, to the Source Watershed less an allowance for Consumptive Use;
 - ii. No surface water or groundwater from outside the Basin is used to satisfy any portion of subparagraph (i) above except if it:
 - (a) Is part of a water supply and/or wastewater treatment system that combines water from inside and outside of the Basin;
 - (b) Is treated to meet applicable water quality discharge standards and to prevent the introduction of invasive species into the Basin;
 - (c) Maximizes the portion of water returned to the Source Watershed as Basin Water, and minimizes the surface water or groundwater from outside the Basin;
 - iii. All such Water returned meets all applicable water quality standards.
 - c. The Proposal shall be subject to management and regulation by the Originating Party, regardless of its size;
 - d. There is no reasonable water supply alternative within the basin in which the community is located, including conservation of existing water supplies;
 - e. Caution shall be used in determining whether or not the Proposal meets the conditions for this Exception. This exception should not be authorized unless it can be shown that it will not endanger the integrity of the Basin Ecosystem;
 - f. The Proposal undergoes Regional Review; and,
 - g. If the Originating Party is a State, the Proposal is approved pursuant to the Compact.

A Proposal must satisfy all of the conditions listed above. Further, substantive consideration will also be given to whether or not the Proposal can provide sufficient

scientifically based evidence that the existing water supply is derived from groundwater that is hydrologically interconnected to Waters of the Basin.

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.

Review of Article

5. The Parties shall evaluate this Article in the context of the periodic cumulative impact assessment as described in Article 209.

ARTICLE 202 IMPLEMENTATION OF THE STANDARD AND THE EXCEPTION STANDARD

1. The Parties shall seek to adopt and implement Measures establishing the Exception Standard under Article 201 and the Decision-Making Standard for management and regulation of Withdrawals and Consumptive Uses under Article 203. The Standards are one of the means by which the Parties shall together protect, conserve, restore, improve and manage the Waters of the Basin.
2. The Standard and the Exception Standards are minimum standards. The Parties may implement Measures that are more restrictive than the requirements of this Agreement. Although a Proposal may meet the Standard or the Exception Standard,

it may not be approved under the laws of the Originating Party if that Party has implemented more restrictive Measures.

3. When fully implemented, this Agreement shall lead to Water Withdrawal management systems that are consistent in their fundamentals within the Basin.

ARTICLE 203
THE DECISION-MAKING STANDARD FOR
MANAGEMENT OF WITHDRAWALS AND
CONSUMPTIVE USES

The following criteria constitute the Decision-Making Standard for management of new or increased Withdrawals and Consumptive Uses:

1. All Water Withdrawn shall be returned, either naturally or after use, to the Source Watershed less an allowance for Consumptive Use;
2. The Withdrawal or Consumptive Use shall be implemented so as to ensure that the Proposal will result in no significant individual or cumulative adverse impacts to the quantity or quality of the Waters and Water Dependent Natural Resources and the applicable Source Watershed;
3. The Withdrawal or Consumptive Use shall be implemented so as to incorporate Environmentally Sound and Economically Feasible Water Conservation Measures;
4. The Withdrawal or Consumptive Use 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;
5. The proposed use is reasonable, based upon a consideration of the following factors:
 - a. Whether the proposed Withdrawal or Consumptive Use is planned in a fashion that provides for efficient use of the Water, and will avoid or minimize the waste of Water;
 - b. If the Proposal is for an increased Withdrawal or Consumptive Use, whether efficient use is made of existing Water supplies;
 - c. The balance between economic development, social development and environmental protection of the proposed Withdrawal and use and other existing or planned withdrawals and Water uses sharing the water source;
 - d. The supply potential of the Water source, considering quantity, quality, and reliability and safe yield of hydrologically interconnected water sources;
 - e. The probable degree and duration of any adverse impacts caused or expected to be caused by the proposed Withdrawal and use under foreseeable conditions, to other lawful consumptive or non-consumptive uses of water or to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin, and the proposed plans and arrangements for avoidance or mitigation of such impacts; and,
 - f. If a Proposal includes restoration of hydrologic conditions and functions of the Source Watershed, the Party may consider that.

ARTICLE 204
PROPOSALS SUBJECT TO REGIONAL REVIEW

1. Regional Review as outlined in Chapter 5 applies to a Proposal for any Exception requiring Regional Review under Article 201.
2. The Proposal may be approved by the Originating Party thereafter only if it meets the Exception Standard.

ARTICLE 205
PROPOSALS SUBJECT TO PRIOR NOTICE

1. The Originating Party shall provide all Parties with detailed and timely notice and an opportunity to comment within 90 days on any Proposal for a New or Increased Consumptive Use of 5 million gallons per day (19 million litres per day) or greater average in any 90-day period. Comments shall address whether or not the Proposal is consistent with the Standard established under Article 203. The Originating Party shall provide a response to any such comment received from another Party.
2. A Party may provide notice, an opportunity to comment and a response to comments even if this is not required under paragraph 1 of this Article. Any provision of such notice and opportunity to comment shall be undertaken only after consulting the Applicant.

