

# The Evolution of the Law and Politics of Water

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Editors



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# Contents

<b>Contributors</b> .....	ix
<b>List of Abbreviations</b> .....	xv
<b>List of Tables</b> .....	xvii
<b>Part I Introduction</b>	
<b>1 The Evolution of Global Water Law</b> .....	3
Joseph W. Dellapenna and Joyeeta Gupta	
<b>2 Mesopotamia: A History of Water and Law</b> .....	21
Itzhak E. Kornfeld	
<b>3 Islamic Law and the Politics of Water</b> .....	37
Thomas Naff	
<b>4 Water in the Jewish Legal Tradition</b> .....	53
Richard Laster, Rabbi David Aronovsky, and Dan Livney	
<b>Part II Evolving National Law and Politics</b>	
<b>5 Brazil: The Evolution of the Law and Politics of Water</b> .....	69
Paulo José Leite Farias	
<b>6 South Africa: The Development of Water Law</b> .....	87
Michael Kidd	
<b>7 East African Water Regimes: The Case of Kenya</b> .....	105
David Nilsson and Ezekiel Nyangeri Nyanchaga	



<b>8 Israel: The Evolution of Water Law and Policy</b> .....	121
Richard Laster and Dan Livney	
<b>9 Russia: Historical Dimensions of Water Management</b> .....	139
Vladimir Kotov	
<b>10 India: Evolution of Water Law and Policy</b> .....	157
Philippe Cullet and Joyeeta Gupta	
<b>11 Australia: The Problem of Sustainability in Water</b> .....	175
Jennifer McKay and Simon Marsden	
<b>12 United States: The Allocation of Surface Waters</b> .....	189
Joseph W. Dellapenna	
<b>13 United States: The Emergence of Environmental Considerations</b> .....	205
Sandra Zellmer	
<b>Part III Evolving Supranational and Regional Water Law and Politics</b>	
<b>14 European Community Water Policy</b> .....	227
Paulo Canelas de Castro	
<b>15 Southern Africa: Evolving Regional Water Law and Politics</b> .....	245
Pieter van der Zaag	
<b>16 The Jordan Basin: Evolution of the Rules</b> .....	263
Robbie Sabel	
<b>17 The North American Great Lakes</b> .....	281
Noah D. Hall	
<b>18 The Río de la Plata Basin</b> .....	299
Griselda D. Capaldo	
<b>Part IV Current Trends in International Water Law</b>	
<b>19 Case Law on International Watercourses</b> .....	319
Lilian del Castillo-Laborde	
<b>20 International Cooperation on Water Resources</b> .....	337
Maria Manuela Farrajota	



Contents	vii
<b>21 Public Participation in Water Governance</b> .....	353
Jona Razzaque	
<b>22 The Market Alternative</b> .....	373
Joseph W. Dellapenna	
<b>Part V Conclusions</b>	
<b>23 The Challenges for the Twenty-First Century: A Critical Approach</b> .....	391
Joyeeta Gupta and Joseph W. Dellapenna	
<b>Index</b> .....	411



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## Chapter 17

# The North American Great Lakes

Noah D. Hall

**Abstract** The Great Lakes are a vast resource shared by two countries, ten states and provinces, and hundreds of Indian tribes or First Nations. They are the quintessential commons that have seen their share of tragedies. Addressing competing pressures of economic development and environmental protection is only part of the challenge. The real struggle has been governance: How is management of an international transboundary resource best accomplished under the legal and political limitations of constitutional federalism? This chapter analyses the international agreements, court decisions, interstate compacts, and federal statutes that created a transboundary water regime, considering in detail the Great Lakes– St. Lawrence River Basin Sustainable Water Resources Agreement and Great Lakes–St. Lawrence River Basin Water Resources Compact as models for responding to stresses on transboundary water resources from climate change.

**Keywords** Great Lakes • transboundary waters • interstate waters • United States • Canada • climate change

### 17.1 Introduction

The Great Lakes are the world's largest freshwater resource, holding approximately 95% of the fresh surface water in the United States and 20% of the world's supply (Great Lakes Commission 2003). The five Great Lakes (Lake Erie, Lake Huron, Lake Michigan, Lake Ontario, and Lake Superior along with the St. Lawrence River and connecting channels) contain about 5,440 cubic miles of fresh surface water, with another 1,000 cubic miles of stored groundwater in the basin (Grannemann 2000). About 40 million Americans and Canadians obtain their drinking water from this basin (International Joint Commission 2000). More fresh water is at stake here than any other single freshwater resource in the world. The system covers parts

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281

of eight states and two provinces within the U.S. and Canada: Wisconsin, Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Ontario, Pennsylvania, and Quebec. Hundreds of tribes and First Nations and thousands of local governments and municipalities also share legal responsibilities.

