Water Resource Management and North American Green Paradiplomacy : The Case of the Great Lakes – St. Lawrence River Basin

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WATER RESOURCE MANAGEMENT AND NORTH AMERICAN GREEN PARADIPLOMACY: The Case of the Great Lakes – St. Lawrence River Basin

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Abstract

Sharing the world's largest freshwater lake system, Canada and United States seek for over a hundred years to jointly manage this vital resource. However, in accordance with multi-level governance and paradiplomacy literature, it appears that this collaboration has considerably changed over the last thirty years. From an initial bilateral cooperation between federal authorities, provinces and US states became prominent actors in cross-border water governance, and, in this sense, a green transboundary paradiplomacy has emerged along the 49th parallel. In particular, a specific cross-border organization, the Council of Great Lakes Governors, developed an interesting water regime, and adopted recently a dual tool for water governance in 2005, called the "Great Lakes – St. Lawrence River Basin Water Resources Compact" and its non-binding twin the "Great Lakes – St. Lawrence River Basin Sustainable Resources Agreement", which aim to prevent massive water transfer outside the basin. Adopting a multi-level governance perspective, this paper aims to analyze in depth this new environmental regime and, in corollary, the effectiveness of the implementation process of this dual agreement. Then, we will begin a broader reflection on cross-border and subnational environmental multi-level governance in North America.

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Introduction

Sharing the world's largest freshwater lake system, Canada and the United States have sought for over a hundred years to jointly manage this vital resource. This vast ecosystem is fundamental for economic, social and environmental reasons, as a population of 40 million people depend on this ecosystem to work and live. While threats such as diversion, withdrawal and pollution have been the source of cross-border collaboration between the two nations for over a century, it appears that this collaboration has considerably changed in the last thirty years (Parrish, 2006; Paquerot, 2007; Bielecki, 2006). In fact, a new phenomenon that we called "green paradiplomacy" has grown considerably in North America (Chaloux & Paguin, 2012a). Because of the phenomenon called "glocalization," Canadian provinces and US states now recognize the increasing importance of their role in the regulation of the environment, and have undertaken many actions internationally and regionally (Blatter, Ingram, & Doughman, 2001; Bulkeley, 2005). Some federated states have grouped together bilaterally or multilaterally to set up various environmental regulation tools, such as action plans and crossborder agreements, and water management has been one of the most prolific paradiplomatic fields in this regard (Chaloux, 2012; Chaloux, 2010; Vannijnatten, 2006; Norman & Bakker, 2009). States and provinces have become promoters of regional environmental agreements, and have developed cooperative transboundary relations over water management issues (Chaloux, 2012; Paguin & Chaloux, 2008; Selin & Vandeveer, 2009). For instance, most of the international agreements in the environmental field adopted by Quebec relate to water issues (Chaloux, 2010). As well, a study conducted by Norman and Bakker showed the increasing number of paradiplomatic instruments adopted by substate actors to manage transboundary waters over the past decades in North America (2009, p. 105).

More specifically concerning water management issues, the growing importance of green paradiplomacy was accompanied by a new integrated water governance perspective, called the "watershed approach," which favoured a reconfiguration of authority over water issues in North America (Norman & Bakker, 2009; Gerlak, 2005; Paquerot, 2007; McGinnis, 1999; Emerson, 2008). The Great Lakes region has been particularly active in this regard, adopting numerous agreements recognizing this new water management approach (Norman & Bakker, 2009;

Vannijnatten, 2006). One particular organization, the Council of Great Lakes Governors, introduced this watershed-based approach in its reflections, and has developed different tools to regulate water issues since its creation. Quebec and Ontario became associate members in 1997 in order to deal in a more integrated way with the Great Lakes - St. Lawrence watershed (Government of Québec, 2011). After the adoption of the Great Lakes Charter in 1985, several tools were developed by this cross-border organization. The latest is the "Great Lakes – St. Lawrence River Basin Sustainable Resources Agreement," adopted in 2005, which aims to prevent massive water transfer outside the basin.

However, despite the growth of paradiplomatic instruments to protect the environment, the literature tells us little about the development of such paradiplomatic agreements on environmental issues, and more specifically on water management issues between Canada and the United States at the subnational level (Criekemans, 2010; Gattinger & Hale, Geoffrey, 2010; Chaloux, 2010; Bruyninckx, Happaerts, & Van den Brande, 2012; Emerson, 2008). Moreover, there is a tendency to ignore the implementation process in the paradiplomacy literature. Indeed, according to scholars, this is in large part because scholars tend to take for granted this stage of the policy cycle (Pressman & Wildavsky, [1973] 1984; Sabatier, 1986; Matland, 1995). While this trend has been attenuated in a number of public policy research areas, it remains largely ignored by paradiplomacy scholars (Paguin, 2010; Criekemans, 2010; Chaloux, 2010; Paguin, 2004). This article aims to respond to a certain gap in the literature by developing a descriptive analysis focusing on a particular case study, the Council of Great Lakes Governors and its most recent agreement, the "Great Lakes – St. Lawrence River Basin Sustainable Resources Agreement." The article begins with a review of the literature concerning the paradiplomatic phenomenon related to the environmental field in North America. The article then focuses more specifically on cross-border and water management issues. Next, the article seeks to analyze the context of the Great Lakes – St. Lawrence River Basin Sustainable Resources Agreement's adoption, and the effectiveness of the implementation by stakeholders. Finally, we begin a larger reflection on the implementation of international agreements undertaken by North American federated states.

1. Green paradiplomacy in North America

The recognition of environmental issues and threats essentially became a subject of public concern in North America in the 1970s. Since that period, all levels of government have developed substantive policies around environmental issues, such as acid rain, mercury, water quality, forestry, and more recently climate change issues. In North America, because of the

federal nature of the political systems of Canada and the United States, federated states became prominent actors in the regulation of the environment. The constitutional powers attributed to states and provinces enabled them to assume a certain leadership over several environmental issues, and gave them an opportunity to develop cooperation and collaboration over cross-border environmental issues (Chaloux, 2012; Vannijnatten, 2004; Selin & Vandeveer, 2009). In fact, North American federated states became more and more active internationally over environmental issues. We called this phenomenon green paradiplomacy. The present section draws a portrait of this phenomenon that is still underestimated in conventional international relations literature.