ARTICLE 206
**MANAGEMENT AND REGULATION OF NEW OR INCREASED
WITHDRAWALS AND CONSUMPTIVE USES**

1. Each Party shall establish a program for the management and regulation of New or Increased Withdrawals and Consumptive Uses by adopting and implementing Measures consistent with the Standard. Each Party, through a considered process, shall set and may modify threshold levels for the regulation of New or Increased Withdrawals in order to assure an effective and efficient Water management program that will ensure that uses overall are reasonable, that Withdrawals overall will not result in significant impacts to the Waters and Water Dependent Natural Resources of the Basin, determined on the basis of significant impacts to the physical, chemical and biological integrity of Source Watersheds, and that other objectives of the Agreement are achieved. Each Party may determine the scope and thresholds of its program, including which New or Increased Withdrawals and Consumptive Uses will be subject to the program.
2. In the event that a Party has not established threshold levels in accordance with paragraph 1 on or before 10 years after paragraphs 1 and 2 of Article 200 come into force, it shall apply a threshold level for management and regulation of all New or Increased Withdrawals of 100,000 gallons per day (379,000 litres per day) or greater average in any 90 day period.
3. The Parties intend programs for New or Increased Withdrawals and Consumptive Uses to evolve as may be necessary to protect Basin Waters. The Regional Body shall periodically assess the Water management programs of the Parties. Such assessments may produce recommendations for the strengthening of the programs including, without limitation, establishing lower thresholds for management and regulation in

accordance with the Standard. The Parties may, by unanimous consent, collectively adopt such thresholds or revisions to their programs.

ARTICLE 207 APPLICABILITY

Determining New or Increased Diversions, Consumptive Uses or Withdrawals

1. To establish a baseline for determining a New or Increased Diversion, Consumptive Use or Withdrawal, each Party shall develop either or both of the following lists for their jurisdiction:
 - a. A list of existing Water Withdrawal approvals as of the date this Article comes into force;
 - b. A list of the capacity of existing systems as of the date this Article comes into force. The capacity of the existing systems should be presented in terms of Withdrawal capacity, treatment capacity, distribution capacity, or other capacity limiting factors. The capacity of the existing systems must represent the state of the systems. Existing capacity determinations shall be based upon approval limits or the most restrictive capacity information.

For all purposes of this Agreement, volumes of the Diversions, Consumptive Uses or Withdrawals set forth in the list(s) prepared by each Party in accordance with this Paragraph shall constitute the baseline volume.

The list(s) shall be furnished to the Regional Body within 1 year of the date this Article comes into force.

Timing of Additional Applications

2. Applications for New or Increased Withdrawals, Consumptive Uses or Exceptions shall be considered cumulatively within ten years of any application.

Change of Ownership

3. Unless a new owner proposes a project that will result in a Proposal for a New or Increased Diversion or Consumptive Use subject to Regional Review, the change of ownership in and of itself shall not require Regional Review.

Groundwater

4. The Basin surface water divide shall be used for the purpose of managing and regulating New or Increased Diversions, Consumptive Uses or Withdrawals of surface water and groundwater.

Withdrawal systems

5. The total volume of surface water and groundwater resources that supply a common distribution system shall determine the volume of a Withdrawal, Consumptive Use or Diversion.

Connecting Channels

6. The watershed of each Great Lake shall include its upstream and downstream connecting channels.

Transmission in Water Lines

7. Transmission of Water within a line that extends outside the Basin as it conveys Water from one point to another within the Basin shall not be considered a Diversion if none of the Water is used outside the Basin.

Hydrologic Units

8. The Lake Michigan and Lake Huron watersheds shall be considered to be a single hydrologic unit and watershed.

Bulk Water Transfer

9. A Proposal to Withdraw Water and to remove it from the Basin in any container greater than 5.7 gallons (20 litres) shall be treated under this Agreement in the same manner as a Proposal for a Diversion. Each Party shall have the discretion, within its jurisdiction, to determine the treatment of Proposals to Withdraw Water and to remove it from the Basin in any container of 5.7 gallons (20 litres) or less.

U.S. Supreme Court Decree: Wisconsin et al. v. Illinois et al.