Managing Great Lakes water is necessarily an exercise in cooperation among multiple jurisdictions and levels of government, with numerous and potentially overlapping legal regimes. This transboundary challenge has produced a rich history of law and politics that continues to develop today and demonstrates the evolution in transboundary water management from simple allocation and dispute resolution to cooperative environmental protection of a shared resource. As climate change further stresses global freshwater supplies, disputes and conflicts over transboundary water resources will intensify. The most recent Great Lakes developments, the Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement and Great Lakes–St. Lawrence River Basin Water Resources Compact, provide a model for managing a transboundary water resource in the climate change era.

## 17.2 The Boundary Waters Treaty of 1909

The Boundary Waters Treaty (1909) provided the foundation for transboundary Canadian–American water management for a century. Before 1903, no legal regime governed use of Great Lakes water. As the Great Lakes region was relatively undeveloped until the late nineteenth century, there was little pressure on Great Lakes water resources and no need for international legal rules. By the turn of the century, both countries saw a need to avoid conflicts over use of the shared waters. The United States and Canada first established the International Waterways Commission in 1903 to address potentially conflicting rights in the countries' shared waterways (Woodward 1988: 326). The International Waterways Commission recommended that the two countries adopt legal principles of shared water use and form an international body to protect the boundary waters. In 1907, the International Waterways Commission drafted a proposed treaty, which eventually led to the Boundary Waters Treaty of 1909. The Treaty (1909: preliminary article) provides for joint management and cooperation between the United States and Canada for the shared boundary waters defined as:

the waters from main shore to main shore of the lakes and rivers and connecting waterways ... along which the international boundary between the United States and... Canada passes, including all bays, arms, and inlets thereof, 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.

While tributary rivers and streams, as well as tributary groundwaters, are excluded from coverage, this Treaty governs four of the five Lakes (since Lake Michigan sits entirely within the United States), and other rivers and lakes that straddle or cross the border (Hall 2006: 416–417).

Navigation and access to boundary waters, not water management, was the principle concern in 1909 (Jordan 1971: 66–69). Nonetheless, the first draft included a provision forbidding water pollution having transboundary consequences to be enforced by an

international commission vested with 'police powers' (Jordan 1971: 66–67). The U.S. Secretary of State objected to these provisions, agreeing only to an anti-pollution provision limited to the defined boundary waters and no enforcement jurisdiction for the international commission. Thus, Article IV provides: 'It is further agreed that the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other'. There was some opposition to even this more limited provision in the U.S. Senate when ratification was being debated, founded on the risk of creating an international water pollution police power. Canada responded by assuring the Senators that the provision would be enforced only in 'more serious cases' (Jordan 1971: 67).

While the anti-pollution provision is more limited than Canada would have liked, it establishes a clear standard regarding pollution of shared transboundary waters. Such pollution is just one form of transboundary water pollution, as transboundary pollution often follows an indirect path of tributaries and different media (i.e., airborne pollution that is deposited into water bodies through precipitation). The underlying legal principle of Article IV, that one country's pollution should not harm another country, provides a foundation for U.S.–Canadian international environmental law (Hall 2007).

This Treaty also addresses the taking and diversion of boundary waters. Article III provides that neither party may use or divert boundary waters 'affecting the natural level or flow of boundary waters on the other side of the [border]' without the authority of the International Joint Commission. The Commission is a six member investigative and adjudicative body with the United States and Canada equally represented by political appointees. It is well respected in both countries and is often commended for its objectivity and leadership on environmental issues (Hall 2007: 706). The Commission's reports rely on the best available science and are free of nationalistic biases, making it an important source of information for the public and decision makers (Hall 2007: 707). Scores of issues have been referred to the Commission for non-binding investigative reports and studies pursuant to Article IX. The Treaty only requires a reference from one of the countries to invoke this process, although as a matter of custom this has always been done with the support of both countries (Hall 2007: 706–707). This bilateral approach has strengthened the credibility of the Commission's non-binding reports and recommendations, and ensured sufficient funding for its efforts. These reports and their objective recommendations have enabled diplomatic resolution of numerous transboundary water disputes and crafting new water protection policies.

### 17.3 Interstate Water Management

Interstate management of water resources in the United States has involved a combination of federal regulatory mechanisms and interstate dispute resolution and cooperation mechanisms. Despite many legal tools, management of interstate waters has posed tremendous challenges as '[c]ommunity interest in navigation upon common waters of adjoining States gave rise to difficulties prior to the Constitution, are pressing today, and are bound to manifest themselves in the future'



(Frankfurter & Landis 1925: 696). As discussed by Zellmer (Chapter 13, Zellmer, this book), the historical emergence of water quality protection came in part through interstate disputes over shared water bodies. The federal government protects interstate water quality through the Federal Water Pollution Control Act as amended in 1972 (commonly known as the Clean Water Act). In contrast, most disputes regarding interstate water quantity management continue to be resolved or prevented through equitable apportionment litigation in the U.S. Supreme Court and interstate compacts. Both legal approaches have been used in the Great Lakes, and some background on the evolution of the approaches is useful before looking specifically at the Great Lakes.

