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Toward A New Horizontal Federalism: Interstate Water Management in the Great Lakes Region

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TOWARD A NEW HORIZONTAL FEDERALISM: INTERSTATE WATER MANAGEMENT IN THE GREAT LAKES REGION

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This article presents a new model for environmental policy, called cooperative horizontal federalism. The cooperative horizontal federalism approach utilizes a constitutional mechanism for states to bind themselves to common substantive and procedural environmental protection standards, implemented individually with regional resources and enforcement. Here, the concept of the cooperative horizontal federalism model is illustrated through the recently proposed Great Lakes-St. Lawrence River Basin Water Resources Compact. Under this proposed compact, the eight Great Lakes states would cooperatively manage the world's largest freshwater resource under common minimum standards, which are then incorporated into state law and implemented individually. This cooperative horizontal federalism approach avoids the "race to the bottom" that often undermines individual state efforts, but still allows states the flexibility to craft environmental policies best suited to their specific needs and preferences.

INTRODUCTION

For over one hundred years, federal and state governments have struggled with management of the Great Lakes. A vast resource shared by two countries, ten states and provinces, and hundreds of Indian tribes and First Nations, the Great Lakes are a quintessential commons that have seen their share of tragedies. Addressing the potentially competing

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pressures of economic development and environmental protection is only part of the challenge. The real struggle has been in governance: How is management of an international transboundary resource best accomplished under the legal and political limitations of constitutional federalism? This question is not unique to the Great Lakes. With the federal government stepping back (or being pushed back) from environmental protection, states need to explore new options for managing regional resources and environmental problems that cross political boundaries.

A proposal being considered by the Great Lakes states and provinces takes a new approach to interstate environmental protection. Under the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact[1] and companion Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement,[2] the world's largest freshwater resource would be protected and managed pursuant to minimum standards administered primarily under the authority of individual states and provinces. The proposed compact and agreement put riparian water use rules and environmental protection standards into a proactive public law regime in eight states and two Canadian provinces. The standards represent numerous advances in the development of water use law, including uniform treatment for ground and surface water withdrawals, water conservation, return flow, and prevention of environmental impacts.

The significance of the proposed compact and agreement goes far beyond water law and the Great Lakes region. What has been proposed is a new federalist model for creating common state environmental standards to protect interstate natural resources.[3] The model can be termed "cooperative horizontal federalism." Cooperative horizontal federalism is an approach in which states jointly develop common minimum legal standards (substantive and/or procedural) to manage a shared resource, but leave the individual states with the flexibility and autonomy to administer those standards under state law. In the context of Great Lakes water management, cooperative horizontal federalism provides a mechanism for the states to craft regional minimum standards to govern water withdrawals, while allowing states to develop individual programs tailored to their specific needs. The discretion given to states is not absolute; they are subject to programmatic review and enforcement by their

1. Great Lakes-St. Lawrence River Basin Water Resources Compact, Dec. 13, 2005, http://www.cglg.org/projects/water/docs/12-13-05/Great_Lakes-St_Lawrence_River_Basin_Water_Resources_Compact.pdf (last visited Feb. 6, 2006) [hereinafter Proposed Compact].

2. Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement, Dec. 13, 2005, http://www.cglg.org/projects/water/docs/12-13-05/Great_Lakes-St_Lawrence_Basin_Sustainable_Water_Resources_Agreement.pdf (last visited Feb. 6, 2006) [hereinafter Proposed Agreement].

3. *See infra* Part I.

peers. Under this approach, the regulatory standards, programmatic obligations, and enforcement mechanisms come from the states' obligations to each other, not from a congressional mandate. This cooperative horizontal federalism model for interstate environmental protection creates a third option to federal and individual state policymaking.

Part I of this article provides a preliminary background on interstate water management compacts as an exercise of horizontal federalism. Interstate compacts are central to the concept of cooperative horizontal federalism, since interstate compacts are the constitutionally permitted mechanism for states to create legal obligations to each other.[4] While interstate compacts have been used to address a range of issues, from resolving boundary disputes to establishing penal jurisdiction,[5] their potential goes far beyond these applications. Interstate compacts were first used to resolve disputes and establish rights regarding shared water bodies over seventy years ago.[6] Historically, the water compacts in place throughout the country have employed two general approaches for managing interstate water resources and regulating water use. The first approach uses compacts to simply divide and allocate the water resource among the individual states with no guidance as to how the states should individually manage their water use.[7] The second approach utilizes compacts to create a centralized regulatory authority with management power over the entire watershed.[8]

The Great Lakes states considered but ultimately rejected both of these existing models, proposing instead the new cooperative approach based on common standards enforced by individual states. While bound by common standards, the states would retain the flexibility to exercise their compact duties in ways best suited to meet their local environmental and economic needs. States can thus tailor their application of the standards to be consistent with their common law, statutory, and regulatory traditions, subject to the programmatic review of collective states. To achieve these goals, the Great Lakes states have created a framework for the cooperative horizontal federalism model.

Part II of this article explains the history of water management in the Great Lakes region and the social, political, and ecological factors that led to the new cooperative horizontal federalism model. Over one

4. U.S. CONST. art. I, § 10, cl. 3.

5. *See* Felix Frankfurter & James M. Landis, *The Compact Clause of the Constitution—A Study in Interstate Adjustment*, 34 YALE L.J. 685, 696–98 (1925).

6. *See* Colorado River Compact, 70 CONG. REC. 324 (1928).

7. *See id.*; Rio Grande Compact, 53 Stat. 785 (1939).

8. *See* Delaware River Basin Compact, 75 Stat. 688 (1961), Susquehanna River Basin Compact, 84 Stat. 1509 (1970).

hundred years of international treaties, Supreme Court litigation, interstate compacts, handshake agreements, federal statutes, inconsistent state laws, and a patchwork of common law rules and local decisions have left the waters of the Great Lakes with few meaningful protections from withdrawals and diversions, and the region's water users with an unpredictable and uncertain legal regime. Necessity is the mother of invention, and the shortcomings of existing legal regimes demonstrate the need for a new cooperative horizontal federalism approach. The Boundary Waters Treaty of 1909 between the United States and Canada,[9] the Supreme Court's landmark decisions regarding Chicago's diversion of Great Lakes water (the *Wisconsin v. Illinois* cases),[10] the original Great Lakes Basin Compact,[11] the Great Lakes Charter of 1985,[12] the various state legal regimes (statutory and common law), the federal 1986 Water Resources Development Act,[13] and the Great Lakes Charter Annex of 2001[14] are each briefly discussed to demonstrate the failures of federal and individual state policies and the need for new collective policy solutions.

Part III analyzes the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact as a model for cooperative horizontal federalism. The analysis begins with the substantive standards for new water withdrawals under the proposed compact. The standards, anchored in common law riparian principles and incorporating advances in the public law of water management, are the foundation of a sustainable water use policy. The second element of the compact analysis is the management regime in which the standards will be applied, utilizing both state implementation and regional cooperation and enforcement. The final element of the analysis focuses on the companion Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement, which provides for sub-treaty cooperation between the states and Canadian provinces. The proposed compact and agreement provide a detailed and realistic model

9. Boundary Waters Treaty, Jan. 11, 1909, United States-Great Britain (for Canada), 36 Stat. 2448.

10. *See* Wisconsin v. Illinois, 449 U.S. 48 (1980); Wisconsin v. Illinois, 388 U.S. 426 (1967); Wisconsin v. Illinois, 289 U.S. 395 (1933); Wisconsin v. Illinois, 281 U.S. 696 (1930); Wisconsin v. Illinois, 281 U.S. 179 (1930); Wisconsin v. Illinois, 278 U.S. 367 (1929).

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

12. The Great Lakes Charter, Feb. 11, 1985, *reprinted in* Great Lakes Governors' Task Force, Council of Great Lakes Governors, Final Report and Recommendation on Water Diversion and Great Lakes Institutions (1985) at app. III, http://www.cglg.org/pub/charter/index.html (last visited Nov. 20, 2005) [hereinafter Great Lakes Charter].

13. 42 U.S.C. § 1962d-20 (2000).

14. Annex to the Great Lakes Charter, June 18, 2001, http://www.cglg.org/1pdfs/Annex2001.pdf (last visited Nov. 20, 2005) [hereinafter Annex 2001].

for applying the cooperative horizontal federalism approach to a challenging environmental problem.

Part IV develops the thesis that the cooperative horizontal federalism model should be considered as a third alternative in the ongoing federal versus state environmental regulatory debate. Cooperative horizontal federalism gives states the flexibility to craft regional solutions but avoids the "race to the bottom" that can undermine environmental protection. The approach also avoids commerce clause challenges, providing a more durable legal structure. While a strong federal role or individual state action may still be desirable in some environmental regulation, cooperative horizontal federalism should be considered as an option for addressing emerging regional environmental issues.

I. FEDERALISM AND INTERSTATE WATER MANAGEMENT COMPACTS

Protection of water resources has traditionally utilized numerous components of the constitutional federalism framework. Federalism has been defined as "a system where particular distributions of authority between a nation and its sub-units are secured by definitive rights that the sub-units can assert against the central government."[15] In simpler terms, federalism describes the constitutional balance of power between units of government.[16] Vertical federalism refers to the relationship between the federal government and state governments (federal-state), while horizontal federalism refers to the relationship between individual states (state-state).[17]

Since the 1970s, environmental policy in the United States has focused on vertical federalism with resulting tensions between state and federal governments.[18] The dominant approach to environmental federalism is the model called "cooperative federalism," in which the federal government sets national environmental standards for the states to administer and enforce.[19] This approach could be more specifically called "cooperative *vertical* federalism," since it comes from the federal-state relationship.

While vertical federalism has dominated most environmental policies (including pollution, hazardous waste, and endangered species) since

15. Edward Rubin, *Rational States?*, 83 VA. L. REV. 1433, 1434 (1997).

16. *See* GEOFFREY R. STONE ET AL., CONSTITUTIONAL LAW 149 (4th ed., 2001).

17. *See* Dan L. Burk, *Federalism in Cyberspace*, 28 CONN. L. REV. 1095, 1100 (1996) ("In the United States, regulatory power is divided 'vertically' between the states and the federal government and 'horizontally' among the several states.").

18. *See generally* Robert V. Percival, *Environmental Federalism: Historical Roots and Contemporary Models*, 54 MD. L. REV. 1141 (1995).

19. *Id.* at 1174; *see also* New York v. United States, 505 U.S. 144, 167–68 (1992).

1970,[20] water resource management is a notable exception. Interstate management of water resources has been addressed primarily through horizontal federalism, utilizing various mechanisms to resolve interstate disputes and provide for interstate cooperation.[21] The reason this approach is specifically used in water resource management is that water resources often cross (and even define) state boundaries, and conflicts over these resources have historically challenged both the individual states and the federal government. Writing in 1925, future Supreme Court Justice Felix Frankfurter and James Landis observed: "Community 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."[22]

While the federal government has taken a central role in protecting interstate water quality,[23] it has generally left protection of water quantity and management of water resources to the states and is likely to continue to do so.[24] Absent congressional action, states manage water resources under various common law and statutory approaches and are left to resolve interstate disputes through either equitable apportionment in the Supreme Court or an interstate compact (two common forms of horizontal federalism).[25] As discussed in Part II of this article, each of these options has been employed in the Great Lakes. States often find that an interstate compact is the preferred approach for apportioning and managing a shared water resource.[26]

Interstate compacts are powerful tools for making law. A compact is essentially a contract between states entered into through state legisla-

20. *See* Percival, *supra* note 18, at 1174; New York v. United States, 505 U.S. at 167–68.

21. *See generally* Robert H. Abrams, *Interstate Water Allocation: A Contemporary Primer for Eastern States*, 25 U. ARK. LITTLE ROCK L. REV. 155 (2002). While interstate management and allocation of water resources could be directly addressed by the federal government via congressional action, this has only happened in two instances. *Id.* at 158.

22. *See* Frankfurter & Landis, *supra* note 5, at 696.

23. *See generally* Federal Water Pollution Control Act, Pub. L. No. 92-500, 86 Stat. 896 (1972) (codified at 33 U.S.C. §§ 1251–1376 (2000)).

24. *See* Abrams, *supra* note 21, at 155–56 ("[D]espite the combination of the commerce power and the Supremacy Clause that together allow the national government to propound a meaningful water policy with allocative features, the national government has not done so and is unlikely to do so any time soon.").

25. *See id.* at 156–57.

26. *See* Douglas L. Grant, *Interstate Water Allocation Compacts: When the Virtue of Permanence Becomes the Vice of Inflexibility*, 74 COLO. L. REV. 105 (2003). However, some commentators have recently suggested that "congressional action is the only means by which interstate water conflicts can be managed in the twenty-first century." George William Sherk, *The Management of Interstate Water Conflicts in the Twenty-first Century: Is It Time to Call Uncle?*, 12 N.Y.U. ENVTL. L.J. 764, 826–27 (2005).

tion.[27] Because interstate compacts increase the power of the states at the expense of the federal government, they are subject to congressional approval.[28] With federal approval, an interstate compact has the full force and supremacy of federal law.[29] This allows the terms of a compact to be enforced in federal court and prevents states from ignoring their compact duties.[30]

Cooperative horizontal federalism borrows features from both traditional environmental federalism (cooperative vertical federalism) and existing interstate water management compacts (a common form of horizontal federalism). Like vertical federalism, cooperative horizontal federalism utilizes common minimum standards, enforced and administered by individual states. But unlike traditional vertical cooperative federalism frameworks, the minimum standards do not come from the federal government. Instead, the collective states serve the function typically held by the federal government by establishing the standards and providing programmatic enforcement. This is accomplished through the interstate compact mechanism that is often employed for interstate water management.

Historically, interstate water compacts tend to follow one of two models—western and eastern.[31] Western water compacts, such as the Colorado River Compact[32] and the Rio Grande Compact,[33] typically focus on allocating coveted water rights to a shared river among the party states.[34] The compacts basically divide the proverbial pie into agreed pieces, and what each state does with its piece is beyond the scope of the compact. These compacts create legal obligations for dividing a limited water resource, thus restricting the total amount of water available to each individual state.[35] The compacts do not, however, provide any

27. *See* Texas v. New Mexico, 482 U.S. 124, 128 (1987).

28. *See* U.S. CONST. art. I, § 10, cl. 3; *see also* Virginia v. Tennessee, 148 U.S. 503, 519 (1893).

