Michigan State Law Review



Volume 2006 Special Issue 5

> Navigating the Creat Lakes Compact: Water, Public Trust, and International Trade Agreements James M. Olson

NAVIGATING THE GREAT LAKES COMPACT: WATER, PUBLIC TRUST, AND INTERNATIONAL TRADE AGREEMENTS

James M. Olson

2006 MICH, ST. L. REV, 1103

TABLE OF CONTENTS

Introduction	1104
I. HISTORICAL BEACONS	
A. Water as Public Commons or Public Resource	
B. The Public Trust Doctrine	
C. Riparian and Groundwater Law	
D. International Boundary Waters Treaty of 1909	
E. The Great Lakes Charter of 1985	
F. Water Resources and Development Act of 1986	
(Amended 2000)	1121
G. GATT, NAFTA, and the Commerce Clause	
II. SOME SIGNIFICANT DEFECTS IN THE COMPACT	
A. Inconsistent Definitions Within the Compact	
B. Problems in the Compact	
1. Failure to Explicitly Invoke the Public Trust Doctrine	
2. Incomplete Treatment of Riparian Rights and Its Effects	
Environment	
3. Arguments over the Straddling Community Exception	1133
4. Intra-Basin Exception May Put Water into Commerce	
5. Neglect of Climate Change	
6. Deleterious Implications of Section 1.3's "Multiple	
Language	
7. Inadequate Emphasis on Water Conservation	1135
8. Insufficient Legal Remedies	1136
C. A Word About Water and Democracy	
CONCLUSION	1138

^{*} L.L.M. (Public Lands, Natural Resources, and Environmental Law), University of Michigan; J.D., Detroit College of Law; B.A., Michigan State University. James Olson is the principal of the Traverse City, Michigan firm, Olson, Bzdok & Howard, P.C. This Article is based on a presentation at the Great Lakes Water Basin: International Law and Policy Crossroads, the Second Annual Conference on Trade and Investment in the Americas, Michigan State University College of Law, Dec. 1-2, 2006. The views expressed are the author's and not necessarily those of Olson, Bzdok & Howard, P.C. or its clients.

INTRODUCTION

The recent signing of the 2005 Great Lakes Compact, the increased world tensions over trade and terrorism, the desperate lack of water throughout many regions in the North America and the world, and the inevitability of climate change all underscore the central focus of this conference: water law and policy in the Great Lakes Basin are at a crossroads. Toward that end, this Article asks whether the 2005 Compact lives up to the vision embodied in the Federal Water Resources Development Act of 1986, the Boundary Waters Treaty of 1909, the United States Supreme Court's 1892 decision, *Illinois Central Railroad*, which imprinted the Great Lakes with a perpetual public trust, and state common law decisions regarding water diversions from riparian lakes, streams, groundwater, or watersheds.

A good place to start when it comes to water is to make some observations. Water exists independent of anything society thinks, desires, or wants. It is two parts hydrogen, one part oxygen. It is liquid, ice, or vapor, depending on temperature. The sky appears blue because of water, and water appears blue because of the sky. The ethereal nature of water was perhaps best described by Justice Thomas M. Cooley, an eminent legal scholar and jurist from the nineteenth century: "For water is a moveable, wandering thing, and must of necessity continue common by the law of nature...,"

Water falls as precipitation in the form of rain or snow, then it flows—over the surface of the land or into the soil, following the path of least resistance—forming groundwater aquifers that boil up into springs, wetlands, and the headwaters of creeks that combine to become streams, rivers, lakes, the Great Lakes, the St. Lawrence River, and into the Atlantic Ocean. This may seem all too obvious, but just what is it about water that has engendered a vision of it as a commons, a public resource, or subject to a public trust? David James Duncan, the author of the novel River Why, grew up probably spending more time in creeks and rivers than on land. In his autobiographical book My Story as Told by Water, he describes his experiences, focusing on the meaning of what it means to sec.²

The instant it alights on Earth, the first noun "Water" is turned by the verb "Gravity" into a ceaseless search for the lowest possible place while the second noun "Land" does all in its passive power to thwart that search. The result? Riffle; rapid; eddy; pool; scouring sand; sculptured wood and rock; soil-making mud: insects; birds: fish; ar-ka ["water springing up from me"]; endless music; sustenance; life.

^{1.} WILLIAM BLACKSTONE, 2 COMMENTARIES *18.

^{2.} See DAVID JAMES DUNCAN, MY STORY AS TOLD BY WATER (2001).

^{3.} *ld*. at 11.

Enter homo sapiens, the root meaning of which means, not unpretensiously, wisdom. Humans bring a new power; unlike any other species, an active power that has harnessed water for human progress, raised standards of living, and bettered human health. But this same power has turned once fertile crescents into salt flats, high mountain valleys into reservoirs, diverted rivers, drained small and even large lakes, such as Lake Chad or the Aral Sea, and dried up rivers before they reach the sea, such as the Yangtze in China or Colorado where it trickles through Mexico. This same power has also fired temperatures into an escalating global warming and climate change, as evidenced by Hurricane Katrina, the retreat of glaciers, the loss of the snows of Kilimanjaro, and an uncertain yet perilous redistribution of water. What vision, or lack of vision, has brought humans so close to the edge of such catastrophic change?

As suggested by Duncan, there are two aspects of seeing. 4 The first is the fairly obvious external view, which is what is seen in day or external light. The other, however, is internal, a light within, one that sees the external in a way that the aspects of seeing combine to sharpen sight and vision, one that can perceive what is real in order to honor this reality, rather than deny or degrade it. So when the policy and lawmakers-in the vision sense, perhaps lawgivers—the legislators, judges, the leaders, people from all walks of life, back in the 1800s, the 1900s, and in the year 2007 and centuries to come, see a small creek, a sapphire blue spring, or stand on the south shore of Lake Superior,5 they will see the essence of what makes the Great Lakes more than what the external eyes can see. Without such seeing, the human external power, the power that also motivates our human selfinterest-the will to bring about what we want-tends to dim, distort, divert, or degrade, so all that is left is a groveling level of seeing; one that is centered on competition of various multiple users6 of water, driven by the compass of self-want and desires. Michigan poet Michael Delp puts it this way: "I think water is better than money."7

Is it? Does the 2005 Compact match our vision, the seeing of water and of the Great Lakes—or does it match only external utilitarian wants?

^{4.} Id. at 37-40.

^{5.} PETER ANNIN, THE GREAT LAKES WATER WARS (2006); DAVE DEMPSEY, ON THE BRINK: THE GREAT LAKES IN THE 21ST CENTURY prologue (2004) (giving a crow's nest view of the future of the Great Lakes); JERRY DENNIS, THE LIVING GREAT LAKES: SEARCHING FOR THE HEART OF THE INLAND SEAS (2003).

^{6.} Great Lakes-St. Lawrence River Basin Water Resources Compact, Dec. 13, 2005, § 4.2(2), http://www.cglg.org/projects/water/docs/12-13-05/Great_Lakes-St_Lawrence_River_Basin_water_resources_Compact.pdf [hereinafter 2005 Great Lakes Compact] (the Compact was signed by eight governors and two premiers).

^{7.} Michael Delp, The Mad Angler Speaks to Power, in MAD ANGLER POEMS (forthcoming 2007); see also MICHAEL DELP, THE LAST GOOD WATER (2003).

Some think the Compact matches the vision. Others do not.⁸ Still, others are somewhere in between or are simply too busy finding work and making ends meet to have the luxury to even care. The question I want to explore is this: Do we push for the enactment of the 2005 Compact in its present form, or do we pause, as this conference seems to ask, and consider whether this Compact meets, exceeds, or falls short of the vision to protect the life-enduring qualities of the waters, the sustenance for life, communities, the environment, human endeavor, and commerce in the Basin.

One place to start is with a few time-tested beacons—navigational lights if you will—that are tested by history, past conflicts over water in the Great Lakes Basin and elsewhere that have led to principles about the relationship of humans to water. These principles are: water as a sustaining public commons, the public trust, water as flow and level in a stream, lake, or watershed, despite human desire or want to divert and sell water elsewhere—seeing, as Justice Cooley articulated, that water "of necessity continues common" to maintain flows and levels that sustain life through the range of natural fluctuations in seasonal and long-term cycles.

Does the Compact maintain, intensify, or dim the brilliancy of these beacons of water law and policy? I suggest that without some corrections and changes, the Compact may not provide the brilliancy needed to guide decisions in the future, at least not within the bright lines that we have been accustomed to or that riparian property owners, citizens, communities, farmers, tourists, and industry have come to depend on. This seems particularly so when the Compact is placed against the nuances of international trade agreements, specifically NAFTA and GATT, or the Commerce Clause, and the significant but uncertain reach of climate change. ¹⁰ It also suggests the opposite: the Compact, with a few changes that adhere to these

^{8.} The Great Lakes Water Basin: International Law and Policy Crossroads, 2006 Mich. St. L. Rev. 1085.