### 17.3.1 *Equitable Apportionment*

An important aspect of the American constitutional federal structure is the jurisdiction of the U.S. Supreme Court over suits by one state against another. American states are co-equal sovereigns, and the Supreme Court provides a forum for binding resolution of disputes between the states. Using this authority, the Supreme Court has, on occasion, allocated interstate transboundary waters. Its approach to interstate transboundary water allocation is based upon heavy reliance on the specific facts and circumstances, an approach termed ‘equitable apportionment’. The need for equity in allocating transboundary waters was best stated by Justice Holmes in *New Jersey v. New York* (1931: 342–343):

A river is more than an amenity, it is a treasure. It offers a necessity of life that must be rationed among those who have power over it. New York has the physical power to cut off all the water within its jurisdiction. But clearly the exercise of such a power to the destruction of the interest of lower States could not be tolerated. And on the other hand equally little could New Jersey be permitted to require New York to give up its power altogether in order that the river might come down undiminished.

This principle also comes from the Supreme Court’s decision in *Kansas v. Colorado* (1907: 97–100):

One cardinal rule, underlying all the relations of the States to each other, is that of equality of right. Each State stands on the same level with all the rest. It can impose its own legislation on no one of the others, and is bound to yield its own views to none. Yet, whenever ... the action of one State reaches through the agency of natural laws into the territory of another State, the question of the extent and the limitations of the rights of the two States becomes a matter of justiciable dispute between them, and this court is called upon to settle that dispute in such a way as will recognize the equal rights of both and at the same time establish justice between them. ... We must consider the effect of what has been done upon the conditions in the respective States and so adjust the dispute upon the basis of equality of rights as to secure so far as possible to Colorado the benefits of irrigation without depriving Kansas of the like beneficial effect of a flowing stream.

Through these and other decisions, the U.S. Supreme Court established that no single state can command an entire transboundary water to the detriment of other riparian states.



### 17.3.2 *Interstate Compacts*

Interstate compacts are powerful legal tools that serves as an alternative to litigation before the U.S. Supreme Court. A compact is like a contract between states entered into through state legislation. Because interstate compacts increase the power of the states at the expense of the federal government, they are subject to congressional approval and then have the full force and supremacy of federal law. This allows the terms of a compact to be enforced in federal court and prevents states from ignoring their compact duties (Hall 2006: 409–411).

Historically, substantive interstate water compacts have followed one of two models—western and eastern (Reflecting where the models are found; some interstate water compacts confer no substantive rights, merely providing a mechanism for sharing information and conducting joint research; see §17.5.). Western water compacts, such as the Colorado River Compact, focus on allocating the waters of a shared river among the participating states. These compacts divide the pie into agreed pieces, restricting the amount of water available to each individual state. These compacts do not, however, provide any standards or even guidance for managing individual water withdrawals within the state's total allocation (Hall 2006: 411–412).

The two major eastern water compacts, the Delaware River Basin Compact and the Susquehanna River Basin Compact, take a different approach (Dellapenna 2005: 831). They create centralized interstate management authorities comprised of the participating states and the federal government. These compact commissions have broad regulatory powers for permitting and managing individual withdrawals or diversions of all waters in the respective river basins. The commissions even set regional standards for discharges of water pollution (Dellapenna 2005: 845). This centralized approach has obvious benefits for uniform management of a single resource, but requires a significant surrender of state autonomy (Hall 2006: 412).

Regardless of the underlying approach employed by such compacts, the greatest shortcoming is the political challenge of getting a compact enacted (Hall 2006: 412–413). This requires ratification by each party state's legislature of identical compact terms and approval by a majority in both houses of Congress, which can modify the terms of the compact to protect national interests. The process also requires negotiation and compromise up front, as no state can unilaterally modify the terms of the compact during ratification. This process is a political obstacle course, and several recent efforts have failed for political reasons (Hall 2006: 412–413). Nonetheless, interstate compacts represent a cooperative approach to interstate water allocation and can be used to implement interstate water management policies.

## 17.4 The Chicago Diversion Litigation

Despite abundant water supply in the Great Lakes, the region has not been immune from interstate disputes over diversions. Litigation between states, with original jurisdiction in the US Supreme Court, is one method of resolving interstate water

disputes. The Chicago diversion litigation (a whole series of *Wisconsin v. Illinois* cases) provides an example of the role that this approach can play in transboundary water management.

In the early 1880s, Chicago was booming when an outbreak of chronic water-borne illnesses resulting from sewage disposal into Lake Michigan (the source of local drinking water) via the Chicago river threatened the health of residents (Hall 2006: 419–420). Chicago, therefore, built a canal to reverse the flow of the Chicago River, changing its outlet from Lake Michigan to the Illinois River, and ultimately to the Mississippi River and the Gulf of Mexico. The project was bold, controversial, and ultimately successful in protecting public health and linking the Great Lakes with the Mississippi River. Missouri, now downstream from Chicago's sewage, brought an interstate nuisance action in the Supreme Court, unsuccessfully challenging Illinois's discharge of sewage into the Mississippi River system as an interstate nuisance under federal common law (*Missouri v. Illinois* 1906; see Chapter 13, Zellmer, this book).