10. Notwithstanding any terms of this Agreement to the contrary, with the exception of Paragraph 14 of this Article, current, New or Increased Withdrawals, Consumptive Uses and Diversions of Basin Water by the State of Illinois shall be governed by the terms of the United States Supreme Court decree in Wisconsin et al. v. Illinois et al. and shall not be subject to the terms of this Agreement nor any rules or regulations promulgated pursuant to this Agreement. This means that, with the exception of Paragraph 14 of this Article, for purposes of this Agreement, current, New or Increased Withdrawals, Consumptive Uses and Diversions of Basin Water within the State of Illinois shall be allowed unless prohibited by the terms of the United States Supreme Court decree in Wisconsin et al. v. Illinois et al.
11. The Parties acknowledge that the United States Supreme Court decree in Wisconsin et al. v. Illinois et al. shall continue in full force and effect, that this Agreement shall not modify any terms thereof, and that this Agreement shall grant the parties no additional rights, obligations, remedies or defenses thereto. The Parties specifically acknowledge that this Agreement shall not prohibit or limit the State of Illinois in any manner from seeking additional Basin Water as allowed under the terms of the United States Supreme Court decree in Wisconsin et al. v. Illinois et al., any other party from objecting to any request by the State of Illinois for additional Basin Water under the terms of said decree, or any party from seeking any other type of modification to said decree. If an application is made by any party to the Supreme Court of the United States to modify said decree, the Parties to this Agreement who are also parties to the decree shall seek formal input from Ontario and Québec, with respect to the proposed modification, use best efforts to facilitate the appropriate participation of said Provinces in the proceedings to modify the decree, and shall not unreasonably impede or restrict such participation.
12. With the exception of Paragraph 14 of this Article, because current, New or Increased Withdrawals, Consumptive Uses and Diversions of Basin Water by the State of Illinois are not subject to the terms of this Agreement, the State of Illinois is

prohibited from using any term of this Agreement, including Article 201, to seek New or Increased Withdrawals, Consumptive Uses or Diversions of Basin Water.

13. With the exception of Paragraph 14 of this Article, Articles 200, 201, 202, 203, 204, 205, 206, 207 (Paragraphs 1, 2, 3, 5 and 9 only), 208 and 210 of this Agreement all relate to current, New or Increased Withdrawals, Consumptive Uses and Diversions of Basin Water and, therefore, do not apply to the State of Illinois. All other provisions of this Agreement not listed in the preceding sentence shall apply to the State of Illinois, including the Water Conservation Programs provision of Article 304.
14. In the event of a Proposal for a Diversion of Basin Water for use outside the territorial boundaries of the Parties to this Agreement, decisions by the State of Illinois regarding such a Proposal would be subject to all terms of this Agreement, except Paragraphs 10, 12 and 13 of this Article.

ARTICLE 208

EXEMPTIONS FROM THE AGREEMENT

This Agreement does not apply to Withdrawals of Basin Water for the following purposes:

1. Supply of vehicles, including vessels and aircraft, whether for the needs of the persons or animals being transported or for ballast or other needs related to the operation of vehicles; or,
2. Use in a non-commercial project on a short-term basis for firefighting, humanitarian or emergency response purposes.

ARTICLE 209

AMENDMENTS TO THE STANDARD AND EXCEPTION STANDARD AND PERIODIC ASSESSMENT OF CUMULATIVE IMPACTS

1. The Standard and the Exception Standard may be amended periodically according to the rules in this Agreement to reflect advancements in science, information and knowledge.
2. The Parties shall co-ordinate the collection and application of scientific information to further develop a mechanism by which individual and Cumulative Impacts of Withdrawals may be assessed.
3. The Parties shall collectively conduct within the Basin, on a Great Lake and St. Lawrence River Basin basis, a periodic assessment of the Cumulative Impacts of Withdrawals, Diversions and Consumptive Uses from the Waters of the Basin. The assessment of the Cumulative Impacts shall be done upon the earlier of:
 - a. Every 5 years;
 - b. Each time the incremental losses to the Basin reach 50,000,000 gallons (190,000,000 litres) per day average in any 90-day period in excess of the quantity at the time of the last assessment; or,
 - c. At the request of one or more of the Parties.
4. The assessment of Cumulative Impacts shall form a basis for the review of the Standard and the Exception Standard and their application. This assessment shall:
 - a. Utilize the most current and appropriate guidelines for such a review, which may include but not be limited to Council on Environmental Quality and Environment Canada guidelines;

- b. Give substantive consideration to climate change or other significant threats to Basin Waters and take into account the current state of scientific knowledge, or uncertainty, and appropriate Measures to exercise caution in cases of uncertainty, if serious damage may result;
 - c. Consider Adaptive Management principles and approaches recognizing, considering and providing adjustments for the uncertainties in, and evolution of, science concerning the Basin's water resources, watersheds and ecosystems including potential changes to Basin-wide processes, such as lake level cycles and climate; and,
 - d. Include the evaluation of Article 201 concerning Exceptions. Based on the results of this assessment, the provisions in that Article may be maintained, made more restrictive or withdrawn.
5. The Parties have the responsibility of conducting this Cumulative Impact assessment. Applicants are not required to participate in this assessment.
 6. Unless required by other statutes, Applicants are not required to conduct a separate cumulative impact assessment in connection with an Application but shall submit information about the potential impacts of a Proposal to the quantity or quality of the Waters and Water Dependent Natural Resources of the applicable Source Watershed. An Applicant may, however, provide an analysis of how their proposal meets the no significant adverse Cumulative Impact provision of the Standards.