29. *See* Culyer v. Adams, 449 U.S. 433, 438 (1981) (congressional consent "transforms an interstate compact . . . into a law of the United States").

30. *See Texas v. New Mexico*, 482 U.S. at 128 (allowing prospective equitable relief as well as a legal remedy for past breaches).

31. In addition to these types of interstate water compacts, there are also examples of interstate water compacts that confer no substantive rights but merely provide a mechanism for sharing information and conducting joint research. *See* Great Lakes Basin Compact, *supra* note 11.

32. Colorado River Compact, *supra* note 6.

33. Rio Grande Compact, *supra* note 7.

34. *See id.*; Colorado River Compact, *supra* note 6.

35. *See Texas v. New Mexico*, 482 U.S. at 126–28.

standards or even guidance for managing individual water withdrawals within the state's total allocation.[36]

The two major eastern water compacts, the Delaware River Basin Compact[37] and the Susquehanna River Basin Compact,[38] take a very different approach.[39] They create centralized interstate management authorities comprised of the party states and federal government.[40] These authorities, termed compact commissions, have broad regulatory powers for permitting and managing individual withdrawals or diversions of all waters in the respective river basins.[41] The commissions even set regional standards for discharges of water pollution. This centralized approach has obvious benefits for uniform management of a single resource, but requires a significant loss of state autonomy.

The Great Lakes states considered but ultimately rejected both the western and eastern models.[42] The western approach is premised on a crisis of scarcity and either current or anticipated over-allocation of a river's water.[43] While the ecological and political concerns regarding Great Lakes water are serious,[44] Great Lakes water is not scarce or over-allocated.[45] Without system-wide scarcity or overuse, a capped allocation is not appropriate. The challenge of such an approach is in setting the total cap and state allocation. With current use in the Great Lakes basin well below renewable supply, a cap on total water use that is relatively restrictive could be terribly inefficient by forcing water use reductions that are not justified ecologically or economically. Similarly, a cap on total use that is too high will do nothing to change water use behavior, since there will be no regulatory scarcity as an incentive. In either case,

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36. *See* Colorado River Compact, *supra* note 6; Rio Grande Compact, *supra* note 7.

37. Delaware River Basin Compact, *supra* note 8.

38. Susquehanna River Basin Compact, *supra* note 8.

39. For a detailed discussion of the Delaware River Basin Compact and Susquehanna River Basin Compact, see Joseph W. Dellapenna, *Interstate Struggles Over Rivers: The Southeastern States and the Struggle Over the 'Hooch'*, 12 N.Y.U. ENVTL. L. J. 828, 837–50 (2005).

40. *Id.* at 843, 849.

41. *See id.* at 845, 849.

42. *Id.* at 840. While the western approach received little attention for reasons discussed below, the eastern approach had an obvious entrance for support, as two of the Great Lakes states, New York and Pennsylvania, are also parties to both the Delaware River Basin Compact and the Susquehanna River Basin Compact. *Id.* at 840, 849.

43. *Id.* at 836–37; Abrams, *supra* note 21, at 155.

44. *See infra* Part II A.

45. According to the U.S. Geological Survey, the Great Lakes region has a consumptive use of 1.9 billion gallons per day ("gpd") and a total renewable water supply of 74.3 billion gpd. *See* U.S. GEOLOGICAL SURVEY, NATIONAL WATER SUMMARY 1983 – HYDROLOGIC EVENTS AND ISSUES: U.S. GEOLOGICAL SURVEY WATER-SUPPLY PAPER 2250 (1984) [hereinafter U.S. GEOLOGICAL SURVEY].

a cap and allocation approach will do little or nothing to protect the Great Lakes ecosystem from the local impacts of water withdrawals.[46]

While the eastern model has clear benefits for ecosystem protection and comprehensive management, the geopolitics of the Great Lakes region make such an approach impractical. First, without the crises of scarcity or litigation (as was the case in the Delaware River[47]), there is little political support for surrendering state autonomy to a centralized management authority. More acutely, the geography of the Great Lakes and the state of Michigan would raise a significant political hurdle to such an approach. The state of Michigan sits almost entirely within the Great Lakes basin,[48] so a centralized management authority would have total control over all water use in the state. The authority could effectively be controlled by the seven other neighboring states, all competing for business development and growth. Given how critical water use is to the economic development of a state, it is difficult to imagine Michigan giving regulatory powers to its neighbors and economic rivals.

Cooperative horizontal federalism provides a new alternative to the western cap and allocation model and the eastern centralized management model. It finds a middle ground that is premised on a sustainable approach to water management rather than allocation or control. As discussed in Part III, the Great Lakes model for cooperative horizontal federalism relies on common minimum standards for in-basin water use and protections against diversions, premised on the notion of living within the limits of the watershed. While not explicit, the theory behind the approach is that collective and regional sustainability will result from individual and state compliance with common standards. States retain the flexibility to manage in-basin uses, but collectively protect against large diversions that threaten total water supply. In administering their individual programs, states have both the benefit of regional resources and the threat of regional enforcement. If implemented, the proposed Great Lakes compact could serve as a cooperative horizontal federalism model for interstate management of natural resources and environmental protection.

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46. If future water use in the region increases significantly (or the renewable supply decreases, perhaps due to global warming) and a cap on total water use is necessary, it should be done through the Boundary Waters Treaty of 1909 and the International Joint Commission (discussed in Part II), to provide a legally binding and enforceable allocation of shared waters between the United States and Canada.

47. *See* New Jersey v. New York, 347 U.S. 995 (1954); New Jersey v. New York, 283 U.S. 336 (1931).

48. *See* J. David Prince, *State Control of Great Lakes Water Diversion*, 16 WM. MITCHELL L. REV. 107, 122 (1990) (map of Great Lakes Basin dividing line).

II. GREAT LAKES AGREEMENTS AND LEGAL REGIMES

The emergence of cooperative horizontal federalism in the Great Lakes region comes from over a century of agreements and legal regimes that now constitute the law of the Great Lakes. This section surveys how the various international treaties, Supreme Court decisions, interstate compacts, handshake agreements, federal and state statutes, and common law water-use rules have set the stage for the development of cooperative horizontal federalism. This section also shows that this legal patchwork has left potentially fatal holes in the Great Lakes protection scheme. Improving the current legal regime requires a new cooperative, multi-jurisdictional approach to water management based on protective enforceable standards.

A. Background on the Great Lakes and Great Lakes Region

Both current and proposed Great Lakes water policy (including the new cooperative horizontal federalism model) is best understood by first establishing three points of reference about the Great Lakes and the Great Lakes region: (1) the immense amount of freshwater in the Great Lakes system relative to regional demand; (2) the geographic scope of the Great Lakes as it relates to political boundaries and jurisdictions; and (3) the deeply held and at times conflicting attitudes of the people of the Great Lakes region regarding this tremendous natural resource. The policy choices being made in the Great Lakes are more easily understood (and perhaps better justified) with a brief summary of these issues.

First, almost every discussion of the Great Lakes begins by stating that the Great Lakes are the world's largest surface freshwater system, containing ninety-five percent of the fresh surface water in the United States and twenty percent of the world's supply.[49] The five Great Lakes (Lake Superior, Lake Michigan, Lake Huron, Lake Erie, and Lake Ontario, 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 ground water in the basin.[50] About 40 million Americans and Canadians rely on Great Lakes basin water for their

49. *See id.* at 108; *see also* GREAT LAKES COMM'N, TOWARD A WATER RESOURCES MANAGEMENT DECISION SUPPORT SYSTEM FOR THE GREAT LAKES-ST. LAWRENCE RIVER BASIN 9 (2003), http://www.glc.org/wateruse/wrmdss/finalreport/pdf/WR-ExSum-2003.pdf.

50. N.G. GRANNEMANN ET AL., THE IMPORTANCE OF GROUND WATER IN THE GREAT LAKES REGION 1 (U.S. Geological Survey Water Resources Investigations Report 00-4008 (2000)).

drinking supply.[51] Simply put, more fresh water is at stake in the management of the Great Lakes than any other single freshwater resource in the world.[52]

Second, the Great Lakes system covers eight states and two provinces within the United States and Canada: Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, Pennsylvania, New York, Ontario, and Quebec. Hundreds of tribes and First Nations and thousands of local governments and municipalities also share legal responsibilities. Management of Great Lakes water is necessarily an exercise in cooperation among multiple jurisdictions and levels of government, with numerous and potentially overlapping legal regimes.

Third, the tremendous presence of the Great Lakes in the region leads to two primary and seemingly conflicting attitudes toward the Great Lakes. Great Lakes citizens feel tremendous pride about "their" lakes. This pride is demonstrated in polls and surveys,[53] and is evident in the cars they drive and the money they spend (both Michigan's license plate and its specially minted quarter tell the rest of the country that it is the "Great Lakes state"). The pride also stems from the reliance on the Great Lakes to support the region's manufacturing, tourism, and agricultural industries, valued collectively at $438 billion (U.S.) per year.[54] At the same time, the abundance of freshwater in the region has undermined political support for meaningful long-term management policies. In recent years, numerous proposals for strong water management laws have died in the states' legislatures.[55]

These conflicting attitudes historically have resulted in agreements and policies that make bold proclamations about the Great Lakes, but require little in the way of legal obligations and water use practices for the regions' citizens and businesses.[56] The people of the region and their elected officials jealously guard their Great Lakes against the threat of diversions to other parts of the country or world, but have shown little concern for wasteful consumptive uses at home.[57] The meaningful pro-

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51. INT'L JOINT COMM'N, PROTECTION OF THE WATERS OF THE GREAT LAKES: FINAL REPORT TO THE GOVERNMENTS OF CANADA AND THE UNITED STATES 6 (2000), *available at* http://www.ijc.org/php/publications/html/finalreport.html.

52. *See id.*

53. In one recent poll, nearly four in five Michigan voters would support a proposed law to curb Great Lakes water withdrawals. *Likely Michigan Voters Back Great Lakes Water Curb*, TOLEDO BLADE, Apr. 1, 2004, *available at* http://www.toledoblade.com/apps/pbcs.dll/article?AID=/20040401/NEWS19/404010346&SearchID=73226366403062.

54. *See* GREAT LAKES COMM'N, *supra* note 49, at 28.

55. *See Environmentalists Make New Push for Water Protection*, DETROIT FREE PRESS, May 18, 2005 (on file with author).

56. *See* Great Lakes Charter, *supra* note 12.

57. *See* 42 U.S.C. § 1962d-20 (2000) (requiring approval of Great Lakes governors for a

tections and standards of the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact and Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement would be a tremendous step forward in moving from regional protectionism to the more important long-term position of active environmental stewardship. In this way, the states may provide greater environmental protection through cooperative horizontal federalism than they have previously provided individually.

B. The Boundary Waters Treaty of 1909: Canada and the United States

It seems most appropriate to begin a summary of the existing agreements, policies, and laws regarding Great Lakes water management with the Boundary Water Treaty of 1909 between the United States and Canada.[58] It has been in force for nearly a century and as an international treaty it operates as "the Supreme Law of the Land" through the Supremacy Clause of the U.S. Constitution.[59] However, a review of the Boundary Waters Treaty's provisions and its role in managing Great Lakes water withdrawals and diversions shows that its international and historic status exceeds its actual value in Great Lakes water management.

The Boundary Waters Treaty provides for joint management and cooperation between the United States and Canada for the two countries' shared boundary waters.[60] However, the first limitation of the Boundary Waters Treaty is evident from the scope of its coverage. "Boundary waters" are defined as:

> the waters from main shore to main shore of the lakes and rivers and connecting waterways . . . along which the international boundary between the United States and . . . Canada passes, including all bays, arms, and inlets thereof, 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.[61]

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diversion, but no regulatory approval for in-basin water use).

58. Boundary Waters Treaty, *supra* note 9.

59. U.S. CONST. art. VI, cl. 2 ("This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land . . . .").

60. *See* Boundary Waters Treaty, *supra* note 9.

61. *Id.*, Preliminary Article, 36 Stat. at 2448–49. Of course, the Great Lakes are not the only boundary waters between the United States and Canada, nor have the Great Lakes been the only source of disputes under the Boundary Waters Treaty. *See* Daniel K. DeWitt, Note,

While four of the five Great Lakes (Superior, Huron, Erie, and Ontario) meet the definition of "boundary waters," Lake Michigan sits entirely within the United States' borders and is thus not considered a "boundary water" under the terms of the Boundary Waters Treaty.[62] Further, the hundreds of tributary rivers and streams, as well as tributary ground water, upon which the boundary Great Lakes depend are also excluded from coverage under the Boundary Waters Treaty.[63]

Beyond the limited scope of coverage, the standard for protection provided by the Boundary Waters Treaty has little practical value. The respective parties may not use or divert boundary waters "affecting the natural level or flow of boundary waters on the other side of the [border]line" without the authority of the International Joint Commission,[64] an adjudicative body with equal United States and Canadian representation.[65] The most significant problem with this standard relates directly to the size and scale of the Great Lakes. With their enormous volumes, it would take a massive diversion to have any measurable effect on the levels or flow of the Great Lakes.[66] The vast majority of the water uses and diversions from the boundary Great Lakes have no measurable effect on Great Lakes levels and flows, at least individually.[67] Ironically, individual withdrawals and diversions from tributary rivers and streams often have a measurable affect on these waters, but these waters are not protected under this provision of the Boundary Waters Treaty.

Great Words Needed for the Great Lakes: Reasons to Rewrite the Boundary Waters Treaty of 1909, 69 IND. L.J. 299, 305 (1993).

62. While Lake Michigan is not subject to most of the treaty terms because it is not a boundary water, the Boundary Waters Treaty does extend its guarantees to the mutual right of free navigation to the waters of Lake Michigan. *See* Boundary Waters Treaty, *supra* note 9, art. I, 36 Stat. at 2449. The express extension of the Article I protections for navigation to Lake Michigan makes the exclusion of Lake Michigan from the rest of the Boundary Waters Treaty provisions more strikingly evident. *See* DeWitt, *supra* note 61, at 306–07.

63. Article II of the Boundary Waters Treaty further insures "absolute sovereignty of the upstream state when it uses or diverts water that flows into the boundary waters or across the boundary (as compared to the boundary waters themselves)." DeWitt, *supra* note 61, at 307. DeWitt notes that this clause disproportionately benefits the United States, since it is generally upstream along the Great Lakes system from Canada. *Id.* Either country may object to such a diversion if it produces a "material injury to the navigation interests" of the country. Boundary Waters Treaty, *supra* note 9, art. II, 36 Stat. at 2449.