1.1. Paradiplomacy and Multi-Level Governance

Today virtually all government activity falls within the purview of at least one intergovernmental organization, and frequently many more. Education, public health, cultural diversity, the environment, business subsidies, the treatment accorded to investors, the removal of non-tariff barriers, the liberalization of agricultural trade, the issue of government procurement – all these policy areas are on the agendas of international organizations and summit meetings.

The enlargement of the international policy agenda has had important implications for decisionmaking at the national level. Today, some of the activities of most government departments are internationalized. At the federal level, this has had an impact on decision-making: the Department of Foreign Affairs no longer has (if indeed it ever had) the ability to centralize decision-making, representation and control functions concerning international policy.

As the international policy agenda has expanded, subnational governments have become increasingly aware that their political power and sovereignty, or, in other words, their ability to formulate and implement policy, are subject to negotiation in multilateral forums but also in transborder relations. Thus, there has been a noticeable increase in the number of subnational governments that are interested, and participate actively, in international affairs and this, since the 1960s. For instance, in the United States, only four states had representative offices in other countries during the 1970s, versus 42 states with 233 representative offices in 30 countries in 2001. Germany's *Länder* have set up some 130 representative offices since 1970, of which 21 are located in the United States. Quebec, one of the pioneers in the field, has some 28 representative offices around the world. In Spain, the autonomous region of Catalonia operates some 50 representative offices abroad, and the Flemish government opened its 100th

representative office in September 2004, even though these offices handle mostly trade promotion issues. This phenomenon is also evident in Japan and many other countries (Nossal, Roussel, & Paquin, 2011; Paquin, 2004).

Such international activities of non-central governments are often called *paradiplomacy* – in the sense that it occurs alongside the diplomacy of central governments (Michelmann & Soldatos, 1990; Aldecoa & Keating, 1999; Paquin, 2004). It has been a growing global phenomenon, and one that involves not only the governments in federations, but also the governments of 'world' or 'global' cities such as Montréal, New York, Paris and Shanghai. In this context, the international activities of substate actors must be put into a broader global perspective and we must recognize that the paradiplomacy of subnational governments is intensive, extensive, and permanent. Some substate actors enjoy considerable autonomy in the development of their international policies. They also devote considerable resources to paradiplomacy – sometimes even more than some sovereign states devote to their diplomacy. Also, they have more and more influence not only concerning global politics, but also concerning the definition of the central government's international policy.

As international actors, subnational governments have certain advantages over the national government. These benefits come from their ambiguous status, which is, in the words of James Rosenau, both 'sovereignty-bound' and 'sovereignty-free' (1990, p. 36). Their sovereignty-bound status within a nation-state allows the provinces to have access to federal decision-makers, including those who make international policies for the central government. Thus, unlike NGOs and other civil society actors, subnational actors enjoy privileged access to the diplomatic networks, including international organizations, and negotiating forums available to the national government. It is now common for subnational officials to speak on behalf of the national state in international forums, or to participate in the drafting of international agreements when the subject matter falls within their constitutional jurisdiction (Paquin, 2005; 2010).

On the other hand, the subnational actors also enjoy a 'sovereignty-free' status in global politics. Since they are not recognized as sovereign in their own right, they are able to act more freely than the nation-state. In that sense, subnational actors enjoy some of the benefits associated with NGOs. It is easier for them to adopt idealistic positions, and they have more latitude to take firm positions on sensitive subjects, for example, condemning human rights violations or concerning climate change issues. In contrast, the national-state must always adopt a more

nuanced and a more diplomatic approach on such issues since it cannot ignore the constraints of coalition politics or the effects its policies have on the nation-state's political or commercial interests (Paquin, 2005).

The ranges of tools available to the subnational actors in their international activities are almost as wide as those available to the central government in its diplomacy – with the obvious exception of the use of force. Many provinces have offices or 'mini-embassies' abroad that develop bilateral or multilateral relations with both sovereign governments and other non-central governments, including the creation of institutions of regional and trans-regional cooperation. Subnational officials are routinely included in national delegations (for example, the Canadian provinces are included in the Canadian delegation for the negotiation of a comprehensive free trade agreement between Canada and the European Union) and maintain relations with other international institutions such as UNESCO, the World Health Organization, the European Union and the World Trade Organization. Substate actors send missions abroad, and they participate in trade fairs and in private international forums such as the World Economic Forum in Davos. They also finance public relations campaigns to promote exports and attract foreign investment. Also, they host official visits from leaders of other governments. Some subnational governments even have a minister, and for that matter a ministry, responsible for external relations, as in the case of Quebec (Paquin, 2004).

However, subnational actors also face a number of constraints. Usually, because they are not recognized as actors under international law, they have to negotiate with the national government about the terms of some of their international activities, such as official missions to foreign countries or international organizations. Most subnational governments, with the notable exception of Belgian subnational governments, cannot sign real binding agreements under international law. In the case of the government of Quebec, its international agreements are "memoranda of understanding" or "*ententes*". The government of Quebec has signed more than 700 *ententes* since the 1960's including with sovereign states.

But it is at the level of budgetary resources that the differences between the substate actors and the nation-state are most evident. Even though the international relations budget of some subnational actors is considerable, the resources devoted to international relations by the nation-states dwarf these budgets. For instance, the overall budget of Quebec's Ministère des Relations internationales (MRI) is slightly over 125 million dollars, while the budget of its federal

counterpart, the Department of Foreign Affairs and International Trade (DFAIT) is close to 1 billion dollars. In addition, if we include the budget of the Canadian International Development Agency (CIDA) and the Department of National Defence, then we are talking a total foreign affairs budget of approximately 25 billion dollars. In addition, the annual budget of the Canadian embassy in Washington is equivalent to the entire annual budget of the MRI in Quebec, and this subnational government is probably the most active in international policy on the international level.

