

The Great Lakes Water Agreements

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The Great Lakes comprise the largest surface freshwater system on Earth, containing roughly 84 percent of the freshwater in North America and about 21 percent of the world's total freshwater supply (see Figure WB 2.1). The Great Lakes Basin is home to more than 30 million people in the United States and Canada and accounts for 7 percent of American farm production and 25 percent of Canadian farm production (US EPA 2008). Freshwater is among the region's most valuable and important resources—economically, ecologically, and culturally. In the last century, however, these resources have been subjected to heavy pollution and increased withdrawals and diversions often leading to adverse ecological and community impacts. In response, many have called for more effective and coordinated management of the Basin's freshwater resources. The Great Lakes–St. Lawrence River Basin Water Resources Compact (not to be confused with the Great Lakes Basin Compact of 1968) is the most recent and comprehensive in a long series of legislative actions to strengthen and coordinate basin water management while protecting it from use by interests outside the region.

History of Shared Water Resource Management

Water management concerns in the Great Lakes Basin have for decades been largely centered on concerns about pollution and diversion of the water resources and how best to protect those resources from out-of-basin interests. Given the location of the basin at the border of the U.S. and Canada, many of these problems—and the policies designed to address them—are transboundary in nature.

Since the early 20th century, many compacts, treaties, and agreements have sought to coordinate management of the basin's water resources (Table WB 2.1). These agreements have evolved from an emphasis on data collection to more comprehensive water management policies and procedures. The latest round of adjustments was initiated in 1998, when the Province of Ontario approved a permit for a private interest to extract 160 million gallons of Lake Superior water per year to be sold in Asia.¹ This led to a public outcry both in Ontario and neighboring U.S. states that rely on Lake Superior water. In response, the Great Lakes governors and the premiers of Ontario and Quebec negotiated

1. As a Canadian province, Ontario was not subject to out-of-basin diversion restrictions established in the Water Resources Development Act of 1986.



FIGURE WB 2.1 THE GREAT LAKES BASIN: HISTORY OF SHARED WATER RESOURCE MANAGEMENT.

Source: Pacific Institute 2011.

and then, in 2001, signed “Annex 1” to the 1985 Great Lakes Charter, which committed the parties to develop a collaborative water management system for the basin (CGLG 2010).

After significant further efforts, eight U.S. states and two Canadian provinces² signed the Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement in 2005. This agreement provided a framework within which these states and provinces can collaboratively protect and manage their shared freshwater resources (CGLG 2005a). The United States then developed the Great Lakes–St. Lawrence River Basin Water Resources Compact to set forth the policies and practices by which the U.S. states adhere to their commitments under the Agreement. In 2008, it was ratified by all eight states, approved by the U.S. Congress, and signed by President George W. Bush (US EPA 2009; GLWI 2009). The Compact becomes fully binding in 2013 when states are required to formally establish their own water withdrawal regulation and management programs (SOP DEP 2011).

2. Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, Quebec, and Ontario are the 10 states and provinces that signed the Agreement.

TABLE WB 2.1 Compacts, Agreements, and Legislation Governing the Management of Great Lakes Basin Freshwater Resources

Name	Year	Stipulations / Function
Boundary Waters Treaty	1909	Established the International Joint Commission to examine and resolve disputes between the U.S. and Canada over use of the Great Lakes freshwater resources (GLWI 2009)
Great Lakes Basin Compact	1968	Established the Great Lakes Commission, whose authority was largely limited to collecting data, publishing reports, and making nonbinding technical and policy recommendations related to water management in the basin
The Great Lakes Water Quality Agreement	1972, 1978 (renewed)	Reaffirmed the rights and obligations of both countries under the Boundary Waters Treaty and outlined a series of commitments to ensure protection of basin ecosystems
The Great Lakes Charter	1985	Established a prior notice and consultation process for large water withdrawals, a cooperative resource-management program, and a Water Resource Management Committee to identify data needs, among other things (voluntary, not legally binding) (CGLG 2001)
The Water Resources Development Act	1986	Required approval from all eight states for any diversions taking water out of the basin (GLWI 2009)
Annex 1 to the Great Lakes Charter	2001	Committed basin states and provinces to develop a collaborative water-management system for the basin (Squillace 2007)
Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement	2005	Outlines framework for management system committed to in 2001 Annex (CGLG 2005a)
Great Lakes–St. Lawrence River Basin Water Resources Compact	2008	Establishes procedures and policies that constitute American adherence to the 2005 Agreement (CGLG 2005b)

Function and Governance of the Agreement and Compact

The goals of the 2005 Agreement are to maintain and strengthen cooperative and sustainable management, ecosystem protection, and data collection established in previous agreements. It also seeks to move beyond the previous agreements by adapting management models to changing climate conditions (which is quite uncommon for transboundary water agreements [Cooley et al. 2009]), emphasizing public participation in Basin management, and incorporating elements of the precautionary principle into the decision-making processes (CGLG 2005a, Squillace 2007). The Agreement is notable in that it provides a framework for jointly managing both surface and ground waters within the basin (CGLG 2005a).