64. Boundary Waters Treaty, *supra* note 9, art. III, 36 Stat. at 2449–50.

65. *Id.*, art. VII, 36 Stat. at 2451.

66. The Chicago diversion at its maximum (and subsequently prohibited) level of 8500 cubic feet per second (cfs) was found to have lowered water levels in Lakes Michigan and Huron by 6 inches. Wisconsin v. Illinois, 278 U.S. 367, 407 (1929).

67. The lack of individual effects does not necessarily mean that the withdrawals and diversions have no cumulative effect, but this concern has never led to any formal allegations of Boundary Waters Treaty violations.

While the International Joint Commission created by the Boundary Waters Treaty has been commended for its objectivity and leadership on environmental issues,[68] it is severely limited in its ultimate adjudicative power. For a dispute to be submitted to the International Joint Commission for a binding arbitral decision, a reference is required by both countries.[69] The Boundary Waters Treaty specifies that the consent of the U.S. Senate is required for such action.[70] Thus, if Canada alleges that the United States is diverting water and affecting Great Lakes water levels in violation of the Boundary Waters Treaty, it must obtain the consent of the U.S. Senate (with a two-thirds majority) to submit the matter to the International Joint Commission. As may be expected, the Senate has never consented to refer a matter for a binding decision in the history of the Boundary Waters Treaty.[71]

The above analysis is not meant as a criticism of the progress made under the Boundary Waters Treaty or by the International Joint Commission. In recent decades, the International Joint Commission has played a critically important role in studying potential threats to the waters of the Great Lakes and informing both the public and decision makers in the United States and Canada.[72] However, 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. Canada has taken that step, enacting new bans on all water diversions and comprehensive water management programs, some as direct applications of the Boundary Waters Treaty.[73] For this reason, as well as

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68. *See* Barry Sadler, *The Management of Canada-U.S. Boundary Waters: Retrospect and Prospect*, 26 NAT. RESOURCES J. 359, 370–72 (1986).

69. Boundary Waters Treaty, *supra* note 9, art. X, 36 Stat. at 2452–53.

70. *Id.* The consent of the U.S. Senate would require a two-thirds majority vote. *See* U.S. CONST. art II, § 2, cl. 2. If the International Joint Commission, with its equal U.S. and Canadian representation, is unable to decide the matter with a majority vote, then an umpire is chosen in accordance with the provisions of the Hague Convention of 1907. *See* Boundary Waters Treaty, *supra* note 9, art. X, 36 Stat. at 2452–53.

71. While binding dispute resolution pursuant to article X of the Boundary Waters Treaty has never occurred, dozens of issues have been referred to the International Joint Commission for non-binding investigative reports and studies pursuant to article IX. *See* Boundary Waters Treaty, *supra* note 9, art. IX, 36 Stat. at 2452; *see also* DeWitt, *supra* note 61, at 308–14.

72. *See* INT'L JOINT COMM'N, *supra* note 51. Several commentators have noted the importance of the Boundary Waters Treaty and the International Joint Commission. *See* Prince, *supra* note 48 at 149–151; Sadler, *supra* note 68, at 370–72; Sharon A. Williams, *Public International Law and Water Quality Management in a Common Drainage Basin: The Great Lakes*, 18 CASE W. RES. J. INT'L. L. 155, 178–79 (1986). *But cf.* DeWitt, *supra* note 61, at 313–23 (noting the International Joint Commission's objectivity and independence, but limited and obscure role as a tool of the governments).

73. *See* International Boundary Waters Treaty Act, R.S.C., ch. I17 (1985), *amended by* 2001 S.C. ch. 40 (Can.); *see also* GREAT LAKES COMM'N, *supra* note 49, at 55.

Canada's different constitutional and water law system, the remainder of this article will focus primarily on the existing policies and legal regimes in the United States, and the role the proposed compact could play in shaping policy south of the border.[74] In the United States, the cooperative horizontal federalism approach employed by the proposed compact is uniquely able to incorporate the international concerns for the Great Lakes demonstrated by the Boundary Waters Treaty (through consultation with the Canadian provinces and congressional approval), while ensuring state participation in comprehensive water management that may not be politically possible through a federally negotiated international treaty.

C. Wisconsin v. Illinois: *The Great Lakes in the Supreme Court*

Despite the abundant supply of water in the Great Lakes, the region has not been immune from interstate disputes over diversions. Litigation between states, with original jurisdiction in the United State Supreme Court, is certainly one form of horizontal federalism provided by the Constitution, although it is hardly cooperative in any sense of the term. A summary of the Chicago diversion litigation (the series of *Wisconsin v. Illinois* cases[75]) demonstrates the historic opposition to diversions in many Great Lakes states. Further, an analysis of the Supreme Court's decisions in these cases shows a subtle recognition by the Court that water management in the Great Lakes region is not analogous to water allocation disputes in the West or in some other major river basins in the East.

In the early 1880s, Chicago was booming and becoming one of the nation's largest cities when an outbreak of chronic water-borne illnesses threatened the health of residents. The problem, simply put, was that Chicago was disposing of its sewage into Lake Michigan (via the Chi-

74. Limiting the focus of the remainder of this article to the United States is by no means intended to slight the importance of Great Lakes water resources management in Canada. On the contrary, it seems that the issue is at least as important to Canadians and that the Canadian federal government and the provinces of Ontario and Quebec are generally well ahead of the United States in developing water resources policy. *See* GREAT LAKES COMM'N, *supra* note 49, at 55. Canada continues to play a critical role in pressuring the United States for strong protections for Great Lakes water resources. *See* Tom Henry, *New Hearings Possible on Use of Great Lakes Water*, TOLEDO BLADE, Jan. 17, 2005, *available at* http://www.toledoblade.com/apps/pbcs.dll/article?AID=/20050117/NEWS06/501170327&SearchID=73226368646406; Margaret Philp, *Won't Sign Great Lakes Water Deal, Ontario Says*, TORONTO GLOBE & MAIL, Nov. 16, 2004, at A9.

75. Wisconsin v. Illinois, 449 U.S. 48 (1980); Wisconsin v. Illinois, 388 U.S. 426 (1967); Wisconsin v. Illinois, 289 U.S. 395 (1933); Wisconsin v. Illinois, 281 U.S. 696 (1930); Wisconsin v. Illinois, 281 U.S. 179 (1930); Wisconsin v. Illinois, 278 U.S. 367 (1929).

cago River), while taking its drinking water from the same source. The solution was a bit more complicated. "In an epic environmentally unsound public works project,"[76] Chicago built a canal to reverse the flow of the Chicago River, changing its output from Lake Michigan to the Illinois River, and ultimately to the Mississippi River and Gulf of Mexico. The project was bold, controversial, and ultimately successful in both protecting public health and linking the Great Lakes with the Mississippi River.[77] 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.[78]

With Missouri's challenge overcome and Chicago's population (and sewage) increasing, the city increased the diversions from Lake Michigan from 2541 cubic feet per second (cfs) in 1900 up to 8500 cfs by 1924.[79] That year, Wisconsin, Michigan, and New York (later joined by almost every other Great Lakes state) brought suit in the Supreme Court against Illinois. The complainant states alleged that the Chicago diversion had lowered levels in Lake Michigan, as well as Lakes Huron, Erie, and Ontario, by more than 6 inches, harming navigation and causing serious injury to the complainant states' citizens and property.[80] Illinois's defense was premised on the necessity and federal approval of the diversion, as well as a denial that the diversion caused any actual injury.[81]

Former Justice and Secretary of State Charles Evan Hughes was appointed by the Supreme Court to serve as special master.[82] His report found that Chicago's diversion lowered the levels of Lakes Michigan and Huron by 6 inches and Lakes Erie and Ontario by 5 inches,[83] causing damage "to navigation and commercial interests, to structures, to the

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76. A. Dan Tarlock, *The Law of Equitable Apportionment Revisited, Updated and Restated*, 56 U. COLO. L. REV. 381, 392 (1985).

77. *See* Robert V. Percival, *The Clean Water Act and the Demise of the Federal Common Law of Interstate Nuisance*, 55 ALA. L. REV. 717, 718–32 (2004).

78. *See* Missouri v. Illinois, 200 U.S. 496 (1906); Missouri v. Illinois, 180 U.S. 208 (1901).

79. *See Wisconsin v. Illinois*, 278 U.S. at 417; Sanitary Dist. of Chi. v. United States, 266 U.S. 405, 413 (1925).

80. *See Wisconsin v. Illinois*, 278 U.S. at 399–400.

81. *See id.* at 400–01. In separate litigation, Chicago's Sanitary District was found to be in violation of its federal permit to divert 4167 cfs from Lake Michigan. *See Sanitary Dist. of Chi.*, 266 U.S. at 430–32; *see also* Percival, *supra* note 77, at 729. However, in 1925 the Secretary of War amended the permit, allowing the diversion to increase to 8500 cfs provided the Chicago Sanitary District began to employ artificial sewage treatment processes. *See Wisconsin v. Illinois*, 278 U.S. at 417–18; *see also* Percival, *supra* note 77, at 729.

82. *See Wisconsin v. Illinois*, 278 U.S. at 399. Hughes was originally appointed to the Supreme Court in 1910, but left the Court in 1916 for an unsuccessful run for President. From 1921 to 1925, Hughes served as Secretary of State under President Warren G. Harding.

83. *See id.* at 407.

convenience of summer resorts, to fishing and hunting grounds, to public parks and other enterprises, and to riparian property generally."[84] The Court adopted the special master's report, concluding that the reduced lake levels caused the complainant states and their citizens and property owners "great losses."[85] The Court also rejected Illinois's defense that the diversion was authorized by Congress, concluding that the federal permit was merely a response to the public health threat of the sewage and not a federal decision regarding management of the navigable waters of the Great Lakes.[86]

While generally supporting the claims of the complainant states, the Court recognized the public health implications and economic costs that would come with immediately halting the entire Chicago diversion.[87] The Court thus referred the matter back to the special master for determination of the proper relief.[88] 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 1500 cfs (plus domestic pumping).[89] Subsequent litigation in the Supreme Court continued over several decades regarding Illinois's compliance with the diversion reduction schedule and the amount of water allowed for domestic pumping, with the ultimate result being that the total allowable diversion was increased to 3200 cfs, the level at which it is now capped.[90]

It is notable that the Supreme Court's opinions in the Chicago diversion dispute make only minor references to the Court's previous (primarily western) equitable apportionment cases. The Court's equitable apportionment doctrine began to evolve in the prior cases *Kansas v. Colorado*[91] and *Wyoming v. Colorado*,[92] yet the only references to these decisions were in a string citation regarding the Supreme Court's jurisdiction and a comment regarding the possibility that Congress could take action on the matter.[93] Further, there is no discussion of the various wa-

84. *Id.* at 408.
85. *Id.* at 409.
86. *See id.* at 415–18.
87. *See id.* at 420–21.
88. *See id.* at 421.
89. *See* Wisconsin v. Illinois, 281 U.S. 179, 198, 201 (1930); *see also* Wisconsin v. Illinois, 281 U.S. 696, 697 (1930).
90. *See* Wisconsin v. Illinois, 449 U.S. 48 (1980); Wisconsin v. Illinois, 388 U.S. 426, 427 (1967); Wisconsin v. Illinois, 289 U.S. 395 (1933).
91. 206 U.S. 46 (1907).
92. 259 U.S. 419 (1922).
93. *See* Wisconsin v. Illinois, 281 U.S. at 197–98; Wisconsin v. Illinois, 278 U.S. 367, 409 (1929).

ter use doctrines in the relevant states. Nor does the Court establish any rule of law for allocating the waters of the Great Lakes among the states of region. These elements are typically central to the Supreme Court's handling of western equitable apportionment cases.[94]

The Supreme Court's lack of reliance on its previous equitable apportionment cases may have been intentional. Perhaps the Court recognized 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 relatively short opinions do not advance this proposition directly, it is worth noting that the primary Chicago diversion opinion was authored by Chief Justice William Howard Taft, the former President whose administration had negotiated the Boundary Waters Treaty of 1909 between the United States and Canada.[95] Taft was an Ohioan, and may have instinctively appreciated both the abundance of Great Lakes water that made allocation unnecessary and the shared importance of the resource among two countries and eight states that made protection of all of its values (navigation, drinking supply, fishing, recreation, etc.) critical.[96]

Speculation about the Court's motivations aside, the Chicago diversion litigation leaves two key legacies in shaping the law of the lakes. First, the Chicago diversion, authorized at 3200 cfs, remains the largest diversion of Great Lakes water out of the basin.[97] Second, while the Court's decisions stop short of an absolute prohibition on diversions, they demonstrate a general preference for protecting the demonstrated interests of other states and in preserving the integrity of the Great Lakes system. Both of these legacies continue to play an important part in efforts to craft a new law of the lakes through an interstate compact.

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94. *See generally* Abrams, *supra* note 21; Tarlock, *supra* note 76.

95. *See* Boundary Waters Treaty, *supra* note 9.

96. The treatment of the Chicago diversion cases given by numerous commentators supports this view. For example, Prof. Percival analyzes the challenges against the Chicago diversion brought by both Missouri and the other Great Lakes states in the context of federal interstate nuisance cases. *See* Percival, *supra* note 77, at 718–32. Prof. Tarlock's thorough discussion of the law of equitable apportionment makes only a brief mention of *Wisconsin v. Illinois*. *See* Tarlock, *supra* note 76, at 398–99. Most other recent discussions of the Supreme Court's equitable apportionment doctrine ignore the Chicago diversion cases entirely. *See, e.g.*, Abrams, *supra* note 21; Josh Clemons, *Interstate Water Disputes: A Road Map for States*, 12 SOUTHEASTERN ENVTL. L.J. 115 (2004); E. Leif Reid, *Ripples from the Truckee: The Case for Congressional Apportionment of Disputed Interstate Water Rights*, 14 STAN. ENVTL. L.J. 145 (1995). This is by no means a criticism of these valuable analyses on equitable apportionment, but rather evidence that *Wisconsin v. Illinois* is difficult to characterize as an equitable apportionment case.

97. *See* INT'L JOINT COMM'N, *supra* note 51, at 13.

D. The Original Great Lakes Basin Compact: "We'll Keep in Touch"

The Great Lakes Basin Compact[98] (not to be confused with the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact that is the primary subject of this article) has not directly shaped the law of the lakes or had any substantive impact on water rights in the basin.[99] Still, it deserves brief mention for the simple fact that it is currently the only congressionally-approved compact regarding Great Lakes water management, and provides useful lessons for future Great Lakes policy efforts.