The rise of regional governments and of subnational paradiplomacy certainly has had a big impact on multi-level governance. Decisions taken at one level of government directly affect decisions of the other level of government. Most policies therefore require some form of coordination among international, national, regional and even local governments. The concept of multi-level governance was created within the framework of the European Union in order to explain the relation between the various levels of government in EU policy making (Marks, 1992). Multi-level governance means that there are multiple actors from various levels of government interacting to negotiate and implement public policy coming from the EU. The multi-level governance approach illuminates the interdependence between the local, regional, national and international levels of authority (Bache & Flinders, 2004).

If, at first, multi-level governance was developed as a way to study the European Union, it is now applied in various situations because, as we already stated, these days, virtually all government activities are affected by the jurisdiction of at least one intergovernmental negotiation, and frequently many more. This phenomenon is magnified in Europe by the process of European integration and in North America by the North American Free Trade Agreement (NAFTA) (Bache & Flinders, 2004). It can also be used to explain transborder relations over green issues.

1.2. Evolution of North American Green Paradiplomacy

Why are green issues taking a larger place in the subnational governments' agenda? It is now recognized that substate actors play an increasingly important role in environmental issues. Subnational and municipal governments are important because they are the principal actors involved in public transportation, urban planning, health, energy and natural resources policies. For example, the United Nations Development Programme (UNDP) has recognized a key role for local governments, federated states or sub-national jurisdictions in the fight against global warming, stating that "most investments to reduce GHG emissions and adapt to climate change

- 50 to 80 percent for mitigation (...) take place at the subnational and local levels" (United Nations Development Program, 2011, p. 3). And more globally, since environmental issues are increasingly complex and go beyond territorial boundaries, green paradiplomacy has become a new trend for federated states, and legitimizes their international action over environmental issues.

It was mainly around the beginning of 1960s that cross-border environmental issues became a matter of concern and were brought to public attention in North America. At that time, environmental problems affected larger territories than before, and their effects were observed in an undifferentiated way across state borders (Karkkainen, 2008; Wolf, 1997). Thus, to regulate these larger environmental issues, strong cooperation became necessary between all levels of governments, redefining traditional modes of governance to assume a cross-border multi-level governance perspective (Norman & Bakker, 2009, p. 102; Bruyninckx, Happaerts, & Van den Brande, 2012, p. 6; Chaloux, 2010; Chaloux & Paquin, 2012a).

Nevertheless, cross-border green paradiplomacy is not a recent phenomenon, even if public concern over this issue is quite recent. A study concerning cross-border interactions between Canada-US substate actors, published in 1976, identified more then 700 formal and informal interactions, of which 29% were related to environmental protection or natural resources (Vannijnatten, 2006). Today, even though bilateral green paradiplomacy has been observed all along the Canadian-US border, it is mostly in a multilateral perspective that green paradiplomacy has been developed in North America. In fact, cross-border relations have widened and deepened as a result of an institutionalization of cross-border relations within multilateral organizations such as the Conference of New England Governors and Eastern Canadian Premiers (NEG-ECP), the Council of Great Lakes Governors (CGLG), the Western Climate Initiative (WCI) and several other organizations present along the 49th parallel (Chaloux, 2012; Vannijnatten, 2006; Selin & Vandeveer, 2009; Chaloux & Séguin, 2012).

2. Environmental transboundary issues and the case of water

A transboundary issue of great interest in environmental studies inevitably concerns water management. While a large part of the literature focuses on the study of geopolitical tensions surrounding the issue of transboundary waters (Descroix & Lasserre, 2003; Victor, 2011; Ghiotti, 2006; Galland, 2008; Assouline & Assouline, 2009), another field of study has been developed in the literature around a new form of cross-border governance called the "watershed-based

approach" (Norman & Bakker, 2009; Hall, 2006; Bédard, 2004; McGinnis, 1999; Blatter, Ingram, & Doughman, 2001). In fact, according to McGinnis, a watershed-based approach "provides one of the best units for intergovernmental management" (1999, p. 498). Sharing the longest undefended border in the world, Canada and the United States share as well one of the world's largest watersheds with the Great Lakes and St. Lawrence River Basin (containing in itself nearly 20% of the fresh water on the planet), which over the years has required a cooperative attitude toward the management of this natural resource.

To better understand the complexity and the challenges of the Great Lakes water regime – and in corollary the challenges of a watershed approach - certain facts need to be kept in mind. Firstly, 95% of the US fresh surface water is contained in this specific watershed, and approximately 40 million people on both sides of the border rely on this basin for their water consumption (Hall, 2006, pp. 414-415). Moreover, only one percent of all this water is renewed naturally each year within the basin, which enhances the importance of the concepts of sustainable use and return flow. These facts alone support the importance attached to the study of the management of this hydrographic basin, from an environmental and economic perspective. Secondly, on a political level, the region (with some exceptions, which will be detailed later) is committed to the Boundary Waters Treaty of 1909 adopted by both federal governments. Nevertheless, there is a sharing of responsibilities with all federated states covered by the watershed, including eight US States (Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania and New York) and two Canadian Provinces (Ontario and Quebec), and also with all local governments and municipalities sitting along the basin, which increases the complexity of governance of the water resources (Chaloux, 2010; Norman & Bakker, 2009; Hall, 2006; Bielecki, 2006). And thirdly, the management of this resource involves much more than solely the environmental perspective. The Great Lakes - St. Lawrence River basin management is also related to navigation, tourism, energy, fisheries, agriculture and industries, which necessitates a collaborative attitude from each (contradictory and even conflicting) interest (Bielecki, 2006). In short, the common will to enhance water quality and protect the Great Lakes - St. Lawrence River Basin is conditioned and complicated by the multiplicity of interests, actors and institutions in the region. This section therefore reviews the principal aspects of water management in this area in order to facilitate comprehension of our case study which will be analyzed in Section 3 (the case of the Council of Great Lakes Governors and the Great Lakes -St. Lawrence River Basin Sustainable Water Resources Agreement).

2.1. Federalism and Water Management

As with many other environmental issues, water management jurisdiction is not assigned solely to a specific level of government in Canada or in the United States. Indeed, because water governance is an expansive concept, over time there have been some shifts between the actors, both domestic and transboundary, involved in water management (Norman & Bakker, 2010; Gerlak, 2005). The inclusion of a watershed-based approach has reconfigured how water management could be considered by stakeholders and has helped to shed light on this environmental regime, mostly developed by federated states, around this particular basin. This section explores the evolution of the distribution of authority in Canada and in the United States around that issue, and also explains the development of green paradiplomacy between the states and provinces surrounding the basin.