ARTICLE 210 JUDICIAL REVIEW

The Parties shall seek to adopt and implement Measures to permit a Party to, in an Originating Party's court of competent jurisdiction, seek judicial review of a decision of the Originating Party with respect to a Withdrawal, Consumptive Use or Exception if that decision is, according to this Agreement, subject to the Standard or the Exception Standard.

CHAPTER 3 PROGRAMS

ARTICLE 300 WATER MANAGEMENT PROGRAM REVIEW

1. The Parties shall protect, conserve, restore and improve the Waters and Water Dependent Natural Resources of the Basin by implementing programs that apply the Standard and the Exception Standard.
2. Each Party shall submit a report to the Regional Body, detailing the Water management and Water conservation and efficiency programs that implement this Agreement in their jurisdiction.
3. The report shall set out the manner in which Water Withdrawals are managed by sector, Water source, quantity or any other means and how the provisions of the Standard, the Exception Standard and Water conservation and efficiency programs are implemented.

4. The first report shall be provided by each jurisdiction one year from the date that this Article comes into force and thereafter every 5 years.
5. The Regional Body shall forward each report to all members and shall give the members at least 30 days to consider it.
6. Following that period, the Regional Body shall consider the reports submitted by each Party.
7. The Regional Body shall issue a Declaration of Finding on whether the programs in place in each Party:
 - a. Meet or exceed the provisions of this Agreement;
 - b. Do not meet the provisions of this Agreement; or,
 - c. Would meet the provisions of this Agreement if certain modifications were made and what options may exist to assist the jurisdiction in meeting the provisions of this Agreement.
8. The Regional Body shall distribute the reports to its members.
9. Any Party may ask the Regional Body to issue a Declaration of Finding respecting the Water management and Water conservation and efficiency programs of any of the Parties, including themselves, to determine whether the programs,
 - a. Meet or exceed the provisions of this Agreement;
 - b. Do not meet the provisions of this Agreement; or,
 - c. Would meet the provisions if certain modifications were made and what options may exist to assist the jurisdiction in meeting the provisions of this Agreement.
10. As one of its duties and responsibilities, the Regional Body may recommend a range of approaches to the Parties with respect to the development, enhancement and application of Water management and Water conservation and efficiency programs to implement the Standard and Exception Standard reflecting improved scientific understanding of the Waters of the Basin, including groundwater, and the impacts of Withdrawals on the Basin Ecosystem.

ARTICLE 301 INFORMATION

1. In order to develop and maintain a compatible base of Water use information, the Parties shall annually gather and share accurate and comparable information on all Withdrawals in excess of 100,000 gallons per day (379,000 litres per day) or greater average in any 30-day period (including Consumptive Uses) and all Diversions, including all Exceptions.
2. The Parties shall report this information to a Great Lakes—St. Lawrence River Water use data base repository and aggregated information shall be available to the public, consistent with the confidentiality requirements in Article 704.
3. Each Party shall require users to report their monthly Withdrawals, Consumptive Uses and Diversions on an annual basis.
4. Information gathered shall be used to improve scientific understanding of the Waters of the Basin, the impacts of Withdrawals from various locations and Water sources on the Basin Ecosystem, understanding of the role of groundwater, and to clarify what groundwater forms part of the Waters of the Basin.

ARTICLE 302
SCIENCE

1. The Parties commit to provide leadership for the development of a collaborative strategy with other regional partners to strengthen the scientific basis for sound Water management decision making under this Agreement.
2. The strategy shall guide the collection and application of scientific information to support:
 - a. An improved understanding of the individual and Cumulative Impacts of Withdrawals from various locations and Water sources on the Basin Ecosystem and to develop a mechanism by which impacts of Water Withdrawals may be assessed;
 - b. The periodic assessment of Cumulative Impacts of Withdrawals, Diversions and Consumptive Uses on a Great Lake and St. Lawrence River watershed basis;
 - c. Improved scientific understanding of the Waters of the Basin;
 - d. Improved understanding of the role of groundwater in Basin Water resources management; and,
 - e. The development, transfer and application of science and research related to Water conservation and Water use efficiency.

ARTICLE 303
AVAILABILITY OF APPLICATIONS AND RECORDS OF DECISION

1. Each Party shall seek to make publicly available all Applications it receives that are subject to management and regulation under this Agreement.
2. Each Party shall seek to make publicly available the record of decision including comments, objections and responses.