The Great Lakes Basin Compact was approved by Congress in 1968, although it was negotiated by the Great Lakes states and provinces two decades earlier.[100] The compact includes each of the eight Great Lakes states as members and creates a Great Lakes Commission comprised of representatives from the member states.[101]

The functions of the Great Lakes Basin Compact and its Great Lakes Commission are limited to gathering data and making non-binding recommendations regarding research and cooperative programs. The Great Lakes Commission can make recommendations regarding "uniform . . . laws, ordinances, or regulations relating to the development, use and conservation of the Basin's water resources . . . ."[102] However, this function is purely advisory—the Great Lakes Basin Compact makes clear that "no action of the [Great Lakes] Commission shall have the force of law in, or be binding upon, any party state."[103] Fortunately for the Great Lakes, the proposed compact currently under consideration has much more effective requirements to complement the continuing study,

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98. Great Lakes Basin Compact, *supra* note 11.

99. Prof. Dellapenna has characterized the Great Lakes Basin Compact as typical of the "we'll keep in touch" approach used in many interstate water compacts in the eastern U.S. *See* Dellapenna, *supra* note 39, at 838–39. Prof. 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." *Id.* at 839.

100. *See* Great Lakes Basin Compact, *supra* note 11; Dellapenna, *supra* note 39, at 852.

101. *See* Great Lakes Basin Compact, *supra* note 11, art. II, IV, 82 Stat. 414–16. As negotiated by the states, the Great Lakes Basin Compact included a provision to allow the provinces of Ontario and Quebec to join as parties. *See* Great Lakes Basin Compact, *supra* note 11, art. II.B, 82 Stat. at 414. However, Congress explicitly refused to consent to that provision. *See* Great Lakes Basic Compact, *supra* note 11, art. IX, 82 Stat. at 419. Nonetheless, the Canadian provinces of Ontario and Quebec have recently been added as associate members. *See* Mark Squillace & Sandra Zellmer, *Managing Interjurisdictional Waters Under the Great Lakes Charter Annex*, 18 NAT. RESOURCES & ENV'T, Fall 2003, at 8–9 .

102. Great Lakes Basin Compact, *supra* note 11, art. VI(G), 82 Stat. at 417.

103. *Id.* art. VI(N), 82 Stat. at 418.

research, planning, and recommendatory functions of the original Great Lakes Basin Compact. If the new compact is enacted, the Great Lakes Basin Compact and Great Lakes Commission in its current form will be redundant and likely unnecessary, as the new compact provides many of the same functions (such as coordinated research and planning) in the context of a more substantive policy solution.

E. The Great Lakes Charter: The Unfulfilled Promise of a Handshake Agreement

The Great Lakes Basin Compact is currently the only congressionally-approved interstate compact, but it is not the only interstate agreement regarding the management of Great Lakes water. In 1985, the Great Lakes states and provinces signed the Great Lakes Charter.[104] While only a good faith agreement, the Great Lakes Charter contains individual commitments and a cooperative process for Great Lakes water management that would be tremendously valuable if fully implemented.[105] However, handshake agreements such as the Great Lakes Charter are not sanctioned by the Constitution,[106] and thus these informal horizontal federalism approaches have limited legal value.

The Great Lakes 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 2,000,000 gallons per day ("gpd"); (2) the prior notice and consultation procedure with all of the states and provinces for new or increased consumptive uses or diversions of Great Lakes water greater than 5,000,000 gpd; and (3) the commitment of the states and provinces to gather and report comparable information on all new or increased withdrawals of Great Lakes water greater than 100,000 gpd.

Upon signing the Great Lakes Charter, the states and provinces committed to enacting "authority to manage and regulate water withdrawals involving a total diversion or consumptive use of Great Lakes Basin water resources in excess of 2,000,000 [gpd averaged over any 30-day period]."[107] If a state or province failed to do so, it would lose its right to participate in the notice and consultation process for large diver-

104. *See* Great Lakes Charter, *supra* note 12.

105. *See* Prince, *supra* note 48, at 167–68.

106. U.S. CONST. art. I, § 10, cl. 3. Unlike a compact, which is approved by Congress pursuant to Article I of the Constitution, the Charter lacks congressional approval and thus has no force of law.

107. *See* Great Lakes Charter, *supra* note 12, Progress Toward Implementation (4).

sions and consumptive uses described below.[108] This good faith cooperative approach has proved to be an insufficient incentive, as several states (notably Michigan) have failed to comply with their management and regulatory commitment.[109]

The prior notice and consultation procedure could be fairly characterized as a more specific version of "we'll keep in touch." It provides that the state or province considering issuance of a permit for a new or increased consumptive use or diversion greater than 5,000,000 gpd (averaged over any 30-day period) will first notify the offices of the other governors and premiers, as well as the International Joint Commission.[110] The issuing state or province will then "solicit and carefully consider the comments and concerns of the other Great Lakes States and Provinces."[111] If necessary, a "consultation process" is initiated to "seek and provide mutually agreeable recommendations to the permitting State or Province."[112]

The Great Lakes Charter does not provide a mechanism or remedy if this extensive consultation process proves fruitless or if one state persists despite others' objections. Presumably, a state could resort to litigation under the Supreme Court's original jurisdiction, although the Court's equitable apportionment doctrine (as established in *Kansas v. Colorado*[113] and *Wyoming v. Colorado*[114]) may not give the Great Lakes Charter much weight.[115] The options for a province are no better.[116] Further, the entire notice and consultation process is predicated on the assumption that the state or province where the new consumptive use or diversion is proposed even has a regulatory system for managing water withdrawals. As discussed above and in section I.F, that assumption is unfortunately not justified by the current reality of Great Lakes water management.

In contrast to the management and regulatory commitments, the information and reporting commitments have been largely met by the states and provinces. The states and provinces have all enacted authority to meet their commitment to gather and report comparable information

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108. *See id.*

109. *See* Stephen Frerichs & K. William Easter, *Regulation of Interbasin Transfers and Consumptive Uses from the Great Lakes*, 30 NAT. RESOURCES J. 561, 566–68 (1990).

110. *See* Great Lakes Charter, *supra* note 12, Consultation Procedures.

111. Great Lakes Charter, *supra* note 12, Consultation Procedures (2).

112. Great Lakes Charter, *supra* note 12, Consultation Procedures (4).

113. 206 U.S. 46 (1907).

114. 259 U.S. 419 (1922).

115. *See* Abrams, *supra* note 21, at 156–57.

116. It may not be possible for a province to pursue a claim or resolve a dispute under the Boundary Waters Treaty of 1909. *See supra* notes 61–71 and accompanying text.

on all new or increased withdrawals of Great Lakes water greater than 100,000 gpd (averaged over any 30-day period).[117] However, poor compliance and underfunded reporting programs have resulted in a continued lack of data and information regarding Great Lakes water withdrawals.

The Great Lakes Charter's shortcomings are not in its terms, but in its status.[118] If the Great Lakes Charter's terms were incorporated into a binding and enforceable compact, it would have been an important first step toward comprehensive water management of the Great Lakes. Without the legal authority of a binding compact, the Great Lakes Charter's terms have had little impact. The Great Lakes Charter, while cooperative in nature, did not utilize the constitutional compact process, and thus did not obtain the legal status necessary to bring about true cooperative horizontal federalism. This could soon change, as the proposed compact incorporates many cooperative provisions from the Great Lakes Charter into a legally enforceable compact.

F. State Common Law and Statutory Law: A Patchwork under the Great Lakes Charter

While a comprehensive discussion of state-by-state water law in the Great Lakes region is beyond the scope of this article, it is important to provide a brief summary of both the common law rules and varying statutory schemes, especially in light of the commitments made by the states in the Great Lakes Charter. The summary shows both the common legal principles that can serve as a foundation for a regional policy and the inconsistencies that such a policy must address.

All of the Great Lakes states follow the common law of riparian rights for surface water use.[119] Riparian law is premised on the principle that all riparians have correlative rights in shared water bodies.[120] Conflicts regarding these rights are adjudicated according to the concept of

117. *See* Great Lakes Charter, *supra* note 12, Progress Toward Implementation (3), (4).

118. *See* Dellapenna, *supra* note 39, at 854 (noting that "the [Great Lakes] Charter's provisions lack any effective enforcement mechanism" and further "the lack of congressional assent makes the [Great Lakes] Charter utterly unenforceable on its own") (emphasis omitted).

119. *See* A. Dan Tarlock, *Inter and Intrastate Usage of Great Lakes Waters: A Legal Overview*, 18 CASE W. RES. J. INT'L L. 67, 68 (1986). The term "riparian" generally refers to rights associated with rivers, while the term "littoral" refers to rights associated with lakes. Substantively, "the operative legal rules are virtually identical and go by the general name of riparianism." JOSEPH L. SAX ET AL., LEGAL CONTROL OF WATER RESOURCES 21 (3d ed. 2000). The Great Lakes system contains both lakes and rivers, and in this article, the term "riparian" refers to both sets of rights.

120. *See* State v. Zawistowski, 290 N.W.2d 303, 309 (Wis. 1980).

reasonable use,[121] as opposed to capture or prior appropriation (as has been traditional in the western states). However, the historical abundance of surface water in the Great Lakes region has produced relatively few conflicts and controversies over surface water allocation and use.[122] As a result, "the common law of water allocation consists of fragmented decisions and statements of general principles that yield little guidance to concrete controversies."[123] This legal uncertainty creates at least a theoretical restraint on water users as they make decisions to invest in water-dependent projects.[124]

The common law rules regarding ground water rights in the Great Lakes states are generally less progressive and less uniform than for surface water rights. Historically, ground water and surface water in the Great Lakes states were subject to different rights and rules for allocation.[125] Further, while all of the Great Lakes states generally follow some form of traditional riparian rules for surface waters, the states differ in their common law ground water rules, drawing on doctrines as varied as a modified rule of capture to a reasonable use standard.[126]

In every Great Lakes state, the common law rules for water use and allocation have been altered, to varying degrees, by statute.[127] While a few states had statutory authority regarding water use before the Great Lakes Charter in 1985, the commitments made in the Great Lakes Charter have prompted most states to take some steps toward regulating Great Lakes water withdrawals.[128] Minnesota has the most comprehensive water management and regulatory system in the region, requiring permits

121. *See id.* ("The common law rights of riparian owners to the use of water is limited by the reasonable use doctrine. '[E]very . . . right which a riparian owner acquires, as such, to the waters of the stream flowing through or by his land, is restricted always to that which is a . . . reasonable use, and these terms are to be measured and determined by the extent and capacity of the stream, the uses to which it has been put, and the rights that other riparian owners on the same stream also have.'" (quoting Alfelbacker v. State, 167 N.W. 244, 245 (Wis. 1918))).

122. *See* Tarlock, *supra* note 119, at 68.

123. *Id.*

124. *See id.* at 69.

125. *See* SAX, *supra* note 119, at 344 ("While the dichotomy between the legal regimes applicable to groundwater and surface water is breaking down, some degree of separation continues to be the rule in a majority of American states.")

126. *Compare* Wiggins v. Brazil Coal and Clay Corp., 452 N.E.2d 958, 964 (Ind. 1983) (establishing a modified rule of capture for ground water use in Indiana: "Ground water is part of the land in which it is present and belongs to the owner of that land. It may be put to use to the fullest extent to further enjoyment of the land, however this right does not extend to causing injury gratuitously or maliciously to nearby lands and their owners.") *with* Smith v. Summit County, 721 N.E.2d 482, 485–86 (Ohio Ct. App. 1998) (adopting the Restatement (Second) of Torts "reasonable use" approach for ground water use in Ohio).

127. *See* Frerichs & Easter, *supra* note 109, at 566–68.

128. *See id.* (providing a summary of the states' progress in meeting the commitments of the Great Lakes Charter).

for use of any public waters (ground or surface) within the state.[129] At the other end of the spectrum, Indiana has almost no regulatory authority for managing water withdrawals beyond registration.[130] Michigan, the only state located entirely within the Great Lakes basin, has a statute prohibiting Great Lakes diversions[131] but has done little to meet its commitments under the Great Lakes Charter for managing in-basin consumptive uses.[132]

Perhaps responding to the same public interests and concerns supporting new regional water protections, several Great Lakes states have recently enacted new legislation regarding water use, particularly for ground water. For example, in 2003, Michigan enacted a statute that provides a remedy to small volume ground water users injured by high capacity wells, even when the high capacity use is made on overlying lands.[133] The statute thus alters the usual operation of the traditional common law for ground water in Michigan, the so-called "American Reasonable Use" doctrine.[134] In the same year, Wisconsin enacted a law regulating high capacity wells located near vulnerable spring water and trout stream resources.[135] The recent passage of these laws demonstrates a growing interest in water management in the legislatures of the Great Lakes states, a positive sign for the ultimate success of the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact. Still, such individual state efforts do not protect the entire resource from abuse by one jurisdiction. A cooperative horizontal federalism approach would achieve more comprehensive protection that builds upon (but does not undermine) individual state efforts.

G. 1986 Water Resources Development Act: Policy and Politics

Congress joined the Great Lakes water management debate in 1986, enacting section 1109 of the Water Resources Development Act, typically referred to as 1986 WRDA.[136] The statute provides:

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129. *See* MINN. STAT. § 103G.271 (2004).

130. *See* IND. CODE §§ 14-25-1-1 to -13-9 (2004).

131. *See* MICH. COMP. LAWS § 324.32703 (2004) (providing that "the waters of the Great Lakes within the boundaries of this state shall not be diverted out of the drainage basin of the Great Lakes").

132. *See* Frerichs & Easter, *supra* note 109, at 566–68.

133. *See* MICH. COMP. LAWS §§ 324.31701–.31713 (Supp. 2005).

134. *See* Bernard v. City of St. Louis, 189 N.W. 891 (Mich. 1922) (allowing use of ground water on overlying lands with few limitations based on liability to other ground water users); Schenk v. City of Ann Arbor, 163 N.W. 109 (Mich. 1917).

135. *See* WIS. STAT. § 281.34(1)–(10) (Supp. 2004).

136. Pub. L. No. 99-662, § 1109, 100 Stat. 4082, 4230 (codified as amended at 42 U.S.C. § 1962d-20 (2000)).

> 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 [sic] States.[137]

Thus, any of the Great Lakes governors can veto a proposed diversion of Great Lakes water out of the basin. The statute not only requires the unanimous approval of the governors for a proposed diversion, but further requires unanimous approval of the governors before any federal agency can even study the feasibility of a Great Lakes diversion.[138] While 1986 WRDA is remarkable as a clear statement of Congress' intent to leave Great Lakes water management to the states,[139] it suffers from numerous limitations and flaws that have undermined its value in terms of both protection and process.