^{9.} BLACKSTONE, supra note 1.

See Peter Schwartz & Doug Randall, An Abrupt Climate Change Scenario and **Implications** for United States National Security http://www.environmentaldefense.org/documents/3566_AbruptClimateChange.pdf lighting the importance of proceeding with utmost caution in shifting the law in favor of diversions and exports to a larger universe of competition); George Monbiot, The Water Boom Is over, GUARDIAN, Oct. 10, 2006, http://www.monbiot.com/archives/2006/10/10/thewater-boom-is-over (arguing that global warming must be confined by 2030, or the increased rate of drying of the planet and loss of water supplies will result in major health and economic upheaval on a scale more massive than the devastation wrought by Hurricane Katrina); Fred Pearce, When the Rivers Run Dry: Water-The Defining Crisis of the TWENTY-FIRST CENTURY (2006); JARED DIAMOND, COLLAPSE: HOW SOCIETIES CHOOSE TO FAIL OR SUCCEED ch. 12 (2004). But cf. Melanie Phillips, The Global Warming Fraud, Dailly Mail, Jan. 12, 2004, http://www.melaniephillips.com/articles-new/?m=200401 (disputing the claim that climate change is taking place); Global Water Crisis, NEWSWEEK, June 4, 2007.

bright lines, will do a better job of preserving and sustaining the waters of the Basin for generations to come."

While it remains to be seen how globalization and its attendant international trade agreements will play out in the future, given world water crises, escalating water demands within regions of the Americas and the world, political uncertainty, wars, and climate change, international trade or other global arrangements will likely continue in some form into the foreseeable future.¹²

When the eight governors signed the Compact on December 13, 2005, a little over a year ago, 13 it seemed evident that one of the primary motivations in adopting a Compact was to make sure it did not run the region into the sometimes-treacherous reefs of international trade agreements, such as NAFTA or GATT. While it is not the purpose of this Article to delve into these provisions in detail, it is important to at least consider the implications of these provisions for the Compact before it goes through the enactment process. This will provide better assurance that the vision for the water of the Great Lakes Basin is as clear as the waters of the Great Lakes beyond the magnificent glass windows of Chicago's Shedd Aquarium, and that this vision will be implemented without diversion of its essence when it comes time for the hard decisions that loom on the horizon. As Michael Specter wrote in the *New Yorker* a few weeks ago, "[w]hen you can't get enough water from the surface of the earth, there are really only two alternatives: pray for rain or start to dig." 14

Hopefully the Compact, or whatever management regime or regimes are applied to the Basin, will not leave such a liability for generations to come. If the Compact fulfills the vision that has evolved here in the Basin, the water of the Basin should remain a public resource, a public trust, a commons for the common good, flowing where it has for centuries without diversion or export (at least not without express consent and limitations that comply with the principles of the vision). The water will not be wasted if strong conservation principles of water resources are followed. This is not to say that economic sustainability and progress are wrong or unattainable, but that the course of the Compact must ensure that these waters will be

^{11.} See infra Part II.

^{12. &}quot;The effect of trade agreements or similar pacts between countries should not be taken lightly." See Security, Prosperity, and Security proposal between Canada, Mexico, and United States, discussed infra note 110.

^{13.} The governors and premiers of Ontario and Quebec signed a parallel, voluntary Agreement on the same day. 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_River_Basin_Sustainable_Water_Resources_Agreement.pdf.

^{14.} Michael Specter, The Last Drop: Confronting the Possibility of a Global Catastrophe, New Yorker, Oct. 23, 2006, at 61.

sustained and preserved in perpetuity, ahead of any political or economic gain or expediency.

The Council of Great Lakes Governors announced the historic achievement that an agreement had been reached between eight states and two Canadian provinces over the language of the Compact about one month before the signing ceremony in Milwaukee.15 The announcement came on the heels of a side-bar compromise released by a regionally influential national conservation organization and representatives of industry a few weeks earlier.16 After demands by water and environmental organizations and individuals, the Council made the draft available, cautioning that it would be very difficult to change the wording.17 Many interested parties, as had been the course of earlier public participation, registered critiques, criticisms, support, and comments, in a last-ditch effort to make sure any defects or problems in the Compact were cured before it was signed. Owing to a short timeframe for mobilizing further public involvement and the commitments already made, little change occurred before it was signed.18 Whether this course of events was a blessing or curse will be debated in the years to come, as the Compact, if adopted, will be tested against the oncoming storms of the world water crisis, climate change, and the rock-bottom reef of international trade law,

Generally, the Compact bans all diversions unless covered by an exception; namely, transfers to straddling communities and counties, humanitarian purposes, or intra-basin transfers.¹⁹ Most proposed projects falling within an exception must satisfy return-flow, and some rather conventional environmental, and other standards.²⁰ The Compact also imposes environ-

Dan Egan, Great Lakes Governors Close to Approving New Rules, MILWAUKEE J. SENTINEL, Nov. 18, 2005, at B1.

^{16.} John Flesher, Bottled Water Exports OK Under Proposed Compromise, Oct. 12, 2005, http://www.greatlakesdirectory.org/pa/101205_great_lakes.htm (describing a proposed compromise between the National Wildlife Federation and Great Lakes Industries Council).

^{17.} E-mail from Terry Swier, President, Michigan Citizens for Water Conservation (Nov. 21, 2005, 14:23 EST) (on file with author).

^{18.} Compare Great Lakes-St. Lawrence River Basin Water Resources Compact, Nov. 10, 2005, http://www.ecobizport.com/AnxCompact111005Draft.pdf (draft of Dec. 13, 2005 agreement), with 2005 Great Lakes Compact, supra note 6.

^{19.} The total exemption of the Chicago diversion is outside the scope of this paper, although it is certainly germane to the larger questions presented, including implications of lowered levels in Lake Michigan and Lake Huron due to climate change. Section 4.14 of the Compact provides that "current, New or Increased Withdrawals, Consumptive Uses and Diversions of Basin Water by the State of Illinois shall be governed by the terms of the United States Supreme Court decree in Wisconsin et al. v. Illinois et al. [sic] and shall not be subject to the terms of this Compact..." 2005 Great Lakes Compact, supra note 6, § 4.14. The consent decree limits the Chicago Diversion to 3,200 cubic feet per second, per day (multiply by 448 to convert cfs to gallons per minute). Wisconsin v. Illinois, 388 U.S. 426 (1967), modified, 449 U.S. 48 (1980).

^{20. 2005} Great Lakes Compact, supra note 6, § 4.9.4.

mental and conservation standards on major withdrawals or consumptive uses within the party states.²² However, primary defects in the Compact are found in the exemption of a "product" from the definition of "diversion."²² By definition, a "product" typically considered a use within the party state is also exempt from the ban on diversions.²³ As discussed below, the definition of "product" appears to include the export of water in any size container.²⁴ The problem with this definition is compounded by the approach to minimize the implications of allowing some water exports (packaged water) through the "bulk water transfer" provision. The "bulk transfer" provision demands that any transfer of water packaged in a container equal to or greater than a 5.7 gallon container must be treated as a diversion;²⁵ by necessary implication, this provision allows the transfer of water packaged in containers less than 5.7 gallons, except where packaged water is treated differently by a party state. What is meant by "treatment" after packaged water appears to have been treated as a product is unclear.

I. HISTORICAL BEACONS

I first make a few points about water as a public resource or commons, and the sovereign power of states to control their water future as long as it is not discriminatory. Second, I make a few points about the public trust doctrine, quite appropriate here, since the doctrine's mooring in the United States is tied to a dispute in the late 1900s over Lake Michigan here in Chicago. In what Professor Sax characterized as a "lodestar" decision, the United States Supreme Court held that all bottomlands and waters of the Great Lakes are impressed with a public trust, a trust the Court ruled that cannot be alienated, sold, or conveyed, or used for primarily private purposes or gain. Third, I cover two features of water law, notably the riparian doctrine and its general prohibition against diversion of water out of watersheds, and groundwater law that forbids severance from the overlying land, particularly where intended for diversion and sale in distant lands.

- 21. Id. § 4.10.
- 22. Id. § 1.2.
- 23. Id.
- 24. See infra Part II.A.
- 25. 2005 Great Lakes Compact, supra note 6, § 4.12.10.
- 26. See infra Part I.A.
- 27. See infra Part II.B.
- 28. Joseph L. Sax, The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention, 68 Mich. L. Rev. 471, 489-90 (1970).
- 29. See Ill. Cent. R.R. v. Illinois, 146 U.S. 387, 452 (1892) (stating that public trust waters and lands must be kept "free[] from the obstruction or interference of private parties").
- 30. See Smith v. City of Brooklyn, 54 N.E. 787 (N.Y. 1898); Meeker v. City of East Orange, 74 A. 379 (N.J. 1909); Collens v. New Canaan Water Co., 234 A.2d 825 (Conn.