2.1.1. The United States

In the United States, the division of powers related to environmental issues is highly fragmented, due to the fact that the U.S. Constitution has remained silent on the distribution of environmental jurisdiction. For Denise Scheberle, "[d]ebates over the appropriate scope and division of power, responsibilities, and authority among the federal and states governments are certainly not over, and especially not for environmental federalism" (Scherberle, 2004). In fact, different centralization/decentralization trends have characterized US environmental policies since the beginning of US history. However, according to some authors, the nature of current environmental issues impacted on the distribution of authority over environmental issues, centralizing the authority with the federal government over the states (Knigge & Bausch, 2006, pp. 7-8; Fitzgerald, 1996). Nevertheless, the traditional decentralized nature of the United States has increased the importance of state legislation and policies over environmental issues (Parrish, 2006). Michael Kraft stated, "an estimated 70 percent of all important environmental legislation enacted by the states is done on their own initiative, not under federal policy requirements" (Kraft, 2004, p. 90).

Concretely, federal powers related to the environment come under the federal government's commerce clause (the purpose of this clause is to ensure national minimum standards and to avoid unfair competition by one state over other states), spending and taxing clause (Art. 1 sec. 8), supremacy clause, and power to make treaties (Fitzgerald, 1996). Even if this latter power limits the ability of states to enter into international treaties, according to Knigge and Bausch: "[c]ertainly states can pass laws committing themselves to meet the provisions of a particular treaty, but such laws are not binding under international law" (Knigge & Bausch, 2006, p. 7). In

fact, this does not restrict the development of environmental paradiplomacy, but it necessitates a higher degree of trust and reciprocity in the development of environmental regimes. Finally, states keep residual powers granted under the 10th Amendment to the U. S. Constitution.

If we look closely at water governance issues, it appears that since the 1990s, there is a stronger cooperation between federal and states authorities. According to Gerlak:

"Today's federalism is pragmatic, emphasizing collaborative partnerships, relying on adaptable management strategies with a focus that is problem and process oriented. In some ways, it more closely resembles the cooperative federalism or partnership ideal of shared power and decision making. [...] It promises greater accessibility to environmental and more local interests. It is holistic within a watershed or problem area and attempts integration of water quality and quantity concerns. Of course, pragmatic federalism is not without concern. Ultimately, its real test will be its ability to solve a particular watershed's ecological problems and better coordinate stakeholders and program activities, thereby overcoming the policy fragmentation that has become all too common in U.S. water policy." (Gerlak, 2005, p. 248)

2.1.2. Canada

Water governance is very fragmented in Canada, as in the United States. The Canadian Constitution gives the federal government the power to adopt laws related to navigation, international waters and fisheries, as well as more general responsibilities such as trade and commerce, POGG, criminal law, and interprovincial commerce. On the other hand, provincial powers directly related to water cover natural resources, water supply, public health, property and civil rights, and some other more general matters. However, there are certainly overlapping responsibilities concerning these constitutional powers and other general constitutional powers indirectly affecting water governance (such as agriculture, trade and commerce, and capacity to negotiate an international treaty, etc.) between the federal and provincial levels (Tremblay-McCaig, 2008; Norman & Bakker, 2010; Chaloux, 2010). According to some experts, this fragmentation "of federal and provincial laws in Canada [has] led to confusion over appropriate roles and scales of responsibility" (Norman & Bakker, 2010, p. 196), and is not immune to tension between different levels of government. Nevertheless, to some experts, water governance in Canada appears to be one of the most decentralized in the world (Hill & al., 2008, p. 316; Parrish, 2006)

In fact, in the specific case of water management in the Great Lakes – St. Lawrence River basin, the will of devolution from the federal government gave room for provinces to develop more comprehensive and specific water governance with their neighbouring US partners, recognizing the importance of a more general watershed-based approach to enhance the quality of the shared resource between the two countries (Hill & al., 2008). As well, the deployment of

paradiplomatic strategies, of which Quebec is a fervent advocate, has legitimized these international activities through the Council of Great Lakes Governors, and the further adoption of the Great Lakes – St. Lawrence River Basin Sustainable Resources Agreement in 2005.

In summary, it appears that the evolution of both Canadian and US political systems leaves room to manoeuvre in a transboundary paradiplomatic perspective to enhance water management taking a watershed approach.

2.2. Boundary Waters Treaty and the International Joint Commission

The understanding of transboundary waters governance in North America necessitates a review of the Boundary Waters Treaty (BWT) of 1909 and its International Joint Commission (IJC). Trying to provide a first tool for joint cooperation along transboundary waters, and trying to avoid future confrontation over water issues, the BWT aims to prevent and resolve disputes regarding quality and quantity of shared water resources. Setting several obligations, the BWT's main focus is to avoid water withdrawal and diversion, protect boundary waters from pollution and institute a formal, independent quasi-judicial commission with equal representation (three commissioners from each side of the border). The BWT and the IJC have served as cornerstones of cross-border water governance between Canada and the United States for over a century (Parrish, 2006; Karkkainen, 2008; Durfee & Shamir, 2006).

Despite the great influence of the IJC in water governance between Canada and the United States over the years, certain dimensions were left out of the BWT, such as legitimizing substate cross-border relations and agreements over water issues. In particular, the BWT has a restricted view of shared water, limiting boundary waters solely to

"the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary" (Boundary Waters Treaty, 1909, p. Preliminary article).

This definition excludes several sections on the Great Lakes and St. Lawrence River Basin, such as Lake Michigan (entirely on the US side), the hundreds of tributaries, and ground water (Hall, 2006; Paquerot, 2007; Bielecki, 2006; Toope & Brunnée, 1998). Moreover, the new mode of water governance since the 1980s, based on the watershed approach, seeks to focus more on the ecosystemic boundary of a watershed than on political boundaries, and in this perspective,

the Boundary Waters Treaty is considered more as a "territorial trap" in water governance (Norman & Bakker, 2009; Karkkainen, 2008, p. 1584). Therefore, according to Noah Hall, "the narrow scope of the Boundary Waters Treaty and the political limitations on the International Joint Commission necessitate additional protections and management programs for Great Lakes water resources on both sides of the international border" (2006, p. 418). Thus, the enhanced participation of states and provinces in water governance in the Great Lakes region is part of the answer to water governance, and is also the result of a reconfiguration of authority from the traditional state-centric approach to a multi-level governance approach based on the importance of substate and non-state actors in international environmental governance.