1986 WRDA contains no standards to guide the governors in deciding to approve or deny a proposed diversion or diversion study. Nor does it provide any judicial remedy to challenge a governor's decision, even by another Great Lakes state. From a citizens' perspective, 1986 WRDA is fatally limited by its lack of a private right of action to enforce compliance.[140] These omissions may be explained by understanding the threat that 1986 WRDA was intended to address. At the time, the Great Lakes states shared a common concern about the threat of proposed water diversions to other parts of the country. The federal statute was thus meant to create a barrier to water diversions that would harm the region as a whole.[141]

However, the diversions that have actually been proposed since 1986 are generally for use of Great Lakes water within the Great Lakes states but outside of the surface watershed. Every Great Lakes state ex-

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137. 42 U.S.C. § 1962d-20(d) (2000). This section only applies to new diversions; diversions authorized before 1986 are not covered by the veto. *Id.* § 1962d-20(f).

138. *Id.* § 1962d-20(e). This prohibition does not apply to studies under the direction of the International Joint Commission in accordance with the Boundary Waters Treaty of 1909. *Id.*

139. 1986 WRDA was enacted only a few years after the Supreme Court's decision in *Sporhase v. Nebraska ex rel. Douglas*, 458 U.S. 941 (1982), which limited a state's ability to restrict export of ground water under the dormant commerce clause. As federal legislation authorizing the states to restrict diversions of water, 1986 WRDA creates a shield to a dormant commerce clause challenge. *See* Prince, *supra* note 48, at 148.

140. *See* Little Traverse Bay Bands of Odawa Indians v. Great Spring Waters of Am., Inc., 203 F.Supp.2d 853 (W.D. Mich. 2002). For additional commentary on the lack of a private right of action under 1986 WRDA, *see* Charles F. Glass, Jr., Note, *Enforcing Great Lakes Water Export Restrictions Under the Water Resources Development Act of 1986*, 103 COLUM. L. REV. 1503 (2003).

141. For detailed legislative history on 1986 WRDA, see Prince, *supra* note 48, at 146–48.

cept Michigan has a significant portion (usually a majority) of their land and population outside of the watershed line (where surface waters no longer flow back into the Great Lakes basin).[142] This has created political and legal pressures that undermine and may ultimately undo 1986 WRDA. Much of the tension stems from the geographic fact that Michigan alone sits entirely within the Great Lakes basin. As one commentator has previously noted, "the governor of Michigan may unilaterally prohibit any other Great Lakes state from diverting water within its own borders, but outside the basin, for any purpose, without fear of suffering any reciprocal consequences."[143] This is exactly what happened when the town of Lowell, located four miles from the Great Lakes basin divide in northwest Indiana, sought a diversion from Lake Michigan to replace local water supplies that suffered from unhealthy elevated fluoride levels.[144]

The ultimate check on Michigan's use of the veto authority is Congress, or more specifically the representatives and senators from every state other than Michigan. Even without the intra-regional conflicts such as Lowell, Indiana, it will be increasingly difficult for the Great Lakes states to keep their veto power over diversions. A recent study predicts that the Great Lakes states will lose a combined total of twenty one seats in the U.S. House of Representatives by 2030.[145] If several Great Lakes states became frustrated with Michigan's use of the veto power, they could easily join with western or southern states to repeal or qualify the veto authority. The political risk is significant; no single Great Lakes state can afford to alienate its regional neighbors, all of whom must stand unified to protect control of the Great Lakes in Congress.

Beyond the lack of any standards, judicial review provisions, a private right of action, and a solid political foundation, 1986 WRDA is also limited by its narrow scope of coverage. First, it only applies to diversions, not in-basin consumptive uses, essentially ignoring the other half of Great Lakes water management.[146] Second, it does not apply to

142. The largest example, based on population, is the state of New York, where the entire New York City metropolitan area is outside of the Great Lakes watershed. Philadelphia and Pittsburgh (Pennsylvania), Cincinnati (Ohio), Indianapolis (Indiana), and Minneapolis (Minnesota) are other major population centers of Great Lakes states that are outside the Great Lakes basin. Only the state of Michigan, which is entirely within the Great Lakes basin, even has its capitol seated in the basin. *See id.* at 122 (map of Great Lakes Basin dividing line).

143. Mark J. Dinsmore, *Like a Mirage in the Desert: Great Lakes Water Quantity Preservation Efforts and Their Punitive Effects*, 24 U. TOL. L. REV. 449, 468 (1993).

144. *See id.* at 468–69.

145. Jonathan Tilove, *Sun Belt Needs More Notches*, ANN ARBOR NEWS, May 27, 2005, at A3.

146. If 1986 WRDA applied to in-basin consumptive uses of Great Lakes water at the thresholds of the Great Lakes Charter, Michigan would be have to seek the approval of the

ground water, which comprises over fifteen percent of the total water supply in the Great Lakes basin.[147] These shortcomings are particularly striking when compared with the Great Lakes Charter, signed a year earlier in 1985. Unlike 1986 WRDA, the Great Lakes Charter applies to both diversions and consumptive uses and to both surface and ground waters of the Great Lakes basin.[148]

Despite all of its shortcomings and political vulnerabilities, 1986 WRDA provides clear federal authority for opposing Great Lakes diversions.[149] Congress has given the Great Lakes states a long leash, but it has recently encouraged the states to be more proactive and comprehensive in how they use their authority. Congress amended 1986 WRDA in 2000 to include the following provision:

> [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.[150]

Congress did not go so far as to 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 political dynamics of 1986 WRDA have provided a stick to keep the states at the compact negotiating table. WRDA puts the Great Lakes states in collective control of the Great Lakes, but does nothing to limit the exercise of that control in state versus state disputes. Except for Michigan, all of the states distrust the arbitrary nature of the 1986 WRDA veto mechanism, and Michigan must consider the risk of losing the 1986 WRDA in Congress. The states' recognition of the flaws in the 1986 WRDA system was evidenced in the subsequent amendment to the Great Lakes Charter—the Great Lakes Charter Annex of 2001.[151]

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other states for very large municipal uses and power plants. This would solve both a policy shortcoming and a political weakness of 1986 WRDA.

147. *See* GRANNEMANN ET AL., *supra* note 50, at 1.

148. *See* Great Lakes Charter, *supra* note 12.

149. 42 U.S.C. § 1962d-20(d) (2000).

150. *See* Water Resources Development Act of 2000, Pub. L. No. 106-541, § 504, 114 Stat. 2572, 2644–45 (codified as amended at 42 U.S.C. § 1962d-20(b)(2) (2000)).

151. Annex 2001, *supra* note 14.

H. Annex 2001: Setting the Table for a New Great Lakes Compact

Recognizing the limits of existing laws and policies and the growing threats to the Great Lakes, the region's governors and premiers signed an Annex to the Great Lakes Charter Agreement in 2001.[152] Popularly referred to as "Annex 2001," it reaffirmed the commitments in the Great Lakes Charter and contained a new commitment to:

> [F]urther implementing the principles of the [Great Lakes] Charter by developing an enhanced water management system that is simple, durable, efficient, retains and respects authority within the [Great Lakes] 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 the Great Lakes ecosystem, the Governors and Premiers commit to develop and implement a new common, resource-based conservation standard and apply it to new water withdrawal proposals from the Waters of the Great Lakes Basin. The standard will also address proposed increases to existing water withdrawals and existing withdrawal capacity from the Waters of the Great Lakes Basin.[153]

To achieve these lofty commitments, Annex 2001 provides a number of directives. The first is to develop "Basin-wide binding agreement(s), such as an interstate compact" to implement Annex 2001.[154] 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."[155] Third, Annex 2001 proposes the following principles to guide the establishment of the new standards for reviewing water withdrawal proposals:

- Preventing or minimizing [Great Lakes] Basin water loss through return flow and implementation of environmentally sound and economically feasible water conservation measures; and
- No significant adverse individual or cumulative impacts to the quantity or quality of the Waters and Water-Dependent Natural Resources of the Great Lakes Basin; and

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152. *Id.*
153. *Id.* at 1.
154. *Id.* at 2.
155. *Id.*

- An improvement to the Waters and Water-Dependent Natural Resources of the Great Lakes Basin; and
- Compliance with the applicable state, provincial, federal, and international laws and treaties.[156]

The governors and premiers further committed to developing information for a decision-support system and technical information regarding Great Lakes waters resources.[157]

While non-binding (just as the Great Lakes Charter), 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 ethics 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 being seen around the region.

The scope of the agreement also had great promise. First, the agreement applied to all water withdrawals, not just diversions. In a region that has at times focused only on threats of diversions and ignored the effects of its own water use,[158] this was a tremendous advancement. Secondly, the agreement recognizes the interconnection of all waters in the basin, including ground water. In the Great Lakes, as in many other parts of the country, law and policy has been slow to recognize the surface water / ground water connection and the need to manage all water as a connected resource.[159]

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 impacts and harms. For example, the federal policy for wetland conservation is "no net loss," aimed at preventing the destruction and deterioration of wetlands.[160] In practice, this policy has allowed a slow but steady loss and degradation of natural resources.[161] Because new projects often result in

156. *Id.*

157. *See id.* at 2–3.

158. In contrast, 1986 WRDA applies only to diversions, not in-basin consumptive uses. *See* 42 U.S.C. § 1962d-20(d) (2000).

159. *See* SAX, *supra* note 119, at 343 ("[w]ater law traditionally has treated groundwater and surface water separately, with independent rules for allocation").

160. *See* U.S. FISH AND WILDLIFE SERVICE, WETLANDS: MEETING THE PRESIDENT'S CHALLENGE 6 (1990).

161. *See* NATIONAL RESEARCH COUNCIL, COMPENSATING FOR WETLAND LOSSES UNDER THE CLEAN WATER ACT 2 (2001) (concluding that the "goal of no net loss of wetlands is not

some natural resource loss or degradation, they often face opposition from local citizens and conservationists who do not wish to trade the environmental costs for economic development benefits.

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—the region's most valuable public resource—must leave the resource better than they found it. The principle even holds the potential for changing public attitudes toward water withdrawal projects. Individual projects would be seen for their environmental benefits, not simply their externalized costs. Over time, new projects would drive restoration of the Great Lakes ecosystem, not degradation of it. However, as with any new policy proposal, the improvement concept raises difficult questions. The most important are the practical: what exactly is an improvement, and how much improvement would be enough to satisfy regulators? As discussed below, the difficulty in answering these questions eventually limited the improvement concept to a minor role in the proposed compact and agreement.

To implement Annex 2001 directives, the governors and premiers (working through the Council of Great Lakes Governors) established a Water Management Working Group and Advisory Committee, comprised of state officials, representatives of various water user sectors, local and federal governments, and conservation organizations. The Water Management Working Group, chaired by Ohio Department of Natural Resources Director Dr. Sam Speck, released a first draft of the proposed agreements on July 19, 2004.[162] The proposal received significant attention during a ninety-day public comment period, with over thirty public meetings and hearings throughout the region and over ten thousand written comments.[163] Many of the comments demonstrated an opposition to diversions and concerns regarding the balance of state and regional control of Great Lakes water.[164] Following the initial public comment period, the Water Management Working Group continued negotiating and drafting the proposed agreements, resolving numerous interstate and interprovincial issues as well as addressing concerns raised by the public

being met for wetland functions by the [Clean Water Act] mitigation program, despite progress in the last 20 years").

162. For a summary of the first draft of the proposed Great Lakes Basin Water Resources Compact and Great Lakes Basin Sustainable Water Resources Agreement released in 2004, *see* Noah D. Hall, *Great Lakes Governors Propose Historic Water Resources Compact*, 36 TRENDS, A.B.A. SEC. OF ENV'T, ENERGY, & NAT. RESOURCES NEWSL., No. 2 (2004).

163. Some of these comments are available online. *See* Annex 2001 Public Comments, http://www.cglg.org/comments/ViewComments.asp (last visited Feb. 20, 2006).

164. *See id.*

and various stakeholders. The result of these negotiations, influenced by the Advisory Committee and public comment process, is the proposed Great Lakes-St. Lawrence River Basin Water Resources Compact and companion Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement.

III. THE PROPOSED GREAT LAKES-ST. LAWRENCE RIVER BASIN WATER RESOURCES COMPACT

The proposed Great Lakes-St. Lawrence River Basin Water Resource Compact[165] is a tremendous advancement in both the substantive legal rules for water use in the Great Lakes basin and the cooperative management among the states and provinces that share this resource. An analysis of the proposed compact begins with the common standards for new water withdrawals that are at its core. The analysis then moves to the proposed compact's interstate management structure for implementing and enforcing the standards. Finally, the companion Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement is analyzed as a sub-treaty mechanism for international cooperation.

A. The Decision Making Standard: An Evolution of Riparian Law

At the core of the proposed compact are the common standards (referred to as the "decision making standard"[166]) for new or increased water withdrawals of Great Lakes basin water. The applicability of these standards is not limited to water taken directly from one of the Great Lakes. Rather, the compact broadly defines the waters of the Great Lakes to include all tributary surface and ground waters.[167] Just this initial recognition of connected ground water and surface water as a single resource to be managed uniformly is a long overdue advancement in water law.[168] Addressing both ground and surface water is also critical to the eventual success of any Great Lakes water policy, since ground water comprises over fifteen percent of the total water supply in the Great Lakes basin.[169]

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165. Proposed Compact, *supra* note 1.

166. Proposed Compact, *supra* note 1, § 4.11, at 18–19.

167. *See* Proposed Compact, *supra* note 1, § 1.2, at 4 (defining "Waters of the Basin" or "Basin Water").

168. Prof. Tarlock noted in 1986 that "comprehensive water resource management today means the uniform treatment of ground and surface water, and . . . is the key to the Great Lakes States charting their own water destiny." Tarlock, *supra* note 110, at 76.

169. *See* GRANNEMANN ET AL., *supra* note 50, at 1.