With Missouri's challenge overcome and Chicago's population and sewage increasing, the city increased the diversions from Lake Michigan from 72 m<sup>3</sup>/s in 1900 to 241 m<sup>3</sup>/s by 1924 (*Wisconsin v. Illinois* 1929: 404). That year, Wisconsin, Michigan, and New York (later joined by most other Great Lakes states) sued Illinois in the Supreme Court. The complaining states alleged that the Chicago diversion had lowered levels in Lake Michigan, as well as Lakes Huron, Erie, and Ontario, by more than 6 in., harming navigation and causing serious injury to the complainant states' citizens and property. Illinois's defence was premised on necessity and federal approval of the diversion, as well as a denial that the diversion caused any actual injury (*Wisconsin v. Illinois* 1929: 410).

Former Supreme Court Justice and Secretary of State Charles Evan Hughes was appointed by the Supreme Court as special master to review evidence and make recommendations. His report found that Chicago's diversion lowered the levels of Lakes Michigan and Huron by 6 in. and Lakes Erie and Ontario by 5 in., causing damage 'to navigation and commercial interests, to structures, to the convenience of summer resorts, to fishing and hunting grounds, to public parks and other enterprises, and to riparian property generally' (*Wisconsin v. Illinois* 1929: 407–408). The Court adopted this report, concluding that the reduced lake levels caused the complaining states and their citizens 'great losses' (*Wisconsin v. Illinois* 1929: 409). The Court rejected Illinois' defence of authorisation by Congress, concluding that the federal permit was merely a response to the public health threat and not a federal decision on management of the navigable waters of the Great Lakes.

While generally supporting the claims of the complaining states, the Court recognized the public health implications and economic costs that would come from halting the entire Chicago diversion. The Court referred the matter back to the special master for determination of the proper relief. The master's report recommended a phased reduction in the Chicago diversion, allowing the city time to build adequate sewage treatment. The Court adopted the master's recommendations and by 1939 the allowable diversion was limited to 42.5 m<sup>3</sup>/s plus domestic pumping. Litigation continued for decades regarding Illinois's compliance with the ruling,

with the ultimate result being that the total allowable diversion was increased to 90.6 m<sup>3</sup>/s, the level at which it is now capped (*Wisconsin v. Illinois* 1980: 48).

The Supreme Court apparently recognised that Great Lakes water management was less an issue of apportionment of water rights and more an issue of defining the bounds of the states' shared reasonable use duties. While the opinions do not advance this proposition directly, it is worth noting that the author of the primary Chicago diversion opinion (Chief Justice William Howard Taft) was the former President whose administration had negotiated the Boundary Waters Treaty. Taft, an Ohioan, may have instinctively appreciated that the abundance of Great Lakes water made allocation unnecessary and that the shared importance of the resource among two countries and ten states and provinces made protection of its values (navigation, drinking supply, fishing, recreation, etc.) critical.

The Chicago diversion litigation leaves two key legal legacies. First, the Chicago diversion, authorized at 90.6 m<sup>3</sup>/s, remains the largest diversion of Great Lakes water out of the basin (International Joint Commission 2000). Second, while the Court's decisions stop short of absolutely prohibiting diversions, it prefers to protect the demonstrated interests of other states and preserve the integrity of the Great Lakes system. These legacies are an important part of the evolution of Great Lakes law.

## 17.5 The Great Lakes Basin Compact

The Great Lakes Basin Compact (1968) has not directly shaped the law of the lakes or had any substantive impact on water rights in the basin. It deserves brief mention because for several decades it was the only congressionally approved compact regarding Great Lakes water management, and it continues to provide a good example of information sharing interstate water compacts. Congress approved this Compact in 1968, although the Great Lakes states and provinces had negotiated it 2 decades earlier. It includes the eight Great Lakes states as members and creates a Great Lakes Commission comprised of representatives from the member states. It included a provision to allow Ontario and Quebec to join as parties, which Congress rejected. Nonetheless, Ontario and Quebec have recently joined the Great Lakes Commission as associate members (Hall 2006: 423).

The functions of the Compact and its Commission are limited to gathering data and making non-binding recommendations regarding research and cooperative programmes. The Commission can make advisory recommendations regarding 'uniform... laws, ordinances, or regulations relating to the development, use and conservation of the Basin's water resources. ...', but 'no action of the Commission shall have the force of law in, or be binding upon, any party state.' This compact is characterised as typical of the 'we'll keep in touch' approach used in many interstate water compacts in the eastern United States (Dellapenna 2005: 838). Dellapenna notes that '[n]ot surprisingly, such a "let's keep in touch" approach failed to accomplish much toward protecting the biological, chemical, and physical integrity of the rivers and lakes addressed in the particular compacts' (Dellapenna 2005: 839).