Fourth, I briefly touch on the Boundary Waters Treaty's admonishment that diversions should not "affect flows and levels" of the Great Lakes.31 Fifth, I briefly visit the Charter and WRDA.32

After that, I cover a few aspects of GATT and NAFTA, although the Commerce Clause cases, like Hudson County Water Company v. McCarter33 and Sporhase v. Nebraska,34 could be similarly considered to illustrate ways in which these types of provisions could cripple or even sink the Compact or the expectations of state riparian owners, industrial water users, or citizens and their community or public trust protected uses.

Finally, some key definitions, standards, and the bulk water provisions in the Compact will be reviewed in the context of the common law, public trust, and trade provisions.35 The purpose here is to outline some significant defects or problems with the Compact and then suggest how these issues might be addressed during the debates and legislative processes over the months and next few years, in a manner that honors the integrity of the water commons, public trust, common law water law principles, and the common good of all citizens.

A. Water as Public Commons or Public Resource

Western civilization has recognized water as a public commons (jus publicum) for over 2,000 years: "By natural law, common to all are these: the air, running water, the sea, and therefore the seashores."36 In Arnold v. Mundy, the court said:

^{1967);} see also A. Dan Tarlock, Law of Water Rights and Resources §§ 4-11 (1988). The Western states also guard appropriated rights in streams from groundwater diversions. See Katz v. Walkinshaw, 74 P. 766 (Cal. 1903) (illustrating a correlative rights groundwater case); Joseph L. Sax, We Don't Do Groundwater: A Morsel of California Legal History, 6 U. DENV. WATER L. REV. 269, 283-84, 314 (2003). The limitation on off-tract diversion for municipal purposes even applies where the diversion would diminish the flow or level of a lake or stream. See Schenk v. City of Ann Arbor, 163 N.W. 109 (Mich. 1917).

^{31.} The International Boundary Waters Treaty of 1909 prohibits any diversion "affecting the natural level or flow" unless authorized by both countries. Treaty Between the United States and Great Britain Relating to the Boundary Waters Between the United States and Canada, U.S.-U.K., art. 3, Jan. 11, 1909, 36 Stat. 2448 [hereinafter Boundary Waters Treaty].

The Federal Water Resources and Development Act, 42 U.S.C. § 1962d-20(d) (2000), prohibits both diversions and exports of any water from the Great Lakes Basin, arguably including tributary groundwater, without express consent of all eight Great Lakes States' governors. It is consistent with the watershed notion that limits diversions, since the Great Lakes Basin is a composite of all watersheds in the Basin, including the Basin itself.

Hudson County Water Co. v. McCarter, 209 U.S. 349 (1908). 34.

Sporhase v. Nebraska ex rel. Douglas, 458 U.S. 941 (1982).

See infra Part II.A.

^{36.} J. Inst. 2.1.1. See Justinian, The Institutes of Justinian, bk.2, tit. 1, \S 1 (J A C Thomas trans., 1975) (529 A.D.).

[O]thers remain common to all the citizens.... Of this latter kind... are the air, the running water, the sea, the fish, and the wild beasts.... But inasmuch as the things which constitute this common property are things in which a sort of transient usufructuary possession, only, can be had; ... therefore, the wisdom of that law has placed it in the hands of the sovereign power, to be held, protected, and regulated for the common use and benefit.³⁷

Given the recognition that water is a public resource or commons, it is not surprising that U.S. Supreme Court decisions have left ownership and control over water to the states to decide whether and how to manage, use, or transfer water, free from interference from the claims of others. In *Hudson County Water Company v McCarter*, ³⁸ New Jersey prohibited a private water company from diverting water to deliver and sell to New York. The water company begged the U.S. Supreme Court to overturn the prohibition as a violation of the Dormant Commerce Clause. ³⁹ Justice Holmes, known for his landmark balancing test for analyzing the effect of the exercise of police power on property rights, ⁴⁰ ruled in short-shrift that the state could do what it wanted with its water and give no reasons for doing so.

[T]hat the constitutional power of the state to insist that its natural advantages shall remain unimpaired by its citizens is not dependent upon any nice estimate of the extent of present use or speculation as to future needs. The legal conception of the necessary is apt to be confined to somewhat rudimentary wants, and there are benefits from a great river that might escape a lawyer's view.⁴¹

Justice Holmes recognized the difference between the regulation of private property and the implications of the Commerce Clause that discriminated against non-residents in favor of residents or commerce of a state, and the exercise of a state's sovereign power to limit or prohibit transfers of a public natural resource like water. Of course, common understanding has it that Hudson County Water Company sank when Hughes v. Oklahoma tanked Geer v. Connecticut, holding that a state could not re-

^{37.} Arnold v. Mundy, 6 N.J.L. I, 71 (1821) (internal citations omitted and emphasis in original). Professor Joseph L. Sax, as recently quoted by Melissa Scanlan in a critique of the Compact, said, "[w]ater is and always has been a public resource." Melissa Kwaterski Scanlan et al., Realizing the Promise of the Great Lakes Compact: A Policy Analysis for State Implementation, 8 VT. J. ENVIL. L. 39, 44 (2006) (quoting Joseph L. Sax, The Limits of Private Rights in Public Waters, 19 ENVIL. L. 473, 475 (1989)); see also Opinion of Michigan Attorney General Michael Cox, OAG 7162, Sept. 23, 2004, available at http://www.ag.state.mi.us/opinion/datafiles/2000s/op10238.htm (stating that "this is the common right of all, which must not be interfered with by any") (quoting Strobel v. Kerr Salt Co., 164 N.Y. 303 (1900)).

^{38. 209} U.S. 349 (1908).

^{39.} U.S. CONST., art. I, § 8.

^{40.} Pennsylvania Coal Co. v. Mahon, 260 U.S. 393 (1922).

^{41.} Hudson County Water Co., 209 U.S. at 356-57.

^{42.} Ia

^{43. 441} U.S. 322 (1979).

^{44. 161} U.S. 519 (1896).

strict the sale of its minnows, a natural resource, where it allowed the trade inside its borders but prohibited it across state lines. Then in Sporhase v. Nebraska ex rel. Douglas, in a battle over an uneven gradient between water transfer statutes in Colorado and neighboring Nebraska, the Court struck down a discriminatory law that favored the transfer of groundwater to Colorado farmers but restricted it from transfer to Nebraska. The Court, in an oft-quoted generalization, stated that groundwater was an "article of commerce." On closer analysis, the Court reached this conclusion because both states, along with the rest of the Great Plains jurisdictions, had interwoven the transfer of water and irrigation with the national and global agricultural industry.

However, the Court acknowledged that groundwater remained a public resource subject to the exercise of the states' police power over water to promote health, safety, and welfare, or conservation of its citizens.50 Moreover, in cases like Hughes and Sporhase, the states had already authorized transfer of or trade in a public resource in the first place. 51 The lesson here is that once a state, through its laws or an interstate compact, treats water as a product or fungible resource that can be diverted or commercialized, it could be considered an "article of commerce." Further, if the decision in Hudson County Water Company is examined more closely, it can be seen that another part of the decision remains good law. States have control over water, and own the water insofar as it is capable of being owned, on behalf of their citizens and can regulate or restrict the diversion or export of water in the interests of conservation or the health, safety, and welfare of its citizens, provided it does so even-handedly.52 However, there is something very intriguing in Hudson County that bears particular attention, a meaning that does not appear to have been addressed or affected by Sporhase:

[A] riparian proprietor has no right to divert waters for more than a reasonable distance from the body of the stream or for other than the well-known ordinary uses, and that for any purpose anywhere he is narrowly limited in amount. It went on to infer that his only right in the body of the stream is to have the flow continue, and that there is a residuum of public ownership in the state. It reinforced the state's rights by the state's title to the bed of the stream where flowed by the tide, and concluded from the foregoing and other considerations that, as against the rights of

^{45.} Hughes, 441 U.S. at 338-39.

^{46. 458} U.S. 941 (1982).

^{47.} Id.

^{48.} Id. at 945-46.

^{49.} Id. at 953-54.

^{50.} Id. at 956.

^{51.} *Id.* at 957-58. Both states had enacted statutes that authorized reciprocal water transfers, so the case did not arise under the common law regarding water rights. The problem was that the Nebraska statute did not live up to its promise of reciprocity.