While the decision making standard applies broadly to all waters, it only applies to new or increased withdrawals of water.[170] This follows the express scope of Annex 2001.[171] Existing uses are not grandfathered or protected by the compact; individual jurisdictions are simply free to regulate (or not regulate) existing uses as they see fit. While existing withdrawals are not regulated under the proposed compact, states are required to implement "a voluntary or mandatory" water conservation program with state-specific goals and objectives for all water users, including existing users.[172]

The decision making standard contains the following criteria for new or increased water withdrawals:

1) All Water Withdrawn shall be returned, either naturally or after use, to the Source Watershed less an allowance for Consumptive Use;
2) The Withdrawal . . . will be implemented so as to ensure that [it] will result in 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) The Withdrawal . . . will be implemented so as to incorporate Environmentally Sound and Economically Feasible Water Conservation Measures;
4) The Withdrawal . . . will be implemented so as to ensure that it is in compliance with all applicable municipal, State and federal laws as well as regional 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 . . . is planned in a fashion that provides for efficient use of the water, and will avoid or minimize the waste of Water;
    b. If the Proposal is for an increased Withdrawal . . ., whether efficient use is made of existing supplies;
    c. The balance between economic development, social development and environmental protection of the proposed With-

170. *See* Proposed Compact, *supra* note 1, § 4.10(1), at 17. The Proposed Compact does require registration and reporting for all withdrawals (existing and new or increased) over 100,000 gpd, averaged over any thirty-day period. *See id.* § 4.1(3), at 10. This may facilitate management of existing water withdrawals in the future.

171. *See* Annex 2001, *supra* note 14.

172. *See* Proposed Compact, *supra* note 1, § 4.2(2), (5), at 11.

drawal and use and other existing or planned withdrawals and water uses sharing the water source;

d. The supply potential of the water source, considering quantity, quality, and reliability and safe yield of hydrologically interconnected water sources;

e. The probable degree and duration of any adverse impacts caused or expected to be caused by the proposed Withdrawal and use under foreseeable conditions, to other lawful consumptive or non-consumptive uses of water or to the quantity or quality of the Waters and Water Dependent Natural Resources of the Basin, and the proposed plans and arrangements for avoiding or mitigation of such impacts; and,

f. If a Proposal includes restoration of hydrologic conditions and functions of the Source Watershed, the Party may consider that.[173]

These criteria have discernable roots in common law riparian rules and the doctrine of reasonable use.[174] Criteria (5)(a)–(e) follow closely the factors for determining reasonable use as described in section 850A of the Restatement (Second) of Torts.[175] Further, water conservation—criterion (3)—has long been recognized as a factor in determining the reasonableness of water use under riparian law.[176] Even criterion (2), which prevents a water withdrawal from having "significant" adverse environmental impacts, has a base in common law riparian rules.[177]

The decision making standard also draws heavily from the criteria recommended by the Great Lakes Charter Report, incorporated nearly verbatim by the Wisconsin Legislature when it passed Act 60 in 1985.[178]

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173. Proposed Compact, *supra* note 1, § 4.11, at 18–19.

174. Grounding the criteria in common law riparian rules as "background principles" gives the Great Lakes states a solid defense against potential takings claims relating to the enforcement of the Compact standards. *See* Lucas v. S.C. Coastal Council, 505 U.S. 1003, 1029 (1992); *see also* Joseph L. Sax, *The Constitution, Property Rights and the Future of Water Law*, 61 U. COLO. L. REV. 257 (1990).

175. RESTATEMENT (SECOND) OF TORTS § 850A(a) (1977).

176. *See id.* § 850A(f) (considering "the practicality of avoiding the harm by adjusting the use or method of use" in determining the reasonableness of a water use). The comments to clause (f) note that "[t]he law requires reasonable efficiency in facilities for and methods of using water." *Id.* § 850A(f) cmt. f.

177. *See id.* § 850A(e) (considering "the extent or amount of harm" caused by a water use in determining its reasonableness).

178. *See* Joseph L. Sax, *A Model State Water Act for Great Lakes Management: Explanation and Text*, 18 CASE W. RES. J. INT'L L. 219, 223 (1986). Prof. Sax provides a model state water act, based closely on Wisconsin's statute, which he notes "was built upon the model state legislation that accompanied the Great Lakes Charter." *Id.* Prof. Sax's model act, the Great Lakes Charter criteria, and the Wisconsin Act are thus all nearly identical. For ease of

For example, the third criterion's requirement of "environmentally sound and economically feasible water conservation measures"[179] is an elaboration on the Wisconsin statute's required "reasonable conservation practices."[180] Similarly, the second criterion's prohibition on "significant individual or cumulative adverse impacts"[181] simply expands on the Wisconsin statute's prohibition on "significant adverse impact[s]."[182]

While the fourth criterion requiring compliance with all applicable laws, agreements, and treaties may seem superfluous, it has significant practical importance. As discussed above, the treaties, agreements, and laws regarding Great Lakes water management suffer from a lack of enforceability and private causes of action. The Boundary Waters Treaty of 1909, expressly referenced in criterion (4), lacks any judicial review provisions or enforcement mechanisms short of Senate action.[183] Similarly, the lack of a private right of action to enforce compliance with 1986 WRDA has been lamented as a fatal limitation of that statute.[184] By requiring compliance with the Boundary Waters Treaty and other laws and agreements, the proposed compact elevates their terms to enforceable standards for new or increased water withdrawals. As discussed below, the failure to comply with these criteria, and by reference the terms of the Boundary Waters Treaty and other agreements, triggers numerous enforcement mechanisms and legal remedies.

Despite the compact's generally limited focus on managing and regulating only new or increased water uses, criterion (5)(b) requires consideration of "efficient use . . . of existing water supplies."[185] If applied strictly, a community could not obtain approval for an increase in its water withdrawal to meet the needs of a growing population without first implementing conservation measures for its existing uses. Similarly, a manufacturer or irrigator that wishes to expand and increase its water use must first take measures to reasonably reduce its current water use through conservation practices. Through this criterion, the compact could force efficiency improvements and water conservation on many existing users as they expand, encouraging a "hard look" at existing water use practices and methods.

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reference, this analysis uses the text of the Wisconsin statute. WIS. STAT. § 281.35(5)(d) (2004).

179. Proposed Compact, *supra* note 1, § 4.11(3), at 18.

180. WIS. STAT. § 281.35(5)(d)(3).

181. Proposed Compact, *supra* note 1, § 4.11(2), at 18.

182. WIS. STAT. § 281.35(5)(d)(4).

183. *See* Boundary Waters Treaty, *supra* note 9, art. X, 36 Stat. at 2452–53.

184. *See* Glass, *supra* note 140.

185. Proposed Compact, *supra* note 1, § 4.11(5)(b), at 18.

Finally, while the improvement concept did not become a requirement for new or increased water withdrawals, the concept was incorporated into the decision making standard. Criterion (5)(f) allows consideration of proposals to restore "hydrologic conditions and functions" in the source watershed.[186] Thus, improvements are not strictly required, but can be considered in the overall determination regarding the reasonableness of the proposed use. Water users can propose a restoration or improvement as a way of making their water use more compatible with the resources and limitations in the watershed.

The compact makes clear that the common decision making standard is only a minimum standard.[187] States may impose more restrictive standards for water withdrawals under their authority.[188] Some jurisdictions already have permitting standards in place,[189] and this ensures that the compact in no way requires a weakening of state regulatory programs. Even jurisdictions that do not yet have a comprehensive water management and regulatory program may have stricter standards in other statutes. For example, Michigan has strong statutory protections that do not allow a project to "impair or destroy" lakes and streams.[190]

The proposed compact's decision making standard is a major evolution in eastern water law. While it represents historic progress in the advancement of water resources law, it is also grounded in common law riparian rules and various environmental statutes. However, environmental standards are only as good as the management and enforcement systems by which they are applied. Fortunately for the Great Lakes, the proposed compact provides a meaningful system of interstate water management and enforcement to ensure that the standards are applied across the Great Lakes basin.

B. State and Interstate Management: Consumptive Uses and Diversions

The compact creates two separate approaches to managing new or increased water withdrawals in the Great Lakes basin. The differentiation is based almost entirely on whether the water is used inside or outside of the Great Lakes basin surface watershed boundary. Water use inside of the Great Lakes basin is managed solely by the individual state, with limited advisory input from other states for very large consumptive

186. *Id.*
187. *See id.* § 4.12(1), at 19.
188. *See id.*
189. *See* MINN. STAT. § 103G.271 (2004).
190. MICH. COMP. LAWS § 324.30106 (2003).

uses.[191] Water use outside of the basin (a diversion) is subject to a spectrum of collective rules and approval processes, including a general prohibition on most diversions.[192]

1. State Management of In-Basin Consumptive Uses

The proposed compact requires the states to "create a program for the management and regulation of New or Increased Withdrawals . . . by adopting and implementing Measures consistent with the Decision-Making Standard" within five years.[193] States must set the threshold levels for regulation of water withdrawals to "ensure that uses overall are reasonable, that Withdrawals overall will not result in significant impacts . . . and that all other objectives of the Compact are achieved."[194] If states fail to establish thresholds that comply with these requirements, a default threshold of regulating all new or increased withdrawals of 100,000 gpd or greater (averaged over any ninety-day period) is imposed.[195] The states must make reports to the Compact Council, which is comprised of the governor of each party state, regarding their implementation.[196] The Compact Council must then review the state programs and make findings regarding their adequacy and compliance with the proposed compact.[197]

The states must further develop and promote water conservation programs in cooperation with the Compact Council within two years of the effective date of the proposed compact.[198] While not specifically regulatory, the state programs are intended to advance the proposed compact goals, including protecting and restoring Great Lakes hydrologic and ecosystem integrity.[199] Through their respective conservation programs, states must promote water conservation measures such as "[d]emand-side and supply-side [m]easures or incentives."[200]

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191. *See* Proposed Compact, *supra* note 1, § 4.3 and § 4.6, at 11–12, 14.
192. *See id.* § 4.8 and § 4.9, at 15–17.
193. *Id.* § 4.10(1), at 17.
194. *Id.*
195. *Id.* § 4.10(2), at 18. 100,000 gpd would supply approximately 158 typical households in the Great Lakes region. *See* U.S. DEP'T OF THE INTERIOR, ESTIMATED USE OF WATER IN THE UNITED STATES IN 1990 (1993); U.S. CENSUS BUREAU, CURRENT POPULATIONS SURVEY, ANNUAL SOCIAL AND ECONOMIC SUPPLEMENT (2003), http://www.bls.census.gov/cps/asec/adsmain.htm.
196. *See* Proposed Compact, *supra* note 1, § 3.4(1), at 9.
197. *See id.* § 3.4(2), at 9.
198. *See id.* §§ 4.2(2),(4), at 11.
199. *See id.* § 4.2(2), at 11.
200. *Id.* § 4.2(4)(d), at 11.

Finally, the states are required to develop and maintain a water resources inventory with information regarding both available water resources and water withdrawals within the state.[201] As part of this requirement, all water users (both existing and new) making water withdrawals greater than 100,000 gpd (averaged over any ninety-day period) must register with their state and report the details of their water use.[202] The information gathered by the individual states will create a regional common base of data for interstate information exchange.[203] This information is critical to both state and interstate management of the Great Lakes, especially with regards to cumulative impacts of water withdrawals.[204]

2. Interstate Management of Diversions

The simplest form of interstate management under the proposed compact is the general prohibition on new or increased diversions of Great Lakes water.[205] Diversions are defined to include both the transfer of Great Lakes basin water into another watershed (interbasin diversion) as well as diversions from one Great Lake watershed into another Great Lake watershed (intrabasin diversion).[206] However, this broad definition belies one of the three major exceptions to the prohibition on diversions: intrabasin transfers.

While not subject to the prohibition on diversions, intrabasin transfers are subject to the "exception standard"[207] and varying state approvals and additional requirements based on the amount of the withdrawal and consumptive use.[208] Intrabasin transfers below 100,000 gpd (averaged over any ninety-day period) are left solely to the discretion of the individual state.[209] Intrabasin transfers above the 100,000 gpd threshold but with a consumptive use[210] below 5 million gpd are subject to state

201. *See id.* § 4.1(1), at 10.
202. *See id.* § 4.1(3), at 10.
203. *See id.* § 4.1(2), at 10.
204. *See id.* § 4.1(6), at 10.
205. *See id.* § 4.8, at 15.
206. *See id.* § 1.2, at 2 (defining "Diversion").
207. The "exception standard" is substantively similar to the decision-making standard. However, instead of requiring a multi-factor reasonable use determination, the exception standard requires that both "[t]he need for all or part of the proposed Exception cannot be reasonably avoided through the efficient use and conservation of existing water supplies" and that "[t]he Exception will be limited to quantities that are considered reasonable for the purposes for which it is proposed." *See id.* § 4.9(4), at 17.
208. *See id.* § 4.9(2), at 15–16.
209. *See id.* § 4.9(2)(a), at 15.
210. It should be noted that the amount of consumptive use can be far less than the total

management and regulation based on the exception standard,[211] as well as the prior notice process for comments by other states (discussed below).[212] Intrabasin transfers with a consumptive use above 5 million gpd are subject not only to state regulation pursuant to the exception standard and a non-binding regional review process, but also to the unanimous approval of the Compact Council (comprised of each of the governors).[213]

The other two exceptions to the prohibition on diversions involve communities and counties that straddle the surface water basin divide. Sprawling metro areas that have expanded beyond the Great Lakes watershed are a growing problem in the region. For example, while the city of Milwaukee sits on the shores of Lake Michigan, its suburbs now go beyond the Lake Michigan surface watershed, which is only a few miles from the lakeshore in some areas of Wisconsin.[214] It is important to recognize, however, that the communities just outside the surface watershed are often still within the ground watershed, and may in fact be using ground water connected to the Great Lakes.[215] Thus, both socially and scientifically, these communities could be fairly considered part of the Great Lakes basin.

The proposed compact addresses this issue by bringing straddling communities and counties that use Great Lakes surface water for public water supply purposes into the management regime. A straddling community, defined as an incorporated city or town[216] that uses Great Lakes water for public supply purposes both inside and outside of the surface water basin, is treated similarly to an in-basin withdrawal, subject to state regulation pursuant to the exception standard.[217] To prevent exploitation

withdrawal. "Consumptive Use" is defined in the proposed compact as the portion of the water withdrawn "that is lost or otherwise not returned to the [b]asin due to evaporation, incorporation into products, or other processes." *Id.* § 1.2, at 2 (defining "Consumptive Use"). Estimated consumptive use rates vary by water use sector, but can range from one to two percent for many power plants, to ten to fifteen percent for public water supplies, to seventy to ninety percent for agricultural irrigation. *See* GREAT LAKES COMM'N, *supra* note 49, at 60. So, for example, a public water supply that operates an intrabasin diversion could withdraw 40 million gpd but only have a consumptive use of 4 million gpd.