## 17.6 The Great Lakes Water Quality Agreement

In the 1960s, citizens and scientists became increasingly alarmed about water pollution in the Great Lakes. The United States and Canada therefore referred the pollution issue to the International Joint Commission in 1964. The Commission report in 1970 recommended new water quality control programmes and the need for a new agreement on cooperation on pollution. In 1972, Prime Minister Pierre Trudeau and President Richard Nixon signed the Great Lakes Water Quality Agreement. This Agreement recognized the grave deterioration of water quality, setting forth general and specific water quality objectives, providing for programmes and other measures directed toward achieving water quality objectives, and re-defining the powers, responsibilities, and functions of the Commission. Primary responsibility for implementation was left with the two federal governments (specifically, the US Environmental Protection Agency and Environment Canada).

The 1972 Agreement focused on phosphorous pollution. Sewage treatment was improved and phosphate detergent bans were adopted in both countries. This success was tempered by new scientific discoveries and resulting public pressure to address persistent organic chemicals that 'were already affecting the health of wild-life and could be a threat to human health' (Botts & Muldoon 2005: 27). The United States and Canada amended the Agreement in 1978 (art. II) with a new purpose:

[T]o restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem. In order to achieve this purpose, the Parties agree to make a maximum effort to ... eliminate or reduce to the maximum extent practicable the discharge of pollutants into the Great Lakes System. Consistent with the provisions of this Agreement, it is the policy of the Parties that [t]he discharge of toxic substances in toxic amounts be prohibited and the discharge of any or all persistent toxic substances be virtually eliminated.

The Parties signed another Protocol in 1987 to add provisions for 'remedial action plans' for 'areas of concern' and 'lakewide management plans' focusing on critical pollutants and drawing upon community involvement. In 2006, the two countries and the International Joint Commission began conducting another comprehensive review of the Agreement to address emerging threats to the health of the Great Lakes.

Despite the Agreements' goals, their implementation has been undermined by their sub-treaty status (never subject to approval by the US Senate) and its lack of enforcement provisions. But while the Agreements have not been enforced in domestic court proceedings (*American Iron & Steel Institute v. Environmental Protection Agency* 1996: 1001) it has given citizens an increased role in shaping policy on pollution in the Great Lakes. Before the 1972 Agreement, the International Joint Commission held public hearings on specific topics, but essentially conducted its business in private. Under increased citizen pressure about the environment, the Agreement changed this custom and opened the Commission up to the public. The International Joint Commission (1998) affirmed its commitment to public participation in its *Ninth Biennial Report* in these words: 'The public's right and ability to participate in governmental processes and environmental decisions that affect it must be sustained and nurtured. ... The Commission ... has come to expect, and

to provide opportunities to be held publicly accountable for their work under the Agreement.'

The increased public participation in decision-making compensates, to some extent, for the Agreement's lack of enforcement provisions. With increased public participation comes increased accountability for the two federal governments, and the Agreement has helped to create an informed and engaged citizenry leading to improved binational protection of the Great Lakes. An important element in the public participation under the Agreement is the Science Advisory Board, which is comprised of scientists, citizens, and industry representatives. Originally called the Research Advisory Board, this body has a direct line of communication to advise the International Joint Commission. Despite its name, the Science Advisory Board has not limited itself to technical matters, and its work has led to many policy accomplishments (Botts & Muldoon 2005: 184–188).

### 17.7 The Great Lakes Charter of 1985

The Great Lakes Charter (1985) was signed by the eight Great Lakes states and two provinces, but not submitted to Congress for approval as an interstate compact. It contains potentially strong commitments and a cooperative process for Great Lakes water management, if fully implemented. As a non-binding agreement, however, it remains an aspirational policy with no legal effect. This Charter has three key components integrated throughout the agreement: (1) the commitment of the states and provinces to manage and regulate new or increased consumptive uses or diversions of Great Lakes water greater than 7,600,000 l per day (1985: 8); (2) the commitment of the states and provinces to gather and report information on all new or increased withdrawals of Great Lakes water greater than 380,000 l per day (averaged over any 30-day period) (1985: 8); and (3) prior notice and consultation with all the states and provinces for new or increased consumptive uses or diversions of Great Lakes water greater than 19,000,000 l per day (1985: 4). If a state or province failed to adopt the promised regulations, it would lose its right to participate in the prior notice and consultation process. While not all states have fully met this regulatory commitment, they have met the information and reporting commitments. Yet poor compliance and under funded reporting programmes (primarily due to lack of political will) have caused a continued lack of data and information regarding Great Lakes water withdrawals.

The Charter's prior notice and consultation procedure could be characterized as a more specific version of 'we'll keep in touch' (Dellapenna 2005: 840). It provides that the state or province considering issuance of a permit for a new or increased consumptive use or diversion greater than 19,000,000 l per day (averaged over any 30-day period) will first notify the offices of the other governors and premiers, as well as the International Joint Commission. The issuing state or province will then 'solicit and carefully consider the comments and concerns of the other

Great Lakes States and Provinces' (1985: 2). If necessary, a 'consultation process' will 'seek and provide mutually agreeable recommendations to the permitting State or Province' (1985: 4). The Charter does not provide a remedy if this consultation process proves fruitless or if one state persists despite others' objections. If the Charter's terms had been a binding and enforceable compact, it could have played a major role in achieving comprehensive water management of the Great Lakes.