3. The case of the Council of Great Lakes Governors and the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement

As mentioned above, despite the establishment of a bi-national cooperative mechanism to deal with transboundary water issues, states and provinces quickly recognized the significance of a cooperative and multilateral approach at the substate level to deal with water quality and quantity over the entire basin. Nonetheless, on the US side, the recognition of a cross-border binding initiative was much harder, as article I section 10 and article II section 2 of the Constitution clearly prohibit states from adopting any binding agreement with any other state (in a compact¹) or with a foreign government without the consent of the US Congress. Thus, any bilateral or multilateral agreement at the substate level needs Congressional consent to achieve full force and effect. So, the first Great Lakes Basin Compact was not enacted until 1968, despite the fact that the agreement was negotiated twenty years earlier by states and provinces, and more importantly, the Congress refused to include Ontario and Quebec in the initial compact as official parties (Hall, 2006, p. 423).

Notwithstanding these difficulties, US states and Canadian provinces continued to cooperate. In 1983 they created the Council of Great Lakes Governors (CGLG) (hereafter the Council), where initially Quebec and Ontario participated only on an issue-specific basis (Hill J. P., 1989). Then, the Council adopted, jointly with Quebec and Ontario, the Great Lakes Charter in 1985. This agreement marked an anchor point in the cooperation among all states and provinces concerned by this watershed. The Great Lakes Charter clearly focused on a watershed

¹ An interstate compact (art. 1 sec. 10) is a legally binding agreement between two or more US states that requires the consent of Congress.

perspective, and on an interconnected water system (Bielecki, 2006; Valiante, 2004). In fact, all stakeholders agreed to individual commitments, with the aim 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 (Council of Great Lakes Governors, 1985).

Despite the voluntary nature of this agreement, and its weaknesses in the implementation, federated states nevertheless laid the foundations of a large cross-border cooperation at the subnational level. They institutionalized the cooperation by establishing a consultative process on the management of a common resource, based on particular consumptive uses or diversion of water (Hall, 2006; Bielecki, 2006; Bédard, 2004, pp. 140-141). Then, in 1997, Quebec and Ontario officially became associate members of the organization (Government of Québec, 2011).

Other agreements were annexed to the Charter in the following years, and then, in 2005, the Council adopted a compact and an agreement concerning explicitly massive water transfer in the Great Lakes and St. Lawrence River Basin. The Council became the secretariat of these agreements. The next sections will analyse the negotiations surrounding the compact and the agreement and then the implementation process.

3.1. Negotiations through the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement

Several concerns about possible massive water transfer in the late 1990s led the Council of Great Lakes Governors to seriously consider developing new paradiplomatic tools enabling them to respond to these fears and increase their leeway in managing the watershed. So, in 2001 premiers and governors adopted an Annex to the Great Lakes Charter, and then in 2005 they adopted a basin-wide agreement.

Recognized as "an important attempt to develop for the first time a comprehensive water management regime that is coordinated among the ten Basin jurisdictions" (Valiante, 2004, p. 526), the adoption of Annex 2001 of the Great Lakes Charter was an important moment in the foundation of a water management regime for the Great Lakes and St. Lawrence River Basin (Hall, 2006, p. 432). In fact, states and provinces agreed to develop a new binding agreement to

enhance the sustainable protection of the waters of the basin. Moreover, there was a common will to develop common water protection standards along the Great Lakes and St. Lawrence River Basin (Council of Great Lakes Governors, 2001). In December 2005, after the release of two drafts (July 2004; June 2005) and several modifications, premiers and governors approved the final text of the agreements (Bielecki, 2006).

Interestingly, the Council approved two specific agreements, creating a dual structure of governance for the basin. First, a compact, between the eight states, was negotiated. The relevant jurisdictions then had to officially adopt it through their legislative assembly. All states approved the text no later than July 2008 (Council of Great Lakes Governors, 2011). Once completed, the compact needed Congressional approval (Hall, 2006, p. 411), which was obtained and entered into force in October 2008. To include their Canadian partners, the Council also adopted a good faith agreement, modeled on the US compact.

3.1.1. The Compact

Officially known as the Great Lakes-St. Lawrence River Basin Water Resources Compact, this regional binding agreement was created for two main reasons. First, in order to prevent freeriding related to the protection of shared water resources, the compact creates obligations for each stakeholder, and "it is one of the few instruments that can adequately provide for regional stability and uniformity in decision making" (Bielecki, 2006, p. 498). Indeed, many scholars have shown the weaknesses of previous good faith agreements related to water protection and water management issues in the region (Hill J. P., 1989; Valiante, 2004; Paquerot, 2007; Bielecki, 2006; Hall, 2006). The adoption of the new compact then gave Great Lakes states the opportunity to enforce their collective control over the Great Lakes basin. The other main reason for the choice of an interstate compact relates to the common will to increase the states' leading role with respect to water management issues over that of the federal government. In fact, according to Hall, the Council wanted to avoid the possibility of federal government using the dormant commerce clause to permit water diversion outside the basin or outside the riparian states (Hall, 2006), and therefore, "the goal was to keep diversion authority within the Basin" (Bielecki, 2006, p. 202). The best way to achieve this goal was to adopt an interstate compact and to promote cooperative horizontal federalism:

While cooperative horizontal federalism does not preempt or prevent congressional action, it makes it politically less likely. Congress would need to overturn the express and collective legislative will of an entire region, something that has never occurred in the history of interstate water management compacts (Hall, 2006, p. 451).

In short, the clear will to enhance water management in a cross-border perspective pushed US states to adopt an interstate binding agreement. Nevertheless, to achieve the ultimate watershed approach goal, stakeholders also had to adopt a good faith agreement with Canadian provinces, which was done in parallel with the compact negotiations.