ARTICLE 304
WATER CONSERVATION AND EFFICIENCY PROGRAM

1. Within two years of the signing of the Agreement, the Regional Body shall identify Basin-wide Water conservation and efficiency objectives to assist the Parties in developing their Water conservation and efficiency program. These objectives shall be based on the goals of:
 - a. Ensuring improvement of the Waters and Water Dependent Natural Resources;
 - b. Protecting and restoring the hydrologic and ecosystem integrity of the Basin;
 - c. Retaining the quantity of surface water and groundwater in the Basin;
 - d. Ensuring sustainable use of Waters of the Basin; and,
 - e. Promoting the efficiency of use and reducing losses and waste of Water.
2. Within two years after Article 200, paragraphs 1 and 2 come into force (Prohibition of Diversions and Management of Exceptions), each Party shall develop its own Water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives, and shall develop and implement a Water conservation and efficiency program, either voluntary or mandatory, within its jurisdiction based on the Party's goals and objectives. Each Party shall thereafter annually assess its programs in meeting the Party's goals and objectives, report to the Regional Body every five years and make this annual assessment available to the public.

3. Beginning five years after Article 200, paragraphs 1 and 2 come into force (Prohibition of Diversions and Management of Exceptions), and every five years thereafter, the Regional Body shall review and modify as appropriate the Basin-wide objectives and the Parties shall have regard for any such modifications in implementing their programs. This assessment shall be based on examining new technologies, new patterns of Water use, new resource demands and threats, and the Cumulative Impact assessment under Article 209.
4. Within two years after Article 200, paragraphs 1 and 2 come into force (Prohibition of Diversions and Management of Exceptions), the Parties commit to promote Environmentally Sound and Economically Feasible Water Conservation Measures such as:
 - a. Measures that promote efficient use of Water;
 - b. Identification and sharing of best management practices and state of the art conservation and efficiency technologies;
 - c. Application of sound planning principles;
 - d. Demand-side and supply-side Measures or incentives; and,
 - e. Development, transfer and application of science and research.
5. Each Party shall implement, in accordance with paragraph 2 above a voluntary or mandatory Water conservation program for all, including existing, Basin Water users. Conservation programs need to adjust to new demands and the potential impacts of cumulative effects and climate change.

CHAPTER 4
GREAT LAKES—ST. LAWRENCE RIVER WATER RESOURCES REGIONAL
BODY

ARTICLE 400
FUNCTIONS OF THE REGIONAL BODY

1. The Regional Body is composed of the Governor or Premier of each of the Parties, or a person designated by each of them.
2. The Regional Body is established to undertake the following duties and responsibilities:
 - a. Ensure, in accordance with this Agreement, a formalized process with respect to Proposals that require Regional Review and thereby provide an opportunity to address concerns within the Basin;
 - b. Declare whether or not a Proposal subject to Regional Review meets the Exception Standard;
 - c. Declare whether a Party's Water management programs meet the provisions of this Agreement;
 - d. Facilitate the development of consensus and the resolution of disputes on matters arising under this Agreement;
 - e. Monitor and report on the implementation of this Agreement by the Parties, including: data collection; the implementation of each Party's program to manage

- and regulate Withdrawals, Consumptive Uses and Diversions; promotion of Water conservation; and, the assessment of Cumulative Impacts;
- f. Establishment of Basin wide goals and objectives for Water conservation and efficiency, the review of those programs and recommendations and declarations in respect of them;
 - g. Periodically review the Standard and Exception Standard and their application including new scientific information relating to groundwater;
 - h. Recommend options to Parties with respect to the development and enhancement of their Water management programs;
 - i. Develop guidance for the implementation of the Standard and the Exception Standard and in particular the review of a Proposal, the preparation of an Application and the review of the Parties' Water management programs;
 - j. Propose amendments to this Agreement; and,
 - k. Perform any other functions or duties necessary to implement this Agreement.

ARTICLE 401

ORGANIZATION AND PROCEDURES OF THE REGIONAL BODY

1. The Regional Body may establish its own administrative practices and procedures.
2. The Regional Body may create a secretariat by the unanimous consent of its members.
3. The Regional Body shall meet:
 - a. At least once annually; and,
 - b. At any other time at the call of the Chair or at the request of two or more Parties.
4. The members shall appoint a Chair and Vice Chair through the following process:
 - a. For the first year, the Chair and Vice Chair shall be members elected by a vote of the members.
 - b. Each subsequent year, until all members have served, the Vice Chair shall be chosen by drawing lots from amongst those members who have not yet served.
 - c. Each member shall serve as Chair immediately after having served as Vice Chair.
 - d. Each member shall serve as Vice Chair and as Chair, each for one year.
 - e. Once all members have served as Vice Chair and Chair, the original order of serving shall be repeated.
5. In the event that an Application for Regional Review is from the Chair's State or Province, the role of the Chair shall be filled by the Vice Chair or another member.
6. Each Party shall bear an equitable share of the costs of the Regional Body to a maximum amount per annum that is agreed upon each year by the Parties.
7. The Parties shall support the Regional Body using existing agency staff and facilities to the greatest extent possible and are encouraged to make additional resources available through partnerships and co-operative arrangements with government agencies, public or private entities, individuals or academic institutions.
8. The Regional Body shall keep a complete public record of documents provided to it or generated by it, including but not limited to:
 - a. Proposals about which it is notified;
 - b. Applications, Technical Reviews and comments provided by the public;
 - c. Comments or objections made in respect of a Proposal by members of the Regional Body;