## 17.8 The Water Resources Development Act (WRDA) of 1986

Congress joined the Great Lakes water management debate in 1986, enacting section 1109 of the Water Resources Development Act (1986):

No water shall be diverted or exported from any portion of the Great Lakes within the United States, or from any tributary within the United States of any of the Great Lakes, for use outside the Great Lakes basin unless such diversion or export is approved by the Governor of each of the Great Lake States.

Thus, any Great Lake governors can veto a proposed diversion of Great Lakes water out of the basin. The statute also requires the unanimous approval of the governors before any federal agency can even study the feasibility of a Great Lakes diversion. Despite the statute's support state management of the Great Lakes, it suffers from numerous limitations that undermine its value. First, the statute contains no standards to guide the governors. Nor does it provide any judicial remedy to challenge a governor's decision, even by another Great Lakes state. There is no provision for citizen participation. These omissions may be explained by understanding the threat the statute was intended to address, namely proposed water diversions to other parts of the United States. The federal statute created a barrier to water diversions that would harm the region as a whole. The diversions that have actually been proposed since 1986 generally have been for uses within a Great Lake state but outside of the surface watershed.

Every Great Lakes state except Michigan has a significant portion (usually a majority) of their land and population outside of the watershed (where surface waters do not flow into the Great Lakes). Much of the resulting tension stems from the geographic fact that Michigan alone sits almost entirely within the Great Lakes basin. Thus, Michigan's governor can unilaterally stop any other Great Lakes state from diverting water within its own borders, but outside the basin, without concern for any reciprocal consequence. This is exactly what happened when Lowell, Indiana, located 4 mi from the Great Lakes basin divide, sought a diversion from Lake Michigan to replace local water supplies that suffered from unhealthy fluoride levels (Anin 2006: 142). This power discrepancy makes the federal statute politically vulnerable to repeal by Congress.

Further, the Water Resources Development Act (1986) is also limited by its narrow scope. It only applies to diversions out of the basin, not in-basin consumptive uses, and it does not apply to groundwater, which comprises over 15% of the total water supply in the Great Lakes basin (Grannemann 2000). These shortcomings are



particularly striking when compared with the Great Lakes Charter of 1985, which applies to both diversions and consumptive uses and to both surface and groundwaters. Nevertheless, the Act provides clear federal authority for opposing Great Lakes diversions. Congress had given the Great Lakes states a long leash, but it later encouraged the states to be more active and comprehensive in how they use their authority. Congress amended the WRDA (2000: §1962d-22) to include a policy:

[T]o encourage the Great Lakes States, in consultation with the Provinces of Ontario and Quebec, to develop and implement a mechanism that provides a common conservation standard embodying the principles of water conservation and resource improvement for making decisions concerning the withdrawal and use of water from the Great Lakes Basin.

Congress did not condition the states' veto power on the success of implementing a standards-based management mechanism (such as a compact). Nor did it need to. The states' recognition of the flaws in the Act was evidenced in the subsequent amendment to the Great Lakes Charter—the Great Lakes Charter Annex (2001).

## 17.9 Annex 2001

The region's governors and premiers signed an Annex to the Great Lakes Charter Agreement in 2001. Popularly referred to as 'Annex 2001,' it reaffirmed the commitments in the Great Lakes Charter and contained a new commitment (Annex 2001: 1) to:

[F]urther implement[] 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. ... [I]n order to adequately protect the water resources of the Great Lakes and [their] 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 ... Great Lakes Basin. The standard will also address proposed increases to existing water withdrawals and existing withdrawal capacity from the ... Great Lakes Basin.

To achieve these commitments, the Annex (2001: 2) provides a number of directives. The first is to develop 'Basin-wide binding agreement(s), such as an interstate compact'. Second, '[t]he 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'. Third, Annex 2001 proposes the following principles for the new standards for reviewing water withdrawal proposals: preventing or minimizing basin water loss through return flows and implementation of environmentally sound and economically feasible water conservation measures; 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; improvement of 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. The governors and premiers further committed to developing a decision-support system and technical information regarding Great Lakes waters resources.

While non-binding, the commitments and principles of the agreement created much excitement within the region. The concept of return flow—requiring diverted water to be returned to its source—could protect the lakes from being depleted by exports. Establishing water conservation obligations in a region accustomed to abundance would be a major step toward sustainable water use. And protecting all water-dependent natural resources in the basin, not just the Great Lakes themselves, might address the many local impacts of water withdrawals around the region. The scope of the agreement also had great promise. The Annex applied to all water withdrawals, not just diversions. In a region that has focused only on threats of diversions and ignored the effects of its own water use, this was a tremendous advance. The Annex also recognized the interconnection of all waters in the basin, including groundwater. In the Great Lakes, as elsewhere, law and policy has been slow to recognize the surface water-groundwater connection and the need to manage all water conjunctively.