3.1.2. And the international non-binding agreement

The cross-border challenge related to embracing an ecosystemic view to dealing with water governance pushed states and provinces to negotiate an additional good faith agreement with all members of the Council of Great Lakes Governors. Modeled on the compact, the Great Lakes – St. Lawrence River Basin Sustainable Resources Agreement presents some innovations, in terms of transboundary relations, but also some risks in multi-level governance and cross-border paradiplomacy in North America.

Actually, Congress's opposition to including provinces as Parties to an interstate compact is not recent, as mentioned previously (Hall, 2006, p. 423). The only way to develop cross-border collaboration over water issues was by including provinces in transboundary organizations, and also by adopting good-faith agreements. These paradiplomatic means have been used for several decades, and it seems that the deep-seated collaboration of Great Lakes states, Ontario and Quebec increased the internalization of common norms, ideas and values by stakeholders, and helped to converge toward a regime where stakeholders act voluntarily and deliberately for a common good (La Branche, 2003; Genest, 2008). Thus, the simplest way to attain this objective was by creating this dual structure of governance.

Nevertheless, some risks are associated with the adoption of a non-binding agreement. One of the most important weaknesses stems from the inability of the Canadian provinces to use US federal legislation (the compact) to protect their interests (Paquerot, 2007). And according to the terms of this non-binding agreement, US states can change the process without the consent of the Canadian provinces. Also, Paquerot highlighted the fact that Quebec and Ontario represent more than 40% of the population living in the basin, but their voice is represented by just two of the ten actors (2007, p. 74). Consequently, to overcome these weaknesses, great confidence in all stakeholders is required, but it is not impossible to achieve.

3.2. The implementation of the agreement

As mentioned earlier, in 2005, the eight US border states of the Great Lakes basin, as well as Quebec and Ontario, adopted the Great Lakes St. Lawrence River Basin Sustainable Water Resources Agreement. The purpose of this agreement was clear: to avoid massive transfer of water outside the Great Lakes and St. Lawrence River basin. To do this, the ten states and provinces needed to incorporate the provisions into domestic law and meet the agreements' objectives.

What is the progress in this regard? On the Canadian side, both Ontario and Quebec have adopted legislation ensuring the sustainable protection of water in the Great Lakes and St. Lawrence River. In 2007, Ontario enacted the Act to amend the Ontario Water Resources Act to safeguard and sustain Ontario's water, which implements the cross-border agreement of 2005, prohibiting specifically the diversion of water outside the Great Lakes basin and limiting the possibility of inter-basin water transfers (Legislative Assembly of Ontario, 2007). Quebec followed with the adoption of a similar act in 2009, which affirmed the collective nature of water resources and provided stronger water resource protection (Gouvernement du Québec, 2009). On the US side, as mentioned earlier, states adopted the Great Lakes - St. Lawrence River Basin Water Resources Compact, which became law in 2008 (Council of Great Lakes Governors, 2011).

Therefore, the integration into domestic law – and the corollary commitment to this cross-border agreement – signifies a clear will of each stakeholder to comply with the new water governance regime.

4. Conclusion

The creation of a watershed-based regime to protect and preserve the water resources of the Great Lakes – St. Lawrence River basin represents a promising avenue in the development of transboundary green paradiplomacy in North America. The analysis of this case study raises several considerations for paradiplomacy and multi-level governance scholars.

The need to develop a common instrument to regulate water management issues in the Great Lakes - St. Lawrence River Basin is not a new phenomenon, as this paper revealed. In fact, since the adoption of the Great Lakes Charter in 1985, states and provinces have recognized the necessity for stronger instruments to enhance water quality and prevent water diversion and

withdrawal from the watershed. Indeed, the adoption of the two simultaneous agreements clearly illustrates that fact, but also reveals the political and legal challenges of the cross-border agreement (Hall, 2006, p. 445). The easiest way to achieve the common goal was by creating a dual structure of governance, which commits to a legally binding structure eight of the ten stakeholders involved in water governance of this watershed. To do this, all US states bordering the watershed had to adopt a regional compact, pledging them to an interstate agreement. Then, another non-binding agreement was also adopted, this time including Ontario and Quebec in the regime, giving them certain procedural powers in the Regional Body of governance. The dual agreements allowed federated states to transcend the constitutional limits and to propose a regional agreement based on common interests (Parrish, 2006). Finally, the good faith agreement gave the opportunity to create a regime that goes beyond the traditional idea of command and control towards a holistic view of transboundary cooperation. In addition, it went further than a mere good faith agreement, in order to optimize the achievement of common goals (recognizing the benefits of a certain constraint in the development of a water governance regime).

Regarding the reconfiguration of water governance, some authors have also argued that there has been a transfer of authority from international bodies (i.e. the IJC) to the sub-state level (Parrish, 2006). In accordance with multi-level governance and paradiplomacy literature, there is a need to reconsider the role of federal authorities with regard to environmental issues. Moreover, according to Karkkainen, central states would not be the best entities to meet the environmental challenges:

Maybe, to put it starkly, a contractual agreement between two sovereign states is not the kind of instrument-and not the right kind of institutional arrangement-that can actually DO something as complex and multidimensional as an "ecosystem approach to management," especially at this large, basin-wide, regional scale, and most especially given the extraordinarily complex suite of resources and stressors that comprise the system" (Karkkainen, 2008, p. 1584).

Therefore, this case study confirms the need for a broader perspective in studies on crossborder environmental governance, as subnational governments become more and more involved in sustainable development policies, and as several environmental issues directly affect their constitutional powers (Bruyninckx, Happaerts, & Van den Brande, 2012). For these reasons, "a major reorientation of governmental activities at all levels is essential. [...] (and) governance dos not imply a shrinking, but a shifting role for governments" ((Bruyninckx, Happaerts, & Van den Brande, 2012, p. 5) Still, research on green paradiplomacy and cross-border relations is barely emerging. Therefore, environmental issues have given stakeholders and scholars an opportunity to reconsider certain modes of governance and to propose new possibilities in cross-border relations at subnational levels in North America. The fact that in this particular case study, at a legislative level, all stakeholders integrated into domestic law the provisions of the agreement leads us to believe that they have a genuine desire to implement the objectives of this agreement. Nevertheless, more broadly, further studies on paradiplomacy could analyze whether the development of agreements within environmental regimes at the state level is sufficient to promote cooperation and achieve common goals, and what are the necessary conditions for this type of agreement to be implemented effectively by all stakeholders.