^{52.} See Hudson County Water Co. v. McCarter, 209 U.S. 349, 354 (1908).

riparian owners merely as such, the state was warranted in prohibiting the acquisition of the title to water on a larger scale.⁵³

Justice Holmes explained that the Court would not decide the case on the narrower issue of a state's power to prohibit diversions consistent with the limitations on diversions from lakes and streams under the state's common law. Atther, Justice Holmes noted that the decision would be decided purely on the state's power to control its water and natural resources against the challenge under the Commerce Clause: But we prefer to put the authority, which cannot be denied to the state, upon a broader ground than that which was emphasized below, since, in our opinion, it is independent of the more or less attenuated residuum of title that the state may be said to possess. Accordingly, if a state's common law prohibits or limits the diversion or export of water, the state may also do so by statute—so long as is done evenly—without violating the Commerce Clause.

B. The Public Trust Doctrine

The public trust doctrine grows out of the recognition that unique, publicly owned natural resources are essential to meet the needs of all citizens, regardless of their economic status or circumstance. In Illinois Central Railroad v. Illinois,56 the state legislature granted a railroad almost a mile of Lake Michigan shoreline as part of its present and future railroad operations. Angered that a new legislature subsequently repealed part of the grant, the railroad sued, claiming the grant was irrevocable.⁵⁷ But the Supreme Court rejected the claim and held that the Great Lakes were subject to the public trust doctrine.58 Thus, it was beyond the power of the state to convey or transfer title or control over such public trust lands and water for primarily private purposes or where it would impair the public trust.59 "It is a title held in trust for the people of the state, that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties."60 The Court then elaborated on the state's duties as holder and protector of this trust:

The trust devolving upon the state for the public, and which can only be discharged by the management and control of the property in which the public has an interest,

^{53.} Id. at 354.

^{54.} Id. at 354-55.

^{55.} Id. at 355.

^{56. 146} U.S. 387 (1892).

^{57.} Id. at 450-52.

^{58.} Id. at 452-53.

^{59.} Id.

^{60.} Id. at 452.

cannot be relinquished by a transfer of the property. . . . [T]he exercise of the trust by which the property was held by the state can be resumed at any time. 61

The principle of the public trust in the Great Lakes, and the tributary waters flowing into them, has been implemented by all of the Great Lakes states in various degrees.⁵² Although rarely tested in its courts, the public trust doctrine is also found in the legal heritage of Canada, owing partly to the fact that water is owned by the Provinces.⁶³ For purposes of this Article, the water of our lakes and streams, from their tributary groundwater and headwaters down to and including the Great Lakes, is considered in the conceptual sense to be subject to protection and control under a state's sovereign power germane to water resources.

While groundwater has not been held by a court in the Great Lakes Basin to be subject to the public trust doctrine, state laws have declared water, including groundwater, as a public resource held in trust.⁶⁴ And courts in other states have applied the public trust doctrine to diversions of tributary waters⁶⁵ and groundwater.⁶⁶ As science and law recognize that the Great Lakes, its tributary lakes, streams, and groundwater are a single or wholly interconnected body of water, there is no reason the public trust doctrine, or at least its protective standards, should not apply to protect the pub-

^{61.} Id. at 453, 455.

^{62.} See, e.g., Obrecht v. Nat'l Gypsum Co., 105 N.W.2d 143 (Mich. 1960); People ex rel. Scott v. Chicago Park Dist., 360 N.E.2d 773 (Ill. 1976). The public trust doctrine extends to the full extent of the navigability of lakes and streams. See, e.g., Collins v. Gerhardt, 211 N.W. 115 (Mich. 1926); Moore v. Sanborne, 2 Mich. 519 (1853).

^{63.} Christine Elwell & Tyson Dyck, Water Grab #2 Province of Ontario's Plans to Transfer Local Water Systems and Services to the Private Sector: A Breach of Public Trust?, (Canadian Inst. Env. Law and Policy, Nov. 27, 2002), http://www.cielap.org/pdf/water-grab2.pdf. Steven Shrybman, A Legal Opinion Concerning Water Export Controls and Canadian Obligations under NAFTA and the WTO, W. COAST ENVIL. L., Sept. 15, 1999; J. Owen Saunders, Trade and the Defence of Non-economic Values: The Regulation of Water Exports, in Trading Canada's Natural Resources, Saunders, ed. Banff Conference on Natural Resources Law (3rd: 1987, Banff, Alberta) 1987.

^{64.} See. e.g., Inland Lakes and Streams, MICH. COMP. LAWS § 324.30101, et seq. (2007) (protecting public trust in all streams and lakes, even tiny ones); Great Lakes Preservation, MICH. COMP. LAWS § 324.32701, et seq. (2007) (declaring water a "public natural resource[] held in trust by the state"). For states outside the Basin, see, for example, New Jersey, N.J. STAT. ANN. § 58:11A-2 (West 2006) ("including groundwaters, and the public trust therein"), and Delaware, DEL. CODE ANN. tit. 7, § 6001 (2001) (requiring that water resources of the state are managed by state as trustee for the public benefit).

^{65.} Nat'l Audubon Soc. v Super. Ct. of Alpine County, 658 P.2d 709 (Cal. 1983); Melissa Kwaterski Scanlan, The Evolution of the Public Trust Doctrine and the Degradation of Trust Resources: Courts, Trustees and Political Power in Wisconsin, 27 ECOLOGY L.Q. 135 (2000).

^{66.} See. e.g., In re Water Use Permit Applications, 9 P.3d 409 (Haw. 2000) (discussing public trust in groundwater through common law and state constitutional provisions); Parks v. Cooper, 676 N.W.2d 823 (S.D. 2004) (discussing separate public trust in the people in non-navigable waters).

lic trust in the waters of the Great Lakes Basin from being alienated, impaired, or diminished.

The public trust doctrine also imposes several substantive standards that vary among jurisdictions. Generally they include:

- (1) Specific legislative authorization is required for the transfer, use, or alienation of public trust resources;
- (2) The transfer or use of trust property must be for a public purpose consistent with public trust uses;
- (3) Citizens or public use of trust resources, such as fishing, boating, bathing, recreation, may not be significantly impaired;
- (4) Harm includes small percentage if it would lead to cumulative harm to the whole (nibbling effects cumulatively violate the public trust doctrine); and,
- (5) Alienations or transfers for private purposes are prohibited and revocable. 67

Some courts have recognized that there is a planning duty associated with any public trust decision, the idea being that the public trust cannot be protected without duly-recorded findings and meaningful consideration of both near- and long-term information.⁶⁸ Parallel to the precautionary principle, ⁶⁹ the public value of public trust waters or natural resources has been presumed, placing the burden of proof on the party who seeks to divert or alter these public trust resources to show that there is no public value and that what is proposed is consistent with standards of the public trust doctrine.⁷⁰ The public trust doctrine imposes a broad ethical and legally en-

^{67.} See Sax, supra note 28; James Olson, The Public Trust Doctrine: Procedural and Substantive Limitations on the Government Reallocation of Natural Resources in Michigan, 1975 DET. C.L. REV. 161 (1975); Ill. Cent. R.R. v. Illinois, 146 U.S. 387, 450-53 (1892); People ex rel. Scott v. Chi. Park Dist., 360 N.E.2d 773 (Ill. 1976); Obrecht v. Nat'l Gypsum Co., 105 N.W.2d 143 (Mich. 1960); State v. Public Service Comm'n, 81 N.W.2d 71 (Wis. 1957); City of Madison v. Wisconsin, 83 N.W.2d 674 (Wis. 1957); People v. Broedell, 112 N.W.2d 517 (Mich. 1961); Hixon v. Public Service Comm'n, 146 N.W.2d 577, 589 (Wis. 1966). For statutory examples, see Great Lakes Submerged Lands, MICH COMP. LAWS § 324.32501, et seq. (2001); Inland Lakes and Streams, MICH. COMP. LAWS § 324.30101, et seq. (2001).

^{68.} See Obrecht, 105 N.W.2d 143; United Plainsmen Ass'n v. State Water Conservation Comm'n, 274 N.W.2d 457 (N.D. 1976); Paepcke v. Public Bld'g Comm'n, 263 N.E.2d 11 (III. 1970).

^{69.} See Obrecht, 105 N.W.2d 143.