The most interesting and promising principle was the improvement standard. Most environmental and natural resource protection statutes are designed to protect the environment from increased harms. For example, the US federal policy for wetland conservation is ‘no net loss’. In practice, this policy has allowed a slow but steady loss and degradation of natural resources. The improvement principle would change the existing paradigm, requiring improvement premised on the notion that limiting harm to an already damaged system is insufficient. Users of Great Lakes water must leave the resource better than they found it. The principle even holds potential for changing public attitudes toward water withdrawals. Individual projects would provide environmental benefits, not simply externalized costs. Over time, new projects would drive restoration of the Great Lakes ecosystem, not degradation of it. As with any new policy proposal, however, the improvement concept raises difficult questions: What exactly is an improvement? How much improvement would be enough to satisfy regulators? While the difficulty in answering these questions eventually undermined the improvement concept, the Great Lakes governors and premiers did meet their collective commitment to negotiate and draft implementing agreements. In late 2005, the international Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement was signed and the 3-year process of approval of the Great Lakes–St. Lawrence River Basin Water Resources Compact ended with President George W. Bush’s signature in 2008.

### **17.10 The Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement and the Great Lakes–St. Lawrence River Basin Water Resources Compact**

The Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement (2005) and Great Lakes–St. Lawrence River Basin Water Resource Compact (2008) (‘Great Lakes Agreement’ and ‘Great Lakes Compact’) represent an advance in



substantive legal rules for water use and cooperative management among the states and provinces sharing the Great Lakes basin. This section focuses on the Great Lakes Compact as a new model for interstate water management and the Great Lakes Agreement as a new model for sub-treaty international cooperation. To best understand the interstate and international management structures, it is important to first note the common standards (referred to as the 'decision making standard') for new or increased water withdrawals of Great Lakes basin water that are at the core of both proposals (Great Lakes Agreement 2005: §§201, 203; Great Lakes Compact 2008 §§4.9, 4.11): (1) All water withdrawn shall be returned to the source watershed less an allowance for consumptive use; (2) Withdrawals are to be implemented in a way that ensures no significant individual or cumulative adverse impacts to the quantity or quality of the waters and water dependent natural resources of the Great Lakes basin and the applicable source watershed; (3) Withdrawals will incorporate environmentally sound and economically feasible water conservation measures; (4) Withdrawals will ensure compliance with all applicable municipal, state, and federal laws as well as interstate 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 will provide efficient use of the water, and will avoid or minimize the waste of water; (b) If a proposal is for an increased withdrawal, whether efficient use is made of existing 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 uses sharing the water source; (d) The supply potential of the water source, considering quantity, quality, reliability, and safe yield of hydrologically interconnected water sources; (e) The probable degree and duration of any adverse impacts 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 avoiding or mitigation of such impacts; and (f) Whether a proposal includes restoration of hydrologic conditions and functions of the source watershed.

These criteria are unremarkable as they are grounded in the common law riparian rights (the doctrine of reasonable use) prevalent in Great Lakes states and provinces (although the expansion of the criteria to groundwater withdrawals is notable). The criterion requiring compliance with all applicable laws, agreements, and treaties has significant importance, especially as the key bilateral agreements regarding water management suffer from a lack of enforceability and private causes of action. By requiring compliance with the Boundary Waters Treaty and other agreements, the Great Lakes Compact elevates their terms to enforceable standards for new or increased water withdrawals.

While the improvement concept did not become a requirement for new or increased water withdrawals, it was incorporated into the decision making standard. Improvements are not strictly required, but can be considered, under criterion 5(f), in determining the reasonableness of the proposed use. Water users can propose restoration as a way of making their water use more compatible with the policy

goals in effect. Finally, the compact indicates that the common decision-making standard is only a minimum standard. States may impose more restrictive standards for water withdrawals under their authority. Some jurisdictions already have permitting standards in place, and this ensures that the compact in no way requires a weakening of state regulatory programmes.

### ***17.10.1 Management Under the Great Lakes Compact***

For constitutional and political reasons (see §17.10.2), the Great Lakes Compact only includes the American states. It creates two separate approaches to managing new or increased water withdrawals in the Great Lakes basin, based on whether the water is used inside or outside of the Great Lakes basin surface sub-watershed boundary. Water used inside of the Great Lakes basin is managed solely by each state individually, with limited advisory input from other states for very large consumptive uses. Water used outside of the basin (a diversion) is subject to collective rules and approval processes, including a general prohibition on most diversions. This Compact requires the states to 'create a program for the management and regulation of New or Increased Withdrawals [for use within the basin]... by adopting and implementing Measures consistent with the Decision-Making Standard' within 5 years (Great Lakes Compact 2008: §4.10). The states must report to the Compact Council, which is comprised of the governor or delegated representative of each state, regarding their implementation. The Compact Council must review the state programmes and make findings regarding their adequacy and compliance with the Compact. The states must further develop and promote water conservation programmes and a water resources inventory including both available water resources and water withdrawals within the state. Diversions of water outside the Great Lakes basin are generally prohibited subject to exceptions for intra-basin diversions (lake-to-lake transfers within the entire Great Lakes basin) and diversions to communities that straddle the basin divide (Great Lakes Compact 2008: §4.9). Even if a diversion qualifies under one of the exceptions, it is usually subject to the unanimous approval of the eight Great Lakes governors voting as the Compact Council.