Bibliography

Aldecoa, F., & Keating, M. (1999). *Paradiplomacy in action: The Foreign Relations of Subnational Governments.* Portland: Editions Frank Cass.

Assouline, J., & Assouline, S. (2009). *Géopolitique de l'eau : Nature et enjeux*. Studyrama. Bache, I., & Flinders, M. (. (2004). *Multi-level Governance*. Oxford: Oxford University Press. Bédard, C. (2004). *Le Bassin du Saint-Laurent et les Grands Lacs. Cadre juridique*. Saint-Nicolas: Les Presses de l'Université Laval.

Bielecki, J. A. (2006). Managing Resources with Interstate Compacts: A perspective from the Great Lakes. *Buffalo Environmental Law Journal*, *14*, pp. 173-210.

Blatter, J., Ingram, H., & Doughman, P. M. (2001). Emerging Approaches to Comprehend Changing Global Contexts. In J. Blatter, & H. (. Ingram, *Reflections on Water: New Approaches to Transboundary Conflicts and Cooperation* (pp. 3-29). Cambridge: The MIT Press.

Boundary Waters Treaty. (1909, January 11). United States-Great Britain (for Canada). Bruyninckx, H., Happaerts, S., & Van den Brande, K. (. (2012). *Sustainable Development and Subnational Governments. Policy-Making and Multi-Level Interactions.* Palgrave Macmillan. Bulkeley, H. (2005). Reconfiguring environmental governance : towards a politics of scales and networks. *Political geography , 24* (8), pp. 875-902.

Chaloux, A. (2012). Fédéralisme, relations transfrontalières et changements climatiques : Le cas nord-américain de la CGNA-PMEC. Sarrebruck: Éditions universitaires européennes. Chaloux, A. (2010). Le Québec, les États-Unis et l'environnement . In G. Lachapelle, Le destin américain du Québec: américanité, américanisation et anti-américanisme (pp. 201-224). Québec: Presses de l'Université Laval.

Chaloux, A., & Paquin, S. (2012a). Green Paradiplomacy in North America: Successes and Limits of the NEG-ECP. In H. Bruyninckx, Happaerts, Sanders, & K. Van Den Brande, *Sustainable Development and Subnational Governments. Policy Making and Multi-Level Interactions* (pp. 217-236). Palgrave.

Chaloux, A., & Séguin, H. (2012, Juin). États fédérés et mise en oeuvre de traités climatiques internationaux : le cas du Québec. *Revue de droit de l'Université de Sherbrooke , 42*.

Council of Great Lakes Governors. (2011, February). *Great Lakes-St. Lawrence River Basin Water Resources Compact Implementation*. Retrieved May 1, 2012 from Council of Great Lakes Governors: http://www.cglg.org/projects/water/CompactImplementation.asp

Council of Great Lakes Governors. (1985, February 11). The Great Lakes Charter.

Council of Great Lakes Governors. (2001, June 18). The Great Lakes Charter Annex.

Criekemans, D. (2010). Regional Sub-State Diplomacy Today. Martinus Nijhoff.

Descroix, L., & Lasserre, F. (2003). *Eaux et territoires: Tensions, coopérations et géopolitique de l'eau.* Editions L'Harmattan.

Durfee, M., & Shamir, M. (2006). Can the Great Lakes of North America Survive Globalization? In P. Le Prestre, & P. (. Stoett, *Bilateral Ecopolitics. Continuity and Change in Canadian-American Environmental Relations* (pp. 145-156). Burlington: Ashgate.

Emerson, A. E. (2008). Assessing the Consistency of Subnational Agreements with International Norms: Water Policy in the Great Lakes-St. Lawrence River Watershed. University of Waterloo, Thesis requirement for the degree of Master of Environmental Studies.

Fitzgerald, E. (1996). The Constitutional Division of Powers with Respect to the Environment in the United States. In K. M. Holland, F. Morton, & B. Galliang, *Federalism and the Environment: Environmental Policymaking in Australia, Canada and the United States.* Westport: Greenwood Press.

Galland, F. (2008). *L'Eau : Géopolitique, enjeux, stratégies.* CNRS Editions.

Gattinger, M., & Hale, Geoffrey. (2010). *Borders and Bridges. Canada's Policy Relations in North America*. Toronto: Oxford University Press.

Genest, H. (2008). An Examination of the Limits Posed by State-Centrism on the Explanatory Power of Neoliberal Institutionalist Approaches to International Regimes: The Case of Substates and Regimes. *The BSIS Journal of International Studies*, *5*.

Gerlak, A. K. (2005). Federalism and U.S. Water Policy: Lessons for the Twenty-First Century . *Publius: The Journal of Federalism , 36* (2), pp. 231–257.

Ghiotti, S. (2006, Février 10). Les Territoires de l'eau et la décentralisation. La gouvernance de bassin versant ou les limites d'une évidence. *Développement durable et territoires*, p. 26. Gouvernement du Québec. (2009, June 11). *Loi affirmant le caractère collectif des ressources en eau et visant à renforcer leur protection.* Retrieved January 20, 2012 from Ministère du Développement durable, de l'environnement et des parcs:

http://www.mddep.gouv.qc.ca/eau/protection/index.htm

Government of Québec. (2011). *Council of Great Lakes Governors*. Retrieved mars 20, 2012 from Ministère des Relations internationales du Québec:

http://www.mri.gouv.qc.ca/en/relations_quebec/ameriques/amerique_du_nord/usa/resume/allian ce_grands_lacs_st_laurent.asp

Hall, N. D. (2006). Toward A New Horizontal Federalism: Interstate Water Management in the Great Lakes Region. *University of Colorado Law Review , 77*, pp. 405-456.

Hassenteufel, P. (2008). Sociologie politique: l'action publique. Paris: Armand Colin. Hill, C., & al., e. (2008). Harmonization versus subsidiarity in water governance: a review of water governance and legislation in the canadian provinces and territories. *Canadian Water Resources Journal*, 33 (4), pp. 315-332.