^{70.} See, e.g., Grosse Ile Twp. v. Dunbar & Sullivan Dredging Co., 167 N.W.2d 311 (Mich. 1969); James M. Olson, Burden of Proof: How the Common Law Can Safeguard Nature and Promote an Earth Ethic, 20 ENVIL. L. 891 (1990). Climate change calls for application of both planning and burden of proof principles under the public trust doctrine to global and local water issues. See generally TIM FLANNERY, THE WEATHER MAKERS (2005).

forceable trust duty that public trust waters must be managed for the com-

mon good of citizens who are the beneficiaries of this trust.71

Finally, in Illinois Central the Supreme Court, as have a number of courts in a variety of ways since, characterized the doctrine as dynamic, flexible, and expansive"-like "trusts connected with public property, or [where there is] property of a special character..."73

C. Riparian and Groundwater Law

States east of the Mississippi, including those within the Great Lakes Basin, generally follow some version of the "reasonable use" doctrine when it comes to riparian water law. 14 The same is generally true for groundwater law,75 although there are variations that tilt toward absolute capture at least for on-tract use,76 or balancing allocation principles, such as Ohio's adoption of the Restatement of Torts (Second) section 858.77

Under riparian "reasonable use" law, riparian landowners-those who own land on water-share the water in common for their various uses connected with their land. So long as the water is used in connection with the land, each owner may use the water as long as the use does not unreasona-

72. See, e.g., Marks v. Whitney, 491 P.2d 374 (Cal. 1974); Moore v. Sanborne, 2 Mich. 519, 525-26 (1853); In re Water Use Applications, 9 P.3d 409 (Haw. 2000); Parks v. Cooper, 676 N.W.2d 823 (S.D. 2004).

73. Ill. Cent. R.R. v. Illinois, 146 U.S. 387, 454 (1892) (emphasis added).

The so-called American Rule of "reasonable use." For a concise description of absolute ownership, American reasonable use, correlative rights, the Restatement, and appropriation doctrines, see SAX, ET AL., LEGAL CONTROL OF WATER RESOURCES 364-65 (3d ed. 1991).

Cline v. American Aggregates Corp., 474 N.E.2d 324 (Ohio 1984) (discussing finally abandoning the absolute user rule in favor of "reasonable use" as viewed by the RE-STATEMENT (SECOND) TORTS § 858 (1979)); McNamara v. City of Rittman, 838 N.E.2d 640 (Ohio 2005). In McNamara, the Court recognized a private property right in groundwater that could be used to limit harmful diversions for municipal water supplies. See also Maerz v. U.S. Steel Corp., 323 N.W.2d 524 (Mich. 1982) (urging adoption of RESTATEMENT (SECOND) TORTS § 858 in a conflict between adjacent landowners competing for groundwa-

It has been referred to as a "high, solemn, and perpetual duty." Collins v. Gerhardt, 211 N.W. 115, 118 (Mich. 1926). The doctrine may also play a role as a conceptual construct in fashioning local, regional, national, and global water policy. See Ralbet Pentland, National Water Policy and Globalism, Address at the Royal Society of Canada Symposium: Water in Canada and the World (Nov. 17, 2006).

Technically, the term "riparian" refers to rivers, whereas "littoral" refers to lake. The term "riparian" is used here to refer to both. Approximately twenty-nine states follow some form of riparian or reasonable use doctrine. DAVID H. GETCHES, WATER LAW IN A Nutshell 5 (3d ed. 1997).

Id. at 51-52. 75.

bly interfere with the other riparians' uses.⁷⁸ But if an owner seeks to disconnect or sever the water from the riparian land and divert it elsewhere else, courts have generally prohibited it absent a shift in common law property rights or an exercise of eminent domain.⁷⁹

True, some cases, usually involving municipal water supplies, allow diversion or transfer of riparian waters to another non-riparian location, provided that there is no diminishment of the flow or level of a stream. ⁸⁰ In this sense, the off-tract or diversion standard is not so much "unreasonable interference," such as uses made in connection with the riparian land, but closer to a "natural flow" standard that reflects the riparian water is viewed by the courts as a commons as against out-of-watershed diversions—that is, no impairment of flows or levels. This is particularly significant when it comes to analyzing the legal basis of a state's power to limit diversions of water from a watershed or the Great Lakes Basin.

When it comes to groundwater law, two categories of uses have been created. On-tract uses of groundwater have been treated more liberally. Landowners may use water to benefit their land, often referred to as the overlying estate, up to the point of unreasonable interference with another competing groundwater user. Off-tract uses are generally disfavored, especially diversions of water for sale somewhere else. Where water has been diverted for marketing, sale out of a watershed, or to some distant place, courts have prohibited the diversion when it interferes with another's on-tract uses or where it diminishes the flow of a stream or level of a lake. Somewhere the contract uses or where it diminishes the flow of a stream or level of a lake.

^{78.} See, e.g., Thompson v. Enz, 154 N.W.2d 473 (Mich. 1967); see also Dumont v. Kellogg, 29 Mich. 420 (1874); Hudson County Water Co. v. McCarter, 209 U.S. 349, 354 (1908).

^{19.} See, e.g., cases cited supra note 30.

^{80.} See, e.g., Smith v. City of Brooklyn, 54 N.E. 787 (N.Y. 1898); see also Schenk v. City of Ann Arbor, 163 N.W. 109 (Mich. 1917).

^{81.} See, e.g., Schenk, 163 N.W. at 109.

^{82.} See cases cited supra note 30; see also A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES §§ 4:11, 4:12, 4:14 (1995).

^{83.} See Williams v. Wadsworth, 51 Conn. 277 (1883); see also Roberts v. Martin, 77 S.E. 535, 537 (W. Va. 1913); Hoover v. Crane, 106 N.W.2d 563, 566 (Mich. 1960) ("Both resort use and agricultural use of the lake are entirely legitimate purposes. Neither serves to remove water from the watershed.") (emphasis added). The underlying reasoning is that the riparians own a commons which cannot be diminished by non-riparian diversions. See City of Paterson v. E. Jersey Water Co., 70 A. 472, 488 (N.J. 1908) ("the uses of the water of a flowing stream, both ordinary and extraordinary, by the riparian owner, must, in order to be reasonable, be connected with the occupation and enjoyment of the riparian lands themselves, and as an incident to such enjoyment, and that the permanent diversion of the waters for nonriparian user and for sale is an unlawful use, is the one now generally, if not universally, adopted; and the courts taking this view also agree that, in order to obtain relief against such unlawful or unreasonable use, it is not necessary that the lower riparian owner show any actual damage.") For groundwater conflicts, the common law rule has been almost the same. Schenk, 163 N.W. at 109. Schenk was a dispute between an on-tract user of

As noted above, this should not be surprising given that water cannot be diverted or removed from a stream or lake for such purposes under riparian principles. Generally, the law should not allow a groundwater user to do indirectly what riparian law does not allow directly.

The issues surrounding conflicts between riparian owners and a groundwater exporter are at the heart of *Michigan Citizens for Water Conservation v. Nestlé Waters North America Inc.*⁸⁴ The battle was over the headwaters of the West Branch of the Little Muskegon River in Michigan's Mecosta County.⁸⁵ The trial court, after hearing extensive evidence about the effects and impacts of the removal of 210 million gallons of water a year (400 gallons per minute) for export as bottled water, prohibited the diversion or export of water because it violated common law principles against diversion for sale where it would diminish the flow or level of a lake or stream.

[I]f the groundwater use is off-tract and/or out of the relevant watershed, that use cannot reduce the natural flow to the riparian body. This is not a per se rule in that it does require a showing that the flow to/in the surface water has been affected to a degree that there is a level of confidence that the effect(s) are not part of the natural forces at work on the surface water(s). **6*

Nestlé appealed, and the intermediate appellate court, two weeks before the Compact was signed, affirmed the trial court's findings of substantial harm and concluded the export was an unreasonable use.⁸⁷ However, in reaching this conclusion, the court leap-frogged from historical common law principles and adopted a new "reasonable use balancing test" for all

groundwater and a city who planned to pump groundwater off-tract to meet municipal needs. The court found the diversion by the municipality to be unreasonable, but refused to entertain an injunction unless a more significant interference with plaintiff's groundwater well or use occurred in the future. However, the court also approved the general rule that a diversion of groundwater for sale elsewhere could not materially diminish the flow of a stream. Schenk, 163 N.W. at 112-13.

N.W.2d 174 (Mich. Ct. App. 2005). Application and cross-application for leave to appeal are pending before the Michigan Supreme Court. The citizens group has asked the Court to grant leave to appeal, affirm the findings of significant diminishment of flow and level of the stream and two lakes, and reverse the court of appeal's "balancing test" that has tilted the common law away from protecting the flows and levels of watersheds in favor of water exports. Nestlé has cross appealed to narrow plaintiffs' standing to assert claims under Michigan's environmental citizens' suit law and overturn the trial court and court of appeals ruling that its water withdrawal and diversion is unreasonable. *Id.* at 185-87.

^{85.} Id. at 184.

^{86.} Mich. Citizens for Water Conservation v. Nestlé Waters N. Am. Inc., No. 01-14563 – CE, slip op. at 40 (Mecosta County Cir. Ct. Nov. 25, 2003), available at http://www.envlaw.com/decisions/MCWC%20decision.pdf (emphasis added). See www.saveMlwater.org for court opinions, legal briefs, articles, comments, and history of the lawsuit.