The 2008 Compact also has a number of important features. Unlike the Great Lakes Basin Compact of 1968, which was consultative in nature, the 2008 Compact is legally binding and calls for state-level management plans that define a process by which to

manage new withdrawals and diversions (GLC 2003, CGLC 2005b). The major stipulations agreed to in the Compact include (1) a requirement that each state create a program to manage and regulate all new or increased withdrawals in their jurisdiction; (2) stringent restrictions on new or increased diversions outside the basin; and (3) an inventory, registration, and reporting requirement for all withdrawals in excess of 100,000 gallons per day, among other provisions (CGLC 2005b). The Compact exempts removal of water in small containers (i.e., commercial bottled water) or water included in other products (e.g., beverages, paint) from its out-of-basin diversion restrictions (CGLC 2005b). It does not specify a threshold volume for regulation of withdrawals or a process by which to do so but, rather, leaves this to the individual states (Squillace 2007).

The Compact explicitly calls for the creation of the Great Lakes–St. Lawrence River Basin Water Resources Council to act as its main governing body. The Council consists of the governors of the eight U.S. member states, who are tasked with conducting research, collecting data, and overseeing disputes related to the water management of the basin (CGLC 2005b, Squillace 2007). Each member of the Council is given one vote, and decisions brought before the Council are decided by simple majority (CGLC 2005b). Each governor has veto power over any out-of-basin diversions (even when water is diverted out of basin but within member states) in excess of five million gallons per day (Squillace 2007). The Council of Great Lakes Governors (CGLG)—established in 1983 to promote regional cooperation on a wide range of issues—acts as the secretariat to the Great Lakes–St. Lawrence River Basin Water Resources Council (CGLC 2011). While technically a separate entity from the CGLC, the 2008 Council consists of the same membership and could be seen as an expansion of the CGLG's authority.

Support for and Criticisms of the Compact

The Compact has been widely supported and lauded for pioneering the way for sustainable and collaborative whole-basin management schemes across state and national boundaries. Many contend that whole-basin management that cuts across political borders provides a better opportunity to address concerns of sustainability and ecosystem health, and to generally manage and regulate the natural resource more coherently and effectively (Ericson 2007, Forster and Marley 2008, PEC 2008, Office of Betty Sutton 2008).

However, the Compact has also faced numerous criticisms, typically regarding ideological views on the appropriate ownership of water resources. Some, such as Ohio state senator Tim Grendell, believe that the Compact puts all water resources in the public trust, threatening property owners' rights to groundwater (Henry 2007, Oosting 2008). Others, such as U.S. representative Bart Stupak, assert that bottled water's exemption from the Compact's diversion ban may allow private interests to bypass the Compact and take Great Lakes water out of the public trust (Egan 2008).

In addition to these debates, some have questioned the effectiveness of the Compact's stipulations in meeting its stated objective of ensuring sustainable use of freshwater resources and ecological integrity in the Basin. For instance, one critique laments the Compact's and Agreement's marginalization of the International Joint Commission, calling the Compact a move away from true bilateral dispute resolution (as enacted by the Boundary Waters Treaty of 1909) to a largely subnational approach (Parrish 2006). Another contends that the Compact is inconsistent with respect to definitions for

“diversions” and “products,” potentially opening the door for weaker state control over water exports. This same critique argues that, despite apparent commitments to public participation and addressing climate change, the Compact in fact has few provisions that implement these commitments in meaningful ways (Olson 2006).

Professor Mark Squillace of the University of Colorado Law School has provided one of the most pointed critiques (see Squillace 2007). He contends that the Compact's focus on new withdrawals as opposed to existing withdrawals and consumptive uses severely limits its ability to address adverse impacts on freshwater ecosystems. He further argues that the Compact inappropriately restricts state power to divert water to areas within their state lines but outside the basin. Further, the Compact's ban on out-of-basin diversions may place greater strain on nearby watersheds that have less water to begin with, effectively transferring environmental impacts out of the basin rather than minimizing them. While prohibiting out-of-basin diversions, the Compact does not provide any stipulations on the diversion of water from watershed to watershed within the basin. Because of this, it may not adequately protect from significant ecological impacts in certain areas within the basin, particularly vulnerable upper watersheds (Squillace 2007).

Conclusion

Several decades of negotiations and legislation have led to the creation of the Great Lakes Compact—a unique transboundary, whole-basin approach to water management in the Great Lakes Basin. The Compact highlights a commitment to collaborative management of shared freshwater resources with the aim of preventing the disjointed and ineffective water management seen in many parts of the world. That said, given the highly sensitive nature of water—ecologically, politically, and culturally—the Compact has inevitably led to a wide range of concerns regarding its impacts on the environment, property rights, and states' rights, as well as debates as to whether it is structured in a way that best enables sustainable water use and ecosystem protection. Answers to these questions remain to be seen but will become clearer after the full provisions of the Compact come into effect and are implemented.

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