Hill, J. P. (1989). The Great Lakes Quasi Compact: an Emerging Paradigm for Regional Governance of U.S. Water Resources? *Detroit College Law Review* (1), pp. 1-24.

Howlett, M., Ramesh, M., & Perl, A. (2009). *Studying Public Policy: Policy Cycles & Policy Subsystems.* Toronto: Oxford University Press.

Karkkainen, B. C. (2008). The Great Lakes and International ENvironmental Law: Time for something completely different? *The Waine Law Review*, *54*, pp. 1571-1590.

Knigge, M., & Bausch, C. (2006, January 41). Discussion Paper. Climate Change Policies at the Subnational Level- Evidence and Implications. *Ecologic* .

Kraft, M. E. (2004). *Environmental Policy and Politics.* New York: 3rd Edition, Pearson Longman. La Branche, S. (2003). La transformation des normes de participation et de durabilité en valeurs?: réflexions pour la théorie des régimes. *Études internationales , 34* (4), pp. 611-629. Legislative Assembly of Ontario. (2007). *Bill 198, Safeguarding and Sustaining Ontario's Water Act.* Retrieved January 20, 2012 from Legislative Assembly of Ontario:

http://www.ontla.on.ca/web/bills/bills_detail.do?locale=en&BillID=1562

Marks, G. (1992). Structural Policy in the European Community. In A. (. Sbragia, *Europolitics: Institutions and Policymaking in the "New" European Community* (pp. 191-224). Washington D.C.: The Brookings Institute.

Matland, R. E. (1995). Synthesizing the Implementation Litterature: The Ambiguity-Conflict Model of Policy Implementation. *Journal of Pubic Administration Research and Theory*, 5 (2), pp. 145-174.

McGinnis, M. V. (1999). Making the Watershed Connection. *Policy Studies Journal*, 27 (3), pp. 497-501.

Michelmann, H., & Soldatos, P. (1990). *Federalism and International Relations: The Role of Subnational Units.* Oxford: Clarendon Press.

Norman, E. S., & Bakker, K. (2010). Governing Water Across the Canada US Borderland. In M. Gattinger, & G. Hale, *Borders and Bridges. Canada's Policy Relations in North AmericaBorders and Bridges. Canada's Policy Relations in North America* (pp. 194-212). Toronto: Oxford University Press.

Norman, E. S., & Bakker, K. (2009). Transgressing Scales: Water Governance Across the Canada-U.S. Borderland. *Annals of the Association of American Geographers*, 99 (1), 99-117. Nossal, K. R., Roussel, S., & Paquin, S. (2011). *International Policy and Politics in Canada.* Toronto: Pearson Prentice Hall.

Paquerot, S. (2007). Gestion intégrée de bassins versants: les défis d'une gouvernance légitime de l'immense bassin des Grands Lacs et du Saint-Laurent. *Économie et Solidarités , 38* (2), pp. 59-81.

Paquin, S. (2010). Federalism and Compliance with International Agreements. In D. Criekemans (Ed.), *Regional Sub-State Diplomacy Today* (pp. 173-197). Leiden: Martinus Nijhoff Publishers. Paquin, S. (2004). *Paradiplomatie et relations internationales: Théorie des stratégies internationales des régions face à la mondialisation*. Bruxelles: P.I.E.-Peter Lang.

Paquin, S. (2005). Quelle place pour les provinces canadiennes dans les organisations et les négociations internationales du Canada à la lumière des pratiques au sein d'autres fédérations? *Canadian Public Administration , 48* (4), pp. 447-505.

Paquin, S., & Chaloux, A. (2008). La diplomatie parallèle des États américains. *Bulletin d'histoire politique , 17* (1).

Parrish, A. L. (2006). Mixed Blessings: The Great Lakes Compact and Agreement, the IJC, and international Dispute Resolution. *Michigan State Law Review*, pp. 1299-1321.

Pressman, J., & Wildavsky. ([1973] 1984). *Implementation*. Berkeley: Univerisyt of California Press.

Rosenau, J. (1990). *Turbulence in World Politics: A Theory of Change and Continuity.* Princeton: Princeton University Press.

Sabatier, P. (1986). Top-Down and Bottom-Up Approaches to Implementation Research: a Critical Analysis and Suggested Synthesis. *Journal of Public Policy*, 6 (1), pp. 21-48. Scherberle, D. (2004). *Federalism and Environmental Policy*. Washington: 2nd Edition,

Georgetown University Press.

Selin, H., & Vandeveer, S. D. (2009). Changing Climates in North American Politics. Institutions, Policymaking and Multilevel Governance. Cambridge: The MIT Press.

Toope, S. J., & Brunnée, J. (1998). Freshwater Regimes the Mandate of the International Joint Commission. *Arizona Journal of International and Comparative Law*, *15* (1), pp. 273-288. Tremblay-McCaig, G. (2008). Le partage des compétences en matière de gestion de l'eau. In C. Choquette, & A. Létourneau, *Vers une gouvernance de l'eau au Québec* (pp. 47-66). Québec:

Éditions Multimonde.

United Nations Development Program. (2011). *Down to Earth: Territorial Approach to Climate Change.* United Nations Development Program, [Online].

Valiante, M. (2004). Harmonization of Great Lakes Water Management in the Shadow of NAFTA. *University of Detroit Mercy Law Review , 81* (4), pp. 525-544.

Vannijnatten, D. L. (2004, Winter). Canadian-American Environmental Relations: Interoperability and Politics. *The American Review of Canadian Studies*, 649-664.

Vannijnatten, D. L. (2006). Towards Cross-Border Environmental Policy Spaces in North America: Province-State Linkages on the Canada-U.S. Border. *AmeriQuests*, *3* (1), 1-19. Victor, J.-C. (2011). Les enjeux géopolitiques de l'eau: risques et tensions à venir. *Institut Kervegan: Conférence-débat*, (p. 16).

Wolf, A. T. (1997). International Water Conflict Resolution: Lessons from Comparative Analysis. *International Journal of Water Resources Development*, *13* (3), pp. 333-365.