^{87.} Michigan Citizens for Water Conservation, 709 N.W.2d at 224.

water uses and diversions, then remanded the case to the lower court to determine if there was any "surplus" water and to establish pumping limits consistent with this new test.88 The central thrust of the Michigan appellate court ruling is that harm, even where substantial, would now have to be weighed, among other factors, against the social and economic benefits and costs of the removal and sale of the water.89 The implications of the decision are staggering because the court's "reasonable use balancing test" would shift Michigan from a reasonable use-correlative rights state, with limitations on off-tract diversions, to a test quite similar to Restatement of Torts (Second) section 858. If that is what the decision portends, then the court would have leapt from the reasonable use doctrine to an allocation rule that would disregard the on-tract or in-watershed limitation and allow withdrawal and diversion with significant harm where it is outweighed by other social benefits or costs. In effect, such a rule, on a case-by-case basis, in principle, could condone what previously would have been deemed unreasonable. In short, the decision, if not reversed or carefully limited by the Supreme Court, the Michigan legislature, or constitutional amendment, could open the door for claims by water marketers that Michigan's common law allows, under some proper possible circumstances, diversions and exports for private sale. This is exactly the kind of effect or implication that policymakers, legislatures, and courts need to keep in mind when fashioning new rules for water law regimes that will be interpreted in conjunction with the Compact or international trade agreements. It also demonstrates the need for those in charge of the Compact's enactment to incorporate public resource, public trust, and common law limitations on diversions or exports into the framework for Great Lakes law and policy.

D. International Boundary Waters Treaty of 1909

The International Boundary Waters Treaty of 1909 grants Canada and the United States, through the International Joint Commission, exclusive jurisdiction to resolve disputes over and to protect the quality and quantity

^{88.} Id. at 202-06. A plaintiff now has to show "the interference was substantial" and that, even if this is established, a court must look beyond the parties and weigh several factors, including the "social benefits and costs of the use." Id. at 204. It should be noted, however, that the court expressly noted that local groundwater users would have a "preference over water uses that ship the water away or otherwise benefit land unconnected with the location from which the water was extracted." Id. at 204. Thus, even in this case, the court continues to recognize that diversion and exports, and presumably their espoused benefits, should not be given much weight when in competition with local users. Again, as noted, the Compact has erased even this residuum of the common law of riparian and water rights.

^{89.} Id.

of the surface waters of the Great Lakes and connecting waterways. While it is debatable whether or not Lake Michigan is an international water subject to the Treaty, it is indisputable that any diversions that would lower Lake Huron, because of its connection to Lake Michigan, would affect the interests of the national governments. As a matter of public policy and legal principle, the Treaty prohibits any further diversion of waters unless authorized by both countries; provided, however, a diversion "affecting the natural flow or level" or that would interfere with domestic uses, boating, and navigation is prohibited in the absence of consent of both countries. The shortcoming in the Treaty is that it applies only to surface and connecting international waters of the Great Lakes.

The Compact's decision-making standard⁹³ for the exceptions or other withdrawals (managed as "consumptive uses") is not tied to flows and levels, and hence undercuts the standard of the Treaty. The Treaty standard is more closely tied to principles of water law and public trust that prohibit or restrict diversions or exports where there is an effect on flows and levels. With greater demands on the water resources of the Basin and the predicated effects from climate change, serious consideration should be given to incorporating standards that are tied to the effect on flows and levels, not the more relaxed and flexible "significant adverse impact" standard. In addition, the International Joint Commission could consider a recommendation to extend the Treaty to all tributary surface and groundwaters of the Basin so that the "affecting level or flow" standard would provide harmonious and consistent protection for the flows and levels of the Great Lakes and the waters that feed them. The standard waters of the Great Lakes and the waters that feed them.

^{90.} Boundary Waters Treaty, supra note 31, art. VIII; see generally William L. Griffin, Great Lakes Diversions and Consumptive Uses in Historical International Legal Perspective, MICH. BAR J., Jan. 1996, at 62, 75 n.l.

^{91.} Under the Compact, Lake Michigan and Lake Huron are recognized as a single hydrologic system. See 2005 Great Lakes Compact, supra note 6, § 4.12.9.

^{92.} Boundary Waters Treaty, *supra* note 31, at arts. II-III. The waters of the Great Lakes Basin are a single water system. Seasonal or cyclical fluctuations in flows or levels due to lower precipitation or human manipulation affect not only the surface waters of the Great Lakes, but their connecting waters and their tributary streams, lakes, and groundwater. The flow of these tributary waters is directly connected to the flows and levels of the Great Lakes. *See* N.G. Grannemann et al., *The Importance of Groundwater in the Great Lakes Region* (U.S. Geological Survey, Water-Resource Investigations Report 00-4008, 2000).

^{93.} See 2005 Great Lakes Compact, supra note 6, § 4.11.2. (stating "no significant individual or cumulative adverse impacts").

^{94.} See id.

^{95.} See id. § 4.11.2.

^{96.} Boundary Waters Treaty, *supra* note 31, at art. III. Note also that the IJC under the Boundary Waters Treaty could address flows and levels as part of its Water Quality Agreement of 1978 review and amendment process. Inescapably, flows and levels of the Great Lakes and tributary waters—quantity—can affect or exacerbate water quality.

E. The Great Lakes Charter of 1985

The Charter declares that "the waters of the Great Lakes Basin are precious public resources, shared and held in trust."97 The Charter carried forward the Treaty policy, one shared by common law principles, that prohibits diversions of waters from the Basin, including groundwater.98 It also established an effort to extend its water management regime to "consumptive uses," including criteria for approvals and conservation.99 Other than the general declaration that the waters are "held in trust," there are no substantive standards in the Charter that incorporate, or even mention, the public trust or common law water principles. 100 Thus, even though the Supreme Court held that the public trust doctrine applied to the Great Lakes Basin (and the twenty percent of the world's surface fresh water it represents), there are virtually no public trust standards in the Charter or Compact. Of course, this could explain in part why the Compact contains standards that appear more accepting of impacts but deny the existence of the public trust doctrine.101 The Charter and the Compact seem to have largely ignored concern for the commons, privatization, or the commercialization and export of water.

F. Water Resources and Development Act of 1986 (Amended 2000)

Recognizing that diversions of water from the Great Lakes and tributary waters would adversely impact domestic, industrial, and navigational uses in the Basin as well as the environment, Congress passed a law that stated:

No water shall be diverted or exported from any portion of the Great Lakes within the United States, from any tributary within the United States of any of the Great

^{97.} The Great Lakes Charter: Principles for the Management of Great Lakes Water Resources, at Findings, Feb. 11, 1985, http://www.cglg.org/projects/water/docs/GreatLakesCharter.pdf [hereinafter 1985 Great Lakes Charter]. Oddly, "Great Lakes Basin water resources" includes surface water and other bodies of water, "including tributary groundwater." *Id.* at Definitions; *see also* 2005 Great Lakes Compact, *supra* note 6, § 1.2.

^{98.} See 1985 Great Lakes Charter, supra note 97, at Principles III, IV (prohibiting all new or increased diversions of water "without the consent and concurrence of all affected Great Lakes States and Provinces").

^{99.} See id.

^{100.} See id. at Findings (using the only reference to public trust in the Compact).

^{101.} See id. at Principle 3 (Principle 3 does not contain public trust or common law standards. Rather the standards focus on a more limited "significant adverse impacts" approach, together with the newer considerations for conservation.).

Lakes, for use outside the Great Lakes Basin unless such diversion or export is approved by the Governor of each of the Great Lakes states. 102

The word "export" was added by an amendment in 2000.¹⁰³ Then Senator Abraham sought to limit WRDA to diversions and only "bulk" exports.¹⁰⁴ Senator Levin and others defeated the "bulk" limitation, which implies that the WRDA was intended to prohibit all diversions and exports, including bottled or packaged water, in the absence of consent from all eight governors.¹⁰⁵

In contrast, as will be explained below, the Compact bans "diversions" but exempts "products." Because of the omission of "exports" from the general ban in the Compact against transfers of water out of the Basin, there is now a question of whether "exports" will continue to be prohibited by the WRDA and require the consent the governors. Furthermore, if exports are considered to be covered by the ban, as packaged water is just as much a transfer as any other, then there is a related question concerning whether the term "product" excludes exports from the ban, and if so, why and how this exclusion was created. 107

G. GATT, NAFTA, and the Commerce Clause

Before considering a few likely defects or problems in the wording of the Compact, it is necessary to understand how packaged water might become a "product" or be deemed to have "entered commerce" under the NAFTA or GATT 1994. A key question is whether party states to the Compact have sufficiently reserved their sovereign control or ownership of water as a public resource, ¹⁰⁸ including the application of the public trust

107. See id. §§ 1.2, 4.12(10) for bulk and bottled water or small container provision.

08. See id. § 8.2, which provides:

Water Resources Development Act of 1986, Pub. L. No. 99-662, 100 Stat. 4082 (codified as amended at 42 U.S.C. § 1962d-20(d) (2006) and in scattered sections of 33 U.S.C.).