- d. Declarations of Finding;
 - e. Materials in respect of dispute resolution;
 - f. Water management program reports;
 - g. Cumulative Impact Assessments;
 - h. The science strategy developed under Article 302;
 - i. Reports on Water conservation and efficiency programs; and,
 - j. Amendments to the Agreement agreed to by the Parties.
9. Public access to documents is recognized to be subject to confidentiality obligations set out in this Agreement.
 10. To the greatest extent possible, the Regional Body shall conduct public participation and Regional Review concurrently and jointly with similar processes under the Compact and in the Originating Party's jurisdiction.
 11. The Parties recognize the importance and necessity of public participation in promoting management of the Water resources of the Basin. Consequently, meetings of the Regional Body, at which official action is to be taken, shall be open to the public except when the Regional Body is meeting in executive session.
 12. The minutes of the Regional Body shall be a public record.

CHAPTER 5 REGIONAL REVIEW

ARTICLE 500 REVIEW OF PROPOSALS

1. This Chapter sets out the process for Regional Review.
2. Regional Review provides the Parties an opportunity to address concerns with respect to a Proposal.
3. Unless the Applicant or the Originating Party otherwise requests, it shall be the goal of the Regional Body to conclude its review no later than 90 days after notice under Article 501 of such Proposal is received from the Originating Party.
4. The Parties agree that the protection of the integrity of the Great Lakes-St. Lawrence River Basin Ecosystem shall be the overarching principle for reviewing Proposals subject to Regional Review, recognizing uncertainties with respect to demands that may be placed on Basin Water, including groundwater, levels and flows of the Great Lakes and the St. Lawrence River, future changes in environmental conditions, the reliability of existing data and the extent to which Diversions may harm the integrity of the Basin Ecosystem.
5. The Originating Party shall have lead responsibility for coordinating information for resolution of issues related to evaluation of a Proposal and shall consult with the Applicant throughout the Regional Review Process.

ARTICLE 501
NOTICE FROM ORIGINATING PARTY
TO THE REGIONAL BODY AND THE PUBLIC

1. The Originating Party shall determine if an Application is subject to Regional Review.
2. If so, the Originating Party shall provide timely notice to the Regional Body, the Parties to this Agreement, and the public.
3. Such notice shall not be given unless and until all information, documents and the Originating Party's Technical Review needed to evaluate whether the Proposal meets the Exception Standard have been provided.

ARTICLE 502
OTHER NOTICE

1. An Originating Party may:
 - a. Provide notice to the Regional Body of an Application, even if notification is not required under this Agreement; or,
 - b. Request Regional Review of an application, even if Regional Review is not required under this Agreement.
2. A majority of the members of the Regional Body may request Regional Review of a regionally significant or potentially precedent setting Proposal.
3. Any such Regional Review shall be undertaken only after consulting the Applicant.
4. An Originating Party may provide preliminary notice of a potential Application.

ARTICLE 503
PUBLIC PARTICIPATION

1. To ensure adequate public participation, the Regional Body shall adopt procedures for the review of Proposals that are subject to Regional Review in accordance with this Article.
2. The Regional Body shall provide notice to the public of a Proposal undergoing Regional Review. Such notice shall indicate that the public has an opportunity to comment in writing to the Regional Body on whether the Proposal meets the Exception Standard.
3. The Regional Body shall hold a public meeting in the State or Province of the Originating Party in order to receive public comment on the issue of whether the Proposal under consideration meets the Exception Standard.
4. The Regional Body shall consider the comments received before issuing a Declaration of Finding.
5. The Regional Body shall forward the comments it receives to the Originating Party.

ARTICLE 504
FIRST NATIONS AND TRIBES CONSULTATION

1. In respect of a Proposal, 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.

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, and 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.

**ARTICLE 505
TECHNICAL REVIEW**

Originating Party's Technical Review

1. The Originating Party shall provide the Regional Body with its Technical Review of the Proposal under consideration.
2. The Technical Review shall thoroughly analyze the Proposal and provide an evaluation of the Proposal sufficient for a determination of whether the Proposal meets the Exception Standard.

Independent Technical Review

3. Any Party may undertake an independent Technical Review of a Proposal and the Originating Party shall assist by providing additional information as may be required.
4. At the request of the majority of its members, the Regional Body shall make such arrangements as it considers appropriate for an independent Technical Review of a Proposal.
5. All Parties shall exercise their best efforts to ensure that a Technical Review undertaken under paragraphs 3 or 4 does not unnecessarily delay the decision by the Originating Party on the Application. Unless the Applicant or the Originating Party otherwise requests, all Technical Reviews shall be completed no later than 60 days after the date the notice of the Proposal was given to the Regional Body.

**ARTICLE 506
DECLARATION OF FINDING**

1. The Regional Body shall meet to consider a Proposal. The Applicant shall be provided with an opportunity to present the Proposal to the Regional Body at such time.