211. *See* Proposed Compact, *supra* note 1, § 4.9(2)(b)(i), at 15–16.

212. *See id.* § 4.9(2)(b)(iii), at 16; *see also id.* § 4.6, at 14 (proposals subject to prior notice).

213. *See id.* § 4.9(2)(c), at 16. The unanimous approval may include abstentions. *See id.* § 4.9(2)(c)(iv), at 16. ("Council approval shall be given unless one or more Council Members vote to disapprove.").

214. *See* Dan Egan, *Water Pressures Divide a Great Lakes State*, MILWAUKEE J. SENTINEL, Nov. 23, 2003, at A1.

215. *See id.*; *see also* GRANNEMANN ET AL., *supra* note 50, at 2.

216. *See* Proposed Compact, *supra* note 1, § 1.2, at 4 (defining "Straddling Community").

217. *See id.* § 4.9(1), at 15.

of this exception by growing incorporated cities and towns through mergers and annexations, the proposed compact limits the defined straddling community to the boundaries existing as of the effective date of the compact.[218]

A proposal for a diversion in a straddling county, which encompasses a far greater area than a "community," is subject to additional standards and regional approval. First, the water can be used solely for the public water supply purposes of a community that is without "adequate supplies of potable water."[219] Second, the proposal is subject to an additional "cautionary" standard, requiring a showing that the proposal "will not endanger the integrity of the Basin Ecosystem."[220] Finally, the proposal is subject to both non-binding regional review and the unanimous approval of the Compact Council.[221]

Like almost any environmental public policy, the proposed compact makes some arbitrary distinctions and avoids some difficult political decisions. For example, the question of whether bottled water shipped out of the basin constitutes a diversion has been an emotional political topic in recent years.[222] Some environmental activists view bottled water as no different from a tanker or pipeline that sends water to distant markets for private profit.[223] The bottled water industry views itself as an in-basin consumptive use, creating a product (bottled water) from a natural resource.[224] Both arguments are perched on slippery slopes. Environmental activists view bottled water as opening the door to massive private sale of the Great Lakes. Industry sees no difference between bottles filled with pure water and bottles filled with water and a little sugar, corn syrup or artificial flavor (also known as soft drinks, or "pop" in the Midwest). The question of whether bottled water constitutes a diversion is so loaded with political controversy that the governors decided not to conclusively address it in the proposed compact. While the compact defines water in containers greater than 5.7 gallons (20 liters) as a diversion, it

218. *See id.* § 1.2, at 4 (defining "Straddling Community").

219. *Id.* § 4.9(3)(a), at 16.

220. *Id.* § 4.9(3)(e), at 16.

221. *See id.* § 4.9(3)(f)–(g), at 16. The unanimous approval may include abstentions. *See id.* § 4.7(3)(g), at 16 ("Council approval shall be given unless one or more Council Members vote to disapprove.").

222. *See* ROBERT GLENNON, WATER FOLLIES: GROUNDWATER PUMPING AND THE FATE OF AMERICA'S FRESH WATERS 1–12 (2002); Robert Haskell Abrams, *Water Follies: Groundwater Pumping and the Fate of America's Fresh Waters*, 46 ARIZ. L. REV. 473, 479–82 (2004) (book review); Debbie Howlett, *Water Battle Dredges Up Acrimony*, USA TODAY, June 23, 2003, at 3A; Hugh McDiarmid, *Nestle Sues Over Restrictive Water-Use Permit*, DETROIT FREE PRESS, June 20, 2005 (on file with author).

223. *See* Howlett, *supra* note 222; McDiarmid, *supra* note 222.

224. *See* Howlett, *supra* note 222; McDiarmid, *supra* note 222.

leaves the decision of how to treat water in containers of 5.7 gallons or less to the individual states.[225]

Another difficult issue relating to the definition of diversion is the management of ground water. The extent and boundaries of Great Lakes tributary ground water are not well defined by current science.[226] This uncertainty is left unresolved in the proposed compact, which circularly defines the "Waters of the Basin or Basin Water" to include "tributary groundwater [] within the Basin" and defines the "Basin or Great Lakes Basin" as "the watershed of the Great Lakes."[227]

3. The Compact Council, Enforcement, and Public Process

In addition to providing a mechanism for unanimous approval of the diversion exceptions, the Compact Council has numerous other powers and duties. Comprised of the governors of each party state (or their designated alternates), it can promulgate and enforce rules to implement its duties under the proposed compact.[228] The Compact Council also has broad authority to plan, conduct research, prepare reports on water use, and forecast water levels.[229] Perhaps most importantly, it can conduct special investigations and institute court actions, including enforcement.[230]

Enforcement is not the sole domain of the Compact Council, however. The proposed compact contains broad and comprehensive enforcement provisions at both the state and interstate levels. Any aggrieved person can commence a civil enforcement action in the relevant state court against a water user that has failed to obtain a required permit or is violating the prohibition on diversions.[231] Remedies include equitable relief and the prevailing party may recover reasonable attorney and expert witness fees.[232] Any person, including another state or province, can challenge a state action under the proposed compact (such as issuance of a permit) pursuant to state administrative law, with an express right of judicial review in state court.[233]

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225. *See* Proposed Compact, *supra* note 1, §4.12(10), at 20.
226. *See generally* GRANNEMANN ET AL., *supra* note 50.
227. *See* Proposed Compact, *supra* note 1, § 1.2, at 1, 4 (defining "Basin or Great Lakes Basin" and "Waters of the Basin or Basin Water").
228. *See id.* §§ 2.1–2.3, at 6, § 3.3(1), at 9.
229. *See id.* § 3.2, at 8–9.
230. *See id.*
231. *See id.* § 7.3(3), at 24.
232. *See id.*
233. *See id.* § 7.3(1), at 23.

The broad enforcement provisions are complemented by similarly progressive public participation provisions. As with the minimum substantive decision making standard, the compact provides minimum procedural public process requirements for the party states and Compact Council. These include: 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 records relating to decisions.[234] The proposed compact also requires additional formal consultation with federally recognized Tribes in the relevant state.[235] In recognition of the Tribes' status as sovereigns, such consultation is handled primarily through either the Compact Council or Regional Body (discussed below).[236]

The proposed compact becomes effective once ratified through concurring legislation in each party state and consented to by Congress.[237] The proposed compact has no termination date; it remains in force unless terminated by a majority of the party states (five of the eight).[238] As is typical for interstate water compacts, it is very difficult to amend once enacted.[239] Amendments would require unanimous approval by all state legislative bodies and the consent of Congress.[240]

C. Sub-Treaty State-Provincial Cooperation and the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement

State-provincial cooperation has been a regional goal for decades, implicitly promised by the Great Lakes Charter and the 2001 Annex to the Great Lakes Charter and expressly encouraged by Congress in its 2000 amendments to WRDA.[241] However, including the Canadian provinces in the proposed compact could bring political and legal challenges. In an attempt to meet the goal of state-provincial cooperation without running afoul of constitutional treaty limitations, the Council of Great Lakes Governors proposed a companion non-binding good faith agreement that includes the provinces of Ontario and Quebec, the Great

234. *See id.* § 6.2, at 23.
235. *See id.* § 5.1, at 22.
236. *See id.*
237. *See id.* § 9.4, at 26–27.
238. *See id.* § 8.7, at 26.
239. *See* Grant, *supra* note 26, at 108.
240. *See* Proposed Compact, *supra* note 1, § 8.5, at 25–26.
241. *See* Water Resources Development Act of 2000, Pub. L. No. 106-541, § 504, 114 Stat. 2572, 2644–45 (codified as amended at 42 U.S.C. § 1962d-20(b)(2) (2000)).

Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (hereinafter "proposed agreement"). This dual structure creates a legally and politically acceptable mechanism for cooperation with Canadian provinces.

State cooperation with Canadian provinces in the Great Lakes region has obvious ecological and policy benefits, but raises fundamental legal and political concerns. The Compact Clause of the Constitution, included in Article I, section 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."[242] The same constitutional section also provides that "[n]o State shall enter into any Treaty, Alliance, or Confederation."[243] Thus, the prohibition on states entering into a "Treaty, Alliance, or Confederation" is absolute, while the prohibition on states entering into an "Agreement or Compact," even with a foreign government, is limited only by the political decision of Congress to consent.[244]

The question of what constitutes a "Treaty, Alliance, or Confederation" versus an "Agreement or Compact" can in theory open the door to major constitutional issues of separation of powers and federalism.[245] In the case of the Great Lakes, there is a sensible answer. Congress has already exercised its treaty powers in this area through the Boundary Waters Treaty of 1909, and it could view any attempt by the states to enter into a binding management arrangement with the provinces on a related subject as an impermissible treaty.[246] Further, even if Congress viewed such an arrangement with the provinces as a compact rather than a treaty, it would likely reject either the entire compact or the inclusion of the provinces. This lesson has already been learned in the Great Lakes; when the Great Lakes states proposed including the provinces in the original Great Lakes compact over fifty years ago, Congress rejected the

242. U.S. CONST. art. I, § 10, cl. 3.

243. *Id.* art. I, § 10, cl. 1.

244. Despite the plain language of the Compact Clause, congressional consent may not be necessary for interstate compacts relating to matters in which the United States has no possible interest or concern or that do not increase the states' political power. *See* Virginia v. Tennessee, 148 U.S. 503, 519–21 (1893).

245. It is left to Congress to determine whether a proposed arrangement is a prohibited "Treaty, Alliance, or Confederation" or a permissible "Agreement or Compact." *See* Frankfurter & Landis, *supra* note 5, at 694–95. This determination may elude a rigid legal analysis since it is "in a field in which political judgment is, to say the least, one of the important factors." *Id.* at 695, n.37.

246. Congress has already refused to authorize the Great Lakes states from entering into any arrangement with Canadian jurisdictions that could be viewed as a treaty or limitation of the United States' treaty-making powers when it approved the original Great Lakes Basin Compact. *See* Great Lakes Basin Compact, *supra* note 11, §§ 2–3, at 419.

provincial participation and only approved the compact among the states.[247]

While Congress would not likely allow a binding agreement between the states and provinces, in its 2000 amendments to WRDA it stated a desire for the states to work "in consultation with" the provinces to develop a Great Lakes water management agreement.[248] The states are wise to interpret this congressional encouragement not as permission to negotiate a compact with the provinces, but rather to develop a nonbinding cooperative approach to Great Lakes water management that involves the provinces.

The proposed compact incorporates the provinces through the proposed agreement's "Regional Body," comprised of representatives from each state and province.[249] The primary mechanism for achieving this purpose is the "Regional Review" procedure conducted by the Regional Body. The Regional Body's authority could be fairly described as procedural rather than substantive; and its determinations described as advisory rather than final. The Regional Body's role includes notice, consultation, and public participation, but stops short of final decision making.[250] The parties and Compact Council need only "consider" (but not follow) Regional Review findings.[251] 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.[252]

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 affecting major decisions. The Regional Review process could have the influence of the environmental review process required by the National Environmental Policy Act (NEPA).[253] Like Regional Review, NEPA's environmental review can be considered procedural.[254] Yet over time, it may have both subtle and direct effects on agency decision making.[255]

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247. *See id.*

248. Water Resources Development Act of 2000, Pub. L. No. 106-541, § 504, 114 Stat. 2572, 2644–45 (codified as amended at 42 U.S.C. § 1962d-20(b)(2) (2000)).

249. *See* Proposed Compact, *supra* note 1, § 1.2, at 4 (defining "Regional Body").

250. *See id.* § 4.5, at 12–14.

251. *See id.* § 4.5(5)(i), at 14.

252. *See id.* §§ 4.5(1)(c), 4.5(1)(f), at 12. A state may, at its discretion and after consulting with the proposal applicant, seek Regional Review for any other proposal within its jurisdiction. *See id.* § 4.5(2)(c)(ii), at 13.

253. Pub. L. No. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. § 4321–4347 (2000)) (requiring review of potential environmental impacts from major federal actions).

254. *See* Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989) ("[I]t is

Despite a few of the arbitrary compromises typically made in the course of environmental policy-making, the proposed compact and agreement represent an historic step forward in Great Lakes water policy. The decision-making standard alone is a major evolution in water law. The unified management of surface and ground water brings some scientific reality to the law. And the provisions for enforcement, public process, and cooperation with Canadian provinces ensure more accountable and participatory decision making. However, the mechanism through which these standards and provisions are applied may be the most important advancement. The proposed compact introduces a new cooperative horizontal federalism approach for crafting multi-state water resource and environmental policy that could be model for future environmental policy efforts.

IV. COOPERATIVE HORIZONTAL FEDERALISM: THE GREAT LAKES MODEL

This concept of using interstate compacts for conservation and environmental protection was suggested eighty years ago by future Supreme Court Justice Felix Frankfurter and James Landis:

> Even before the Constitution we find that the common interest in natural resources, of a region embracing two States, was furthered by an agreement between such States. . . . Conservation of natural resources is thus making a major demand on American statesmanship. An exploration of the possibilities of the compact idea furnishes a partial answer to one of the most intricate and comprehensive of all American problems.[256]

Their vision for interstate compacts as a solution to regional environmental issues was temporarily mooted by the expansion of the federal government into environmental protection in the latter half of the twentieth century.[257] With the federal government taking a strong role on environmental issues, states had neither the need nor the opportunity to craft their own regional solutions. However, "the landscape of federalism appears to be shifting toward the states after decades of moving in

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now well settled that NEPA itself does not mandate particular results, but simply prescribes the necessary process.").

255. For various evaluations of the effects of NEPA on agency decision-making, see DANIEL R. MANDELKER, NEPA LAW & LITIGATION 11-1 to 11-26 (2d ed. 1992).