^{103.} Water Resources Development Act of 2000, 42 U.S.C. § 1962d-20(d) (2006).

^{104.} S. 1667, 106th Cong., 1st Sess. (1999) (proposing to limit the ban on diversions and exports to "bulk freshwater").

^{105.} S. 2796, 106th Cong., 2d Sess. § 508 (2000) (removing "bulk" from the original Amendment).

^{106. 2005} Great Lakes Compact, supra note 6, § 4.8 (prohibiting diversions). But see definitions of "diversion" and "product" in supra note 6, § 1.2.

^{1.} Nothing in this Compact is intended to provide nor shall be construed to provide, directly or indirectly, to any Person any right, claim or remedy under any treaty or international agreement nor is it intended to derogate any right, claim, or remedy that already exists under any treaty or international agreement.

^{2.} Nothing in this Compact is intended to infringe nor shall be construed to infringe upon the treaty power of the United States of America, nor shall any term hereof be construed to alter or amend any treaty or term thereof that has been or may hereafter be executed by the United States of America.

doctrine, against foreign demand and competition for water in the Great Lakes Basin. 109

Increased demand and dwindling freshwater supplies, coupled with increasingly reliable climate change modeling, will likely place great pressure on the need to transfer water for other uses in critical areas of the North America and in other regions of the world. The Compact's provisions provide general protection, but given the definitions of "diversion" and "product" and the exemption of "product" arguably including water, it may be more difficult to argue that states are insulated from international trade agreements or international arrangements or legislation in each country that would authorize diversions or transfers of water in direct contradiction to the prohibition of such diversions in the Compact.

GATT's so-called Harmonizing Code System states that a "good" includes water, and all water other than the sea, whether or not clarified or purified. NAFTA is much less direct. There is no specific provision in NAFTA that makes water a "good" or "product." The 1993 Statement of the Governments of Canada, Mexico, and the United States (the "Statement") declares, "unless water, in any form, has entered into commerce or produced, it is not covered by the provisions of any trade agreement, including NAFTA." The Statement also provides, "nothing in NAFTA would obligate any NAFTA party to either exploit its water for commercial use, or begin exporting water in any form."

However, things are not as simple as they appear. There remains uncertainty as to when water "enter[s] into commerce" or becomes a "prod-

See also id. at § 8.4 ("Nothing in this Compact shall be construed to repeal, modify or qualify the authority of any Party to enact any legislation or enforce any additional conditions and restrictions regarding the management and regulation of Waters within its jurisdiction.").

^{109.} See supra text accompanying note 10.

^{110.} Backgrounder: The North American Future 2025 Project (Canadian Council, May 2007) (on file with author); Pentland, Ralph, Brief to the Standing Committee on International Trade (Canada), May 1, 2007 (on file with author). The United States, Mexico, and Mexico held a tri-lateral round table meeting in Calgary, Canada on April 27, 2007, through the U.S. Center for Strategical and International Studies, in collaboration with the Conference Board of Canada and the Centro de Investigation y Docencia Economicas, to discuss water consumption, water transfers, and artificial diversions of bulk water. Canadian Council, at 3-4. One of the purposes of the round table, known as the Security and Prosperity Partnership of North America is to help implement new integrated water policies through new legislation. Id.

^{111.} See supra text accompanying note 10.

^{112.} See Harmonized Tariff Schedule of the United States ch. 22 (2007) (Rev. 1), http://hotdocs.ustr.gov/docs/tata/hts/bychapter/0701C22.pdf.

^{113.} JON R. JOHNSON, THE NORTH AMERICAN FREE TRADE AGREEMENT: A COMPREHENSIVE GUIDE 109 (1994).

^{114.} Id. at 110.

uct."¹¹⁵ The answer depends on the laws, regulations, court decisions, and agreements, such as the Compact, of each state or party to NAFTA. A state is free to decide whether it does or does not treat water as a "good" or "entered into commerce."¹¹⁶ As would be expected, there are several factors involved in determining whether or not a state has decided to make water a "good" or part of commerce, including weak or ambiguous statements, silence, and action or inaction.¹¹⁷ The most prudent course a state can take in the face of such uncertainty is to clearly, expressly, and affirmatively demonstrate through its laws, agreements, and actions that it specifically does not make water a "good" or "product," has not allowed it to be "entered into commerce," and that it expressly reserves complete sovereign ownership and control over and the public trust in water free from demands on it to exploit or export water as a good or product in commerce.¹¹⁸

Arguably, the fact that a state declares water is not a "good" or "product" does not necessarily mean the right to use or take water is not subject to NAFTA or has not entered into the stream of commerce. The old adage "actions speak louder than words" could apply here. For example, if water is licensed to be sold commercially in some form, by law or agreement, foreign interests can still demand the same fair treatment. Even a single sale of water, such as a transfer in exchange for money or its equivalent outside a state or the Basin, could open up water to export claims. Indeed, this would have happened with Ontario's issuance of the permit to the Nova Group that would have allowed shipments of water to China, had local citizens and the government not intervened. 120

As noted previously, in the Nestlé case, 121 the Court of Appeals weakened long-held riparian and water law principles that restricted export of

117. See supra text accompanying JOHNSON, note 113; Mann, supra note 116.

118. See supra text accompanying notes 111-16.

^{115.} A similar question arises, with some distinctions, generally as to when water becomes a "good" or "article of commerce" under the Commerce Clause of the U.S. Constitution. Generally, whether water is an "article of commerce" depends on whether a state under its common law or state statutes has made it so. Sporhase v. Nebraska ex rel. Douglas, 458 U.S. 941, 944, 959 (1982) (discussing Nebraska's failure to live up to its agreement to provide for reciprocal water transfers with Colorado farmers); Hudson County Water Co. v. McCarter, 209 U.S. 349 (1908) (noting a state has a sovereign right to prohibit a diversion of water from a lake or stream at least to the extent that there is no recognized right to divert under statutes or the common law.).

^{116.} Howard Mann, Who Owns "Your" Water?: Water and Foreign Investors in the Post-NAFTA Context, Address at the Hemispheric Forum on Water for the Americas in the 21st Century Conference, Mexico City, Oct. 9, 2002.

^{119.} A good example of this is the Sun Belt claim under NAFTA against British Columbia. Sun Belt sought to encumber the province with liability for repealing its open water export law, thus cutting off the right to export water. Mann, supra note 116.

^{120.} Liquid Gold Rush: Special Report (Michigan Land Use Institute 2001).
121. Mich. Citizens for Water Conservation v. Nestlé Waters N. Am. Inc., 709
N.W.2d 174, 194, 201-02 (Mich. Ct. App. 2005).

water for sale out of watersheds in favor of a balancing test that would weigh substantial harm to the watershed and riparian interests against the economic or social benefits of the export. Absent further judicial clarification, correction, or legislative amendments affirming the state's sovereignty over water, this could be construed as an incipient right to export water. This uncertainty could fuel an argument that any foreign interest can now claim fair and equal rights to the water in Michigan's watersheds. Furthermore, it could increase the leverage of such interests to compete for water against Michigan's farming, manufacturing, tourist, mining, and other industries that use the water, as opposed to packaging and selling it elsewhere.

Michigan's water law, passed in February 2006, recognizes a right to request a permit to export water packaged in containers less than 5.7 gallons¹²³ or bottled water as a "[c]onsumptive use."¹²⁴ This statute, unfortunately, could now be used to argue that Michigan has acknowledged water packaging and sale, and that in addition to water transfers in small containers, water is now a "good" or "product" subject to the Commerce Clause, NAFTA, or GATT. In a recent letter from Nestlé's president to the president of Michigan Citizens for Water Conservation, in which Nestle outlined its intent to share scientific information concerning its quest for locating additional water sources in Michigan, Nestle's president wrote, "consistent with this [referring to the court of appeals decision noted above], the legislation passed earlier this year treats bottled water as a product." If this interpretation is correct, and the current language of the Compact is retained upon enactment, it may signal for others that an argument can be made that water is available for export under NAFTA.

Michigan's Governor Granholm issued a moratorium that prevented new and increased exports of bottled water in 2003. This moratorium was calculated to increase pressure on the state legislature to enact a water law, a

^{122.} Applications for leave to appeal and cross-appeal are pending in the Michigan Supreme Court. Mich. Citizens for Water Conservation v. Nestlé Waters N. Am. Inc., 722 N.W.2d 703 (Mich. 2006).

^{123.} MICH. COMP. LAWS § 324.32701(e), (h) (2007); MICH. COMP. LAWS § 325.1017(3) (2007).

^{124.} Id. § 324.32701(h).