2. The Regional Body, having considered the notice, the Originating Party's Technical Review, any other independent Technical Review that is made, any comments or objections including the analysis of comments made by the public, First Nations and federally recognized Tribes, and any other information that is provided under this Agreement shall issue a Declaration of Finding that the Proposal under consideration:
 - a. Meets the Exception Standard;
 - b. Does not meet the Exception Standard; or,
 - c. Would meet the Exception Standard if certain conditions were met.
3. An Originating Party may decline to participate in a Declaration of Finding made by the Regional Body.
4. The Parties recognize and affirm that it is preferable for all members of the Regional Body to agree whether the Proposal meets the Exception Standard.
5. If the members of the Regional Body who participate in the Declaration of Finding all agree, they shall issue a written Declaration of Finding with consensus.
6. In the event that the members cannot agree, the Regional Body shall make every reasonable effort to achieve consensus within 25 days.
7. Should consensus not be achieved, the Regional Body may issue a Declaration of Finding that presents different points of view and indicates each Party's conclusions.
8. The Regional Body shall release the Declarations of Finding to the public.
9. The Originating Party shall consider the Declaration of Finding before it makes a decision on the Proposal.

CHAPTER 6 DISPUTE RESOLUTION

ARTICLE 600 GENERAL

1. The Parties undertake to resolve any disputes under this Agreement in a conciliatory, co-operative and harmonious manner.
2. Where dispute resolution is required, the Parties undertake to use the dispute resolution mechanisms provided for in this Chapter to arrive at a mutually satisfactory resolution.
3. The provisions of this Chapter shall not be used to dispute a Declaration of Finding on a Proposal that is subject to Regional Review.
4. A Person who is not a Party to this Agreement may not seek dispute resolution under this Agreement.

ARTICLE 601 PROCEDURE FOR DISPUTE RESOLUTION

Initial Steps

1. A Party may provide detailed written notice to another Party and to the Regional Body of a dispute that in its opinion requires resolution under this Chapter.

Measures to Settle Disputes

2. If the dispute is not resolved informally, the Chair shall initiate the most appropriate measures to resolve the dispute. These measures may include:
 - a. The appointment of a panel to hear the Parties to the dispute;
 - b. Consultation with experts;
 - c. Establishment of a working or fact-finding group; or,
 - d. The use of dispute resolution mechanisms such as conciliation or mediation.
3. After resolution is attempted by one of the means suggested in paragraph 2, recommendations shall be made in accordance with directions given by the Chair at the time the mean was adopted. The disputing Parties shall consider the recommendations and exercise their best efforts to settle their dispute.

Reference to Regional Body

4. If the disputing Parties, having considered the recommendations, fail to settle the dispute, any one of them may refer the matter to the Regional Body. In this case, the Chair shall, in consultation with the other members who are not involved in the dispute, direct the Regional Body to take such further steps as he or she considers advisable in the circumstances to resolve the dispute.
5. When those steps have been taken, the Regional Body shall issue its recommendations regarding the resolution of the dispute.
6. The disputing Parties shall consider the recommendations and shall exercise their best efforts to settle.

Role of the Chair

7. In the event that a dispute involves the Party of the Chair, the role of the Chair set out in this Chapter shall be filled by the Vice Chair or failing him or her, another member who is not a Party to the dispute.

CHAPTER 7 FINAL PROVISIONS

ARTICLE 700 REAFFIRMATION OF CONSTITUTIONAL POWERS AND RESPONSIBILITIES

1. Nothing in this Agreement alters the legislative or other authority of Parliament or of the Provincial legislatures or of the federal Government of Canada or of the Provincial governments or the rights of any of them with respect to the exercise of their legislative or other authorities under the Constitution of Canada.
2. This Agreement is not intended to infringe upon the treaty power of the United States of America, nor shall any term hereof be construed to alter or amend any treaty or term thereof that has been or may hereafter be executed by the United States of America.

ARTICLE 701

RELATIONSHIP TO AGREEMENTS CONCLUDED BY CANADA OR THE UNITED STATES OF AMERICA

1. Nothing in this Agreement is intended to provide nor shall be construed to provide, directly or indirectly, to any Person any right, claim or remedy under any treaty or international agreement nor is it intended to derogate any right, claim, or remedy that already exists under any treaty or international agreement.
2. Nothing in this Agreement is intended to affect the application of the Boundary Waters Treaty of 1909 whose requirements continue to apply in addition to the requirements of this Agreement.

ARTICLE 702

RELATIONSHIP TO FIRST NATIONS AND TRIBES

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.

ARTICLE 703

RELATIONSHIP TO OTHER AGREEMENTS AMONG THE PARTIES

1. The Parties assert that by this Agreement they are fulfilling their existing commitments with respect to each other under the Great Lakes Charter and the Great Lakes Charter Annex.
2. The obligations of this Agreement shall be co-ordinated with any obligations set out in other environmental and conservation agreements between or among the Parties.