The Compact Council has numerous other powers and duties. It can promulgate and enforce rules to implement its duties under the Great Lakes Compact, plan, conduct research, prepare reports on water use, and forecast water levels. Perhaps most importantly, it can conduct special investigations and institute court actions, including enforcement. Citizens can also bring legal actions in the relevant state court against any water user that has failed to obtain a required permit or is violating the prohibition on diversions. The broad enforcement provisions are complemented by similarly progressive public participation provisions. The compact provides minimum procedural public process requirements for the party states and Compact Council, including: public notification of applications with a reasonable time for comments; public accessibility to all documents (including comments); standards for determining whether to hold a public meeting or hearing on an application; and allowing open

public inspection of all relevant records. The Great Lakes Compact also requires formal consultation with federally recognized Tribes in the relevant state. Such consultation is handled primarily through either the Compact Council or Regional Body (§17.10.2).

### ***17.10.2 State-Provincial Cooperation Under the Great Lakes Agreement***

State-provincial cooperation has been a regional goal for decades, implicitly promised by the Great Lakes Charter and Annex 2001 and expressly encouraged by Congress in its 2000 amendments to Water Resources Development Act. State cooperation with Canadian provinces has obvious ecological and policy benefits, but raises fundamental legal and political concerns. The Compact Clause of the US Constitution (I(10)) provides that '[n]o State shall, without the Consent of Congress... enter into any Agreement or Compact with another State, or with a foreign Power'. The same section also provides that '[n]o State shall enter into any Treaty, Alliance, or Confederation'. The limitation on states entering into an 'Agreement or Compact,' even with a foreign government, is limited only by the political decision of Congress to consent, but the prohibition on states entering into a 'Treaty, Alliance, or Confederation' is absolute. In an attempt to meet the goal of state-provincial cooperation without running afoul of constitutional treaty limitations, the Great Lakes Governors and Premiers developed the Great Lakes Agreement (2005) as a non-binding, good faith agreement that includes the provinces of Ontario and Quebec. This dual structure creates a legally and politically acceptable mechanism for cooperation with Canadian provinces.

The question of what constitutes a 'Treaty, Alliance, or Confederation' versus an 'Agreement or Compact' could open the door to major constitutional issues of separation of powers and federalism. For the Great Lakes, there is a sensible answer. Congress has already exercised its treaty powers through the Boundary Waters Treaty of 1909, making any attempt by states to enter into a binding management arrangement with the provinces on a related subject an impermissible treaty. Furthermore, if Congress approached an agreement with the provinces as a compact, it would likely reject either the entire compact or the inclusion of the provinces. This, after all, is what happened when the Great Lake states proposed including the provinces in the Great Lakes Basin Compact (1968) over 50 years ago (see §17.5).

While Congress might not allow a binding agreement between the states and provinces, its 2000 amendments to Water Resources Development Act expressed a desire for the states to work 'in consultation with' the provinces to develop a Great Lakes water management agreement (Water Resources Development Act 2000: §1962d-20(b)(2)). The states chose interpret this congressional encouragement not as permission to negotiate a compact with the provinces, but rather to develop a non-binding cooperative approach to Great Lakes water management that includes the provinces.

The Great Lakes Compact incorporates the provinces through the Great Lakes Agreement's 'Regional Body', comprised of representatives from each state and

province, and charges that body with responsibility to conduct the ‘Regional Review’ procedure. The Regional Body’s authority is procedural rather than substantive; its determinations are advisory rather than final (Great Lakes Agreement 2005: §201). The Regional Body’s role includes notice, consultation, and public participation, but stops short of final decision-making. The states and the Compact Council need only consider (but are not obliged to follow) Regional Review findings (Great Lakes Compact 2008: §4.7(2)). The Regional Review process is also limited to ‘regionally significant or potentially precedent setting’ proposals (as determined by a majority of the members of the Regional Body) and the exceptions to the prohibition on diversions discussed above.

The Regional Review process avoids infringing on federal treaty powers, but still gives the provinces an evaluative and procedural role that may prove useful for them. Despite the Great Lakes Agreement’s non-binding status, Canada is generally pleased with the Great Lakes Compact and the Great Lakes Agreement. Canada’s primary concern is that the United States, with significant population growth in the south and southwest far from the Great Lakes basin, will look to divert Great Lakes water to other parts of the country. Canada welcomes any legal limitations of Great Lakes diversions within the United States.

## 17.11 Conclusion

As demand for freshwater grows worldwide, transboundary waters will be under increasing pressure, leading to disputes over water rights and usage. In the past century, most transboundary water rights disputes were resolved by allocating access and use among competing parties. This approach did little to ensure protection of the transboundary freshwater ecosystem. It has also done little to ensure that the water is used sustainably. More recently, transboundary water management has focused on environmental protection and sustainable use—a result, in part, of a growing role for the public in managing transboundary waters. The evolution towards environmental protection and active citizen participation gives reason for optimism as climate change puts more pressure on freshwater resources in the twenty-first century.

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