256. Frankfurter & Landis, *supra* note 5, at 699.

257. *See* Percival, *supra* note 18, at 1146–65.

the opposite direction."[258] Federal environmental standards and enforcement, even under cooperative vertical federalism approaches, often prove crude and ineffective, and states desire the flexibility to craft environmental standards that meet their local needs.[259]

A brief review of the arguments for a strong federal role over the states in environmental protection provides a framework for analyzing the value of the cooperative horizontal federalism model as a third alternative.[260] Several factors are commonly cited for supporting federalization of environmental regulation. First, it is argued that federal law is necessary for addressing problems of transboundary pollution and pollution of interstate resources, which cannot be addressed through individual state action.[261] It is further argued that in the absence of a federal regulatory program to address transboundary pollution, states will be left to seek redress in the Supreme Court for disputes regarding transboundary and interstate pollution.[262]

Clearly individual states, acting alone, cannot adequately address transboundary and interstate pollution. States can bring litigation to address these problems in United States Supreme Court, which has original jurisdiction over disputes between the states.[263] However, the Court itself has admitted that it is not the ideal forum for addressing transboundary pollution disputes, which tend to involve complex technical and scientific issues with major political and economic ramifications.[264] But when faced with a dispute over interstate water resources, the Court has specifically endorsed the interstate compact mechanism as a preferred alternative for more comprehensively addressing the transboundary pollution problem.[265] With interstate compacts, transboundary pollution problems are "more likely to be wisely solved by cooperative study and by conference and mutual concession on the part of representatives of the

258. *Id.* at 1142; *see also id.* at 1165–71.

259. *Id.* at 1144–45.

260. It is beyond either the scope or intent of this article to weigh in on the well-argued debate over federal versus state environmental protection. *See generally* Richard L. Revesz, *Rehabilitating Interstate Competition: Rethinking the "Race-to-the-Bottom" Rationale for Federal Environmental Regulation*, 67 N.Y.U. L. REV. 1210 (1992); Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570 (1996). This article merely suggests the cooperative horizontal federalism model as third alternative in the federal versus state debate.

261. *See* Percival, *supra* note 18, at 1171.

262. *See id.*

263. *See* Missouri v. Illinois, 200 U.S. 496 (1906); Missouri v. Illinois, 180 U.S. 208 (1901).

264. *See* New York v. New Jersey, 256 U.S. 296, 313 (1921).

265. *See id.*

States so vitally interested in it than by proceedings in any court however constituted."[266]

Transboundary pollution problems can certainly be addressed through federal legislation,[267] but congressional action may not be an ideal solution for several reasons. First, the states involved in the dispute, like private parties in litigation, are in the best position to evaluate the strengths and weaknesses of various potential resolutions to the dispute. Second, in many cases Congress will not want to get involved in the dispute, leaving the states to craft a solution on their own. Finally, for transboundary pollution problems that only affect a regional resource, congressional representatives from other regions have no accountability to the citizens being harmed.

A second justification for federal regulation is that it is necessary to ensure minimum levels of protection and consistent standards.[268] This is beneficial not only for preventing states from "racing to the bottom," but also to give industry the benefit of interstate consistency and to take advantage of regulatory economies of scale.[269] While most western interstate water compacts, which allocate a shared resource with no standards,[270] fail to address this issue, it is the central strength of the cooperative horizontal federalism model. Cooperative horizontal federalism provides minimum standards to prevent a race of laxity among competing states and give regulated industries the benefit of consistency and economies of scale for compliance costs across the region. The standards are only minimums and allow states flexibility in their application, but if this is a weakness, it is a weakness shared by most federal cooperative environmental programs.[271]

While both the cooperative horizontal federalism model and the dominant cooperative vertical federalism model create minimum standards to avoid a race of laxity and provide consistent compliance requirements, cooperative horizontal federalism allows those standards to be tailored to the unique needs of a region or specific natural resource. Some consistency in environmental protection standards is desirable, but uniform federal standards often fail to recognize the unique needs of a

266. *Id.*

267. The federal Clean Air Act prohibits emission activity in one state that contributes significantly to other states' noncompliance with air quality standards. *See* 42 U.S.C. §§ 7410(a)(2)(D)(i), 7426 (2000).

268. *See* Percival, *supra* note 18, at 1171. *But see* Revesz, *supra* note 260 (disputing the "race to the bottom" rationale for federal environmental regulation).

269. *See* Percival, *supra* note 18, at 1171–72.

270. *See* Colorado River Compact, *supra* note 6; Rio Grande Compact, *supra* note 7.

271. *See* Percival, *supra* note 18, at 1142, 1144.

region.[272] Cooperative horizontal federalism allows a balance between the need for consistent standards and the recognition that environmental needs vary by region.

The cooperative horizontal federalism model is particularly valuable for addressing environmental problems when federal action is undesirable. In some cases, environmental protection advocates may not want a strong federal role. This is certainly the case in the Great Lakes, where concerns over diversions to other parts of the country fuel a preference for keeping management of the Great Lakes away from the federal government. While the federal government could always exercise its constitutional powers over management and allocation of interstate waters, the proposed compact creates at least a significant political hurdle to a federal water grab.

Congress can repeal a compact just as it can any statute, but the political ramifications of repealing a compact that has already been ratified by numerous state legislatures may prove to be a significant deterrent. As discussed in Part II.G, the current federal authority for managing Great Lakes water diversions (1986 WRDA) has shaky future political prospects. From the perspective of the Great Lakes states, the risk of putting Congress in the lead role for managing a resource that could be coveted by other regions is obvious. 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.

Using an interstate compact and a cooperative horizontal federalism approach to environmental protection removes the Commerce Clause constraints on environmental protection policy and the uncertainty of the Supreme Court's evolving jurisprudence on the issue. The Commerce Clause empowers Congress "[t]o regulate Commerce . . . among the several States."[273] The federal government has relied on this power to address numerous environmental problems, including the regulation of water pollution and the filling of wetlands. However, the Supreme Court's 2001 decision in *Solid Waste Agency of N. Cook County v. U.S. Army Corps of Engineers*[274] establishes that this power is not without limits. Congress clearly has the power to regulate the waters of the Great Lakes as interstate navigable bodies, but its jurisdiction over the waters of an isolated wetland is less certain. Ecologically, a comprehensive water

272. *See generally* Revesz, *supra* note 260.
273. U.S. CONST. art. I, § 8, cl. 3.
274. 531 U.S. 159 (2001).

management policy for all waters (regardless of jurisdiction) is ideal, but the limits of Congress' Commerce Clause power may curb the federal government's ability to enact such a policy.

Instead of relying on the limited Commerce Clause for regulatory authority, states can rely on their broad police powers to regulate water resources.[275] Yet the Commerce Clause creates a different hurdle to state water policy. The states' broad regulatory powers over their waters are limited by the "dormant" commerce clause doctrine, which prevents states from unreasonably restricting interstate commerce. This doctrine could limit the ability of a state to control or restrict the export of its water. In *Sporhase v. Nebraska ex rel. Douglas*,[276] the Supreme Court held that ground water was an article of interstate commerce and that a Nebraska statute restricting the export of ground water from the state was unconstitutional.[277] Thus, states acting alone may be limited in their ability to restrict the export of water. However, congressional approval of a compact eliminates the concern over a dormant commerce clause challenge to state water policy, since any affect on interstate commerce has been sanctioned by the federal government.

Beyond the legal benefits, a cooperative horizontal federalism approach also eliminates many of the political obstacles to environmental protection. By allowing the states to take the initiative and craft their own solutions, states have a more genuine ownership stake in the resulting policy. Instead of having legal burdens forced upon them, they may embrace the goals of the program and better support its implementation. Having invested in the development and creation of a regional policy, the states are more likely to adequately fund the resulting programs and provide the resources needed for effective administration, since they are politically invested in the program's success.

Programmatic review and enforcement may also be stronger under cooperative horizontal federalism approach. Federal agencies are often reluctant to challenge state programs for a variety of political reasons, including the cost of assuming the program if the state is out of compliance and the reality that congressional representatives are advocates for their states. These problems are minimized in the cooperative horizontal federalism model. A neighboring state will have fewer political disincentives for enforcing programmatic compliance on a delinquent state. It is possible that neighboring states will even be pressured by business in-

275. *See* United States v. Riverside Bayview Homes, 474 U.S. 121 (1985).
276. 458 U.S. 941 (1982).
277. *See id.* at 953, 957–58.

terests within their borders to ensure that the competition is playing by the same rules.

Cooperative horizontal federalism may not be the preferred approach to every environmental problem, but it does have unique benefits and strengths for accomplishing environmental protection goals. In some cases, it may be the only legal or political option, given the current trends in Congress and the Supreme Court. It may also be more appropriate for addressing environmental issues at a regional, rather than national, scale. Water management issues vary regionally, such as the tradition of riparianism and opposition to diversions seen in the Great Lakes. The regional preferences may not be shared by other parts of the country. In such a situation, putting the states in the lead for crafting policy makes more sense than leaving the job to Congress.

Cooperative horizontal federalism could help avoid the more traditional interstate water resources disputes, which typically involve upstream and downstream states competing for use of a river. For example, in the ongoing dispute over water in the Apalachicola-Chattahoochee-Flint river basin, the downstream state (Florida) is seeking to preserve the ecosystem functions through sufficient water flows, while the upstream state (Georgia) wants to secure maximum use of water for its residents and industries.[278] In this situation, the states have a quantitative dispute regarding water resource allocation. However, if a cooperative horizontal federalism approach were utilized with meaningful environmental protection standards subject to enforcement by other states, then perhaps the interstate dispute could be resolved by addressing and regulating the individual water withdrawals that are depriving the downstream users.

The significance of cooperative horizontal federalism goes beyond water management, however. The approach could be used to address many regional environmental problems and the management of regional natural resources. For example, states within a region threatened by the introduction of a particular invasive nuisance species could enter into a compact with common standards for invasive species control, information sharing, and perhaps uniform restrictions on certain activities (such as interstate transport of invasive species). Similarly, states that share a forest resource may wish to create common state forest management standards under a cooperative horizontal federalism approach. The approach could even be expanded beyond regional issues to provide a na-

278. *See* J.B. Ruhl, *Equitable Apportionment of Ecosystem Services: New Water Law for a New Water Age*, 19 J. LAND USE & ENVTL. L. 47, 48 (2003).

tional public policy tool for addressing environmental problems that are beyond the federal government's Commerce Clause powers.

Cooperative horizontal federalism may also be the only politically viable option for addressing an emerging environmental issue. If Congress is unwilling to comprehensively address an environmental problem, citizens and stakeholders should consider cooperative horizontal federalism on either a regional or national scale. For example, environmental advocates frustrated by the lack of congressional will to more comprehensively manage non-point water pollution may wish to explore a cooperative horizontal federalism approach. Even if federal regulation remains the long-term goal, state initiatives in the context of cooperative horizontal federalism may prove to be a critical incremental step.

The primary shortcoming of cooperative horizontal federalism is the tremendous political will and collective action that it requires for implementation. For a compact to be enacted, it requires uniform ratification by each state's legislative body and approval by a simple majority in both houses of Congress, which can modify the terms of the compact to protect national interests.[279] The process for enacting a compact is thus a political obstacle course. In the case of the Great Lakes proposal, sixteen individual state legislative bodies along with both the U.S. House of Representatives and Senate must approve the compact. If any of those bodies rejects the proposal, the compact is not enacted.

The compact process also requires all negotiation and compromise up front, as no individual state can unilaterally modify the terms of the compact during ratification. This presents a challenge to state legislators, who are accustomed to amending proposals as part of the political process. Individual state legislative leaders cannot wait until the proverbial eleventh hour to voice their interests in a compact without dealing the process a potentially fatal blow. Instead, cooperative horizontal federalism and the compact mechanism require detailed and lengthy negotiations before the legislative ratification process.

As Congress must approve a compact anyway (and can always repeal a compact once it is enacted), it is fair to ask what political benefit is gained from using a compact mechanism instead of simply working directly with Congress. The answer is premised on the assumption that Congress will give some level of deference to the collective, legislatively expressed, political will of a group of states. The more difficult question is how much deference Congress will afford states utilizing the cooperative horizontal federalism framework. There are at least three factors in the implementation of cooperative horizontal federalism (and interstate

279. *See* Great Lakes Basin Compact, *supra* note 11, §§ 2–3, 82 Stat. at 419.

compacts in general) that may influence congressional deference and approval.

First, Congress will certainly be influenced by the partisan history of the cooperative horizontal federalism proposal. If the states proposing the compact are dominated by one party, and that same party does not have control of Congress, Congress will be politically skeptical of the proposal. Fortunately, the Great Lakes proposal has a bipartisan history, with leaders of both parties unified in their desire to strengthen the states' role in managing the resource.

Closely related to this first factor is the level of support from a broad range of stakeholders with influence in Congress. If the proposal is supported only by environmental protection advocates, then passage in Congress (and bipartisan support at the state level) is unlikely in the current political climate. Instead, the proposal will need the support of representatives of industry, local government, and environmental organizations, all of whom have different spheres of influence in Congress. It is unlikely that any single interest group can secure passage of a major policy proposal in each party state's legislature, let alone both houses of Congress.

Finally, in addition to the political considerations, a cooperative horizontal federalism proposal should avoid infringing on areas of national interest such as interstate commerce. Congress is likely to guard against protectionism and regionalism, at least to a certain extent. Strict regional prohibitions on the export or import of commercial goods will certainly be scrutinized and possibly rejected. Congress has a duty to ensure national interests are not undermined by an interstate compact, and states pursuing a compact should carefully consider the political risk of blatant regional protectionism.

Successful cooperative horizontal federalism efforts can learn from the Great Lakes process and engage a diversity of stakeholders, as well as federal representatives and tribal leaders, very early in the process. The required level of consensus for ultimate political success is significant. Objections of a single state, and perhaps even a single influential interest group, could be fatal to the process. Such consensus is obviously easier to achieve with fewer party states, but the natural resource or environmental problem will often define the states that must be involved for the resulting policy to be effective.

In the case of the Great Lakes proposal, success at this time is far from guaranteed. As discussed above, success will require broad consensus and bipartisan political leadership. The states must avoid the temptation toward regional protectionism to avoid congressional rejection. Beyond these political uncertainties, it must be recognized that the

endeavor, though fundamentally sound, has elements of a policy experiment. Can conflicts over natural resource allocation and transboundary environmental protection be avoided by setting standards for individual sustainable use? Will the states protect a regional resource without the threat of federal enforcement? The answers are not certain, and the stakes for the world's greatest freshwater ecosystem could not be greater.

CONCLUSION

Cooperative horizontal federalism is not suggested to undermine the necessity of federal environmental protection, but only to show that a third alternative exists in the current dualist "state versus federal" debate. Both proponents and opponents of a limited federal role in environmental protection should consider the suggestion of future Justice Frankfurter eighty years ago, and the innovative model developed by the Great Lakes states at the dawn of the twenty-first century. Today's political realities require consideration of new approaches to environmental protection. The federal government will hopefully continue to play an important part in creating environmental policy, but it is time to put some of our eggs into another basket.