ARTICLE 704

CONFIDENTIALITY

1. Nothing in this Agreement requires a Party to breach confidentiality obligations or requirements prohibiting disclosure that it has under its own laws, to compromise security or a person's commercially sensitive or proprietary information.
2. A Party may take steps, including but not limited to deletion and redaction, deemed necessary to protect any confidential, proprietary or commercially sensitive information when distributing information to other Parties. The Party shall summarize or paraphrase any such information in a manner sufficient for the Regional Body to exercise its authorities contained in this Agreement.

ARTICLE 705

MEASURES SUBJECT TO TRANSITIONAL PROVISIONS

Each Party shall, from the date of execution of this Agreement, exercise its best efforts to refrain from taking any action that would defeat the objectives of this Agreement.

**ARTICLE 706
AMENDMENTS**

1. The Parties may agree in writing to amend this Agreement.
2. An amendment to this Agreement requires the consent of all Parties to the Agreement.
3. When so agreed, and approved in accordance with the applicable legal procedures of each Party, an amendment shall constitute an integral part of this Agreement from the date of its entry into force.

**ARTICLE 707
WITHDRAWAL AND TERMINATION PROCEDURE**

1. Twelve months after it gives written notice to all other Parties, a Party may withdraw from this Agreement.
2. If a Party withdraws, the Agreement shall remain in force among the remaining Parties.
3. This Agreement shall be terminated when all Parties, or all remaining Parties, agree in writing.

**ARTICLE 708
ENTIRE AGREEMENT**

The Parties consider this Agreement to be a complete and integral whole. Each provision is material and any change or amendment made must be agreed to by all Parties.

**ARTICLE 709
ENTRY INTO FORCE**

Parts of this Agreement come into force at different times. Except as otherwise provided in this Agreement, if in any part of the Agreement set out below the parties agree to adopt or implement measures or undertake any other action, this shall be done as expeditiously as possible and in any event no later than the earliest date specified for the part in this Article.

The following are the dates that the parts of this Agreement come into force:

1. On the day the Agreement is signed by all Parties:
 - a. Preamble;
 - b. Chapter 1 (General Provisions);
 - c. Article 202 (Implementation of the Standard and the Exception Standard);
 - d. Article 208 (Exemptions from the Agreement);
 - e. Article 302 (Science);
 - f. Article 303 (Availability of Applications and Records of Decisions);
 - g. Article 304, paragraph 1 (Water Conservation Objectives);
 - h. Chapter 4 (Great Lakes—St. Lawrence River Water Resources Regional Body);
 - i. Chapter 6 (Dispute Resolution); and,
 - j. Chapter 7 (Final Provisions).

2. 60 days after the last Party has notified the others that it has completed the Measures necessary to implement the following parts of this Agreement:
 - a. Article 200, paragraphs 1 and 2 (Prohibition of Diversions and Management and Regulation of Exceptions);
 - b. Article 201 (Exceptions to Prohibition of Diversions);
 - c. Article 203 (The Standard for management of Withdrawals and Consumptive Uses);
 - d. Article 204 (Proposals Subject to Regional Review);
 - e. Article 207 (Applicability);
 - f. Article 209 (Amendments to the Standard and Exception Standard and Periodic Assessment of Cumulative Impacts);
 - g. Article 210 (Judicial Review);
 - h. Article 300 (Water Management Program Review);
 - i. Article 304, except for paragraph 1 (Implementation of Water Conservation Programs of the Parties); and,
 - j. Chapter 5 (Regional Review).
3. 5 years after the date paragraph 2 of this Article comes into force or 60 days after the last Party has notified the others that it has completed the Measure necessary to implement it, whichever is first:
 - a. Article 200, paragraph 3 (Management of Withdrawals and Consumptive Uses);
 - b. Article 205 (Proposals Subject to Prior Notice);
 - c. Article 206 (Management and Regulation of New or Increased Withdrawals and Consumptive Uses); and,
 - d. Article 301 (Information).
4. Except as otherwise set out in this Agreement, 60 days following the date that the last Party has notified the others that it has completed the necessary legal procedures, any remaining parts of this Agreement shall come into force.
5. The terms, agreements, and review processes contained in the Great Lakes Charter of 1985 (“Charter”) shall remain in full force and effect unless and until the Parties to the Charter certify in writing that it has been replaced by the terms of this Agreement. Until the coming into force of Chapter 5 of this Agreement, the Regional Body as described in Chapter 4 shall be used for all prior notice and consultation activities as described in the Charter.

ARTICLE 710
LANGUAGE

This Agreement has been made and executed in English and French and both versions are equally authoritative.

Signed this 13th day of December, 2005.

Governor of Illinois

Governor of Indiana

Governor of Michigan

Governor of Minnesota

Governor of New York

Governor of Ohio

Premier of Ontario

Governor of Pennsylvania

Premier of Québec

Governor of Wisconsin

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