^{125.} Letter from Mr. Kim Jeffry, President, Nestlé Waters N. Am. Inc., to Ms. Terry Swier, President, Mich. Citizens for Water Conservation (Nov. 10, 2006) [hereinafter Letter from Mr. Kim Jeffry] (on file with author).

^{126.} Exec. Directive No. 2005-5 (May 26, 2005). Executive Directive No. 2005-5 imposed a temporary moratorium on any permits or approvals for bottled water for delivery outside of the Great Lakes Basin. For a similar moratorium, and eventually enacted law, see Sun Belt Co. v Canada, a NAFTA dispute resolution case filed as a result of British Columbia's enactment of a law prohibiting water exports from the Province. Notice of Intent to Submit a Claim to Arbitration, Sun Belt Water, Inc., v. Canada (Nov. 27, 1998) available at http://www.sunbeltwater.com/images/sunl.pdf (outlining the NAFTA arguments).

message further driven home by Nestlé's lawsuit against the state claiming a violation of the Commerce Clause. At the same time, Nestlé was allowed to divert and truck water from the City of Evart's municipal system down U.S. 131, a federal expressway, to its plant in Stanwood, Michigan.¹²⁷ Has Michigan's water "entered into the stream of commerce?" Is trucking a "packaged" container a diversion of water over a federal interstate highway? Or is the plant bottling or packaging process merely an incident to the removal and transfer of water from a watershed in a transport truck? Once in the truck, has the water entered into commerce? If packaged water is treated the same as other products, such as agricultural goods or beverages in which water is a part of the product, by an inverse kind of argument, can other water users demand an equal right to access the waters of the Basin for use in their own goods and products?¹²⁸

As indicated above, it is critically important how a state views, regulates, or treats its water, including agreements like the Compact. If a state or local jurisdiction does not emphatically reserve its sovereign power over water and the public trust, or carefully and expressly restrict or limit the diversion or export of water as a good or product, ¹²⁹ the demand of water and export interests will likely displace, or at least compete with, the uses of water within that jurisdiction.

With the lowering of water levels due to climate change, it will be even more important for a state and local communities to reserve and protect the public's ownership and control of water. For example, what if scientific and technical data and opinions show that at a certain flow or level no more water should be diverted or exported by any means? With this knowledge in hand, states and provinces of the Basin should apply it to current consumption standards. Because of the Basin's aforementioned interconnectedness, the removal of water from any segment of these waters would necessarily affect overall flows and levels. With so much at stake, states should have the authority, unencumbered by Commerce Clause or trade agreement claims, to at least prohibit any diversion or export from any waters of the Basin where flows and levels have reached base or the low base flow of seasonal and cyclical variations.

^{127.} Exec. Directive No. 2005-5, supra note 126.

^{128.} A good example of this is the competition for water between mining and agriculture or communities near Monroe, Michigan, or over Canadian tar sands development.

^{129.} See, e.g., Letter from Thomas J. Vilsack, Governor of Iowa, to Honorable Susan Schwab, U.S. Trade Representative-Delegate (May 19, 2006) [hereinafter Vilsack Letter] (requesting the U.S. office "carve out" Iowa from certain categories, including water; and stating that "[w]ater is a basic human right and should not be treated as a commodity subject to trade rules.") (on file with author).

^{130.} INT'L JOINT COMM'N, PROTECTION OF THE WATERS OF THE GREAT LAKES: FINAL REPORT TO THE GOVERNMENTS OF CANADA AND THE UNITED STATES 23-25 (Feb. 22, 2000) [hereinafter IJC FINAL REPORT].

II. SOME SIGNIFICANT DEFECTS IN THE COMPACT

As I alluded to at the outset, vague or overbroad definitions in the Compact and state legislation could open the door to unprecedented misuses or commercial appropriation of the Great Lakes.

A. Inconsistent Definitions Within the Compact

First off, a "diversion" is broadly defined in the Compact as "a transfer of Water from the Basin into another watershed" by pipelines, ships, trucks, rail, or any other means. However, it "does not apply to Water that is used in the Basin or a Great Lake[s] watershed to manufacture or produce a Product that is then transferred out[side] of the Basin or watershed." Applying the general principles discussed above regarding the Commerce Clause, GATT, or NAFTA, if packaged water can be considered a "product" or to have "entered the stream of commerce," its transfer by any means or in any container may be viewed as a "product" and not a diversion banned by the Compact.

The failure of a state to expressly reserve or impose very clear directives, restrictions, or limitations that demonstrate a transfer of water out of the Basin is a diversion, or at least not a product or commodity, may open the door to arguments that water exports from the Basin have been allowed and are subject to the Commerce Clause, GATT, or NAFTA. The clearest way to ensure the export of water, in any form, is prohibited as a diversion is to add "packaged water in any size container" to the definition of "diversion." In this way, "bottled water" or water in containers less than 5.7 gallons can be prohibited consistent with commerce and trade law except where treated differently in the Compact¹³³ and state law.¹³⁴

Second, the Compact defines "product" as "something produced in the Basin by human or mechanical effort or through agricultural processes and used in manufacturing, commercial or other processes or intended for intermediate or end use consumers." The italicized phrases, as written, can be interpreted as one example of a product. It is hard to conceive of a

^{131. 2005} Great Lakes Compact, supra note 6, § 1.2.

^{132.} Id.

^{133.} The Compact allows that water be transferred in containers less than 5.7 gallons unless a state decides to prohibit or restrict small container water exports. *Id.* § 4.12 (10).

^{134.} Michigan has treated small container or bottled water exports as a "consumptive use," which may mean it is not a diversion within the definition of "diversion," because it is arguably produced as a product within the watershed. MICH. COMP. LAWS §§ 324.32701(e), (h) (2007). This could mean that Michigan has thrown the door wide-open for water exports, at least without a more prudent and explicit statement or law that it reserves its sovereignty over water and will allow water exports only to the extent licensed by law.

^{135. 2005} Great Lakes Compact, supra note 6, § 1.2 (emphasis added).

broader definition. If water is "produced," such as withdrawn through a production well, and "intended for . . . consumers," the extraction of water that is intended for consumer use elsewhere is a "product." This means that any water export is arguably a "product" and not subject to the ban on diversions.

Again, applying the general principles under the trade agreements or Commerce Clause, the definition of "product" appears to convert water at the moment it is "produced" and "intended" for "consumer" use into a "good" or placed into the "stream of commerce." Based on the definition of "product," it appears that the negotiators treated water exports as a product and not a diversion.

It can be argued that what the definitions "gave away" the addition of the "bulk water transfer" provision "took back," by requiring any transfer of water in containers over 5.7 gallons to be treated as a diversion:

A Proposal to Withdraw Water and to remove it from the Basin in any container greater than 5.7 gallons shall be treated under this Compact in the same manner as a Proposal for a Diversion. Each Party shall have the discretion, within its jurisdiction, to determine the treatment of Proposals to Withdraw Water and to remove it from the Basin in any container of 5.7 gallons or less. 137

The problem with this approach is two-fold. First, it does not cure the fact that, by definition, the packaged water prohibited by the provision is still a "product" and not a diversion. Second, subsequently treating a "product" or "good" as a "diversion" is a restriction on the good or product; generally in the law, once a right of use or export is recognized as a product or to have entered commerce, restrictions may be more difficult to enforce because of limitations imposed by police power, trade agreements, takings, or the Commerce Clause. As recognized by the Compact, water is a public resource held in trust. ¹³⁸ If that is the case, then why risk creating private rights or interests by treating water exports as "products," when so long as the water is viewed as a "public resource," it can be more broadly restricted by a state as a public or public trust resource? ¹³⁹

Similarly, the "bulk water transfer" provision, in effect, implies that the export of packaged water in containers less than 5.7 gallons is a "product" consistent with the definition of "product." The provision seeks to soften the blow by reserving to each party state the power to provide different treatment of small container exports. This implies that states are free to prohibit, require a license, or further restrict bottled water and small container transfers, including treating such transfers as a diversion. However,

^{136.} Id.

^{137.} Id. § 4.12(10).

^{138,} Id. § 1.3(1)(a.)

^{139.} Letter from Mr. Kim Jeffry, supra note 125.

^{140,} Id. § 4.12(10).

as noted above, any such treatment by a state after enacting the Compact could be viewed as a regulation or restriction on what already has been defined as a "product," not a diversion. Again, it is more problematic or difficult to regulate what is viewed as a private right to use or export water based on the definition, than as a public resource in which explicit and lawful license must be sought to exercise such right at the outset. It would be more prudent to include all water exports in any sized container in the "diversion" definition and to tighten the "product" definition, and then allow a small container transfer of water only if authorized or licensed and consistent with the public trust, withdrawal, and diversion standards under the Compact, and the laws of the state of origin. In this way, states would not unwittingly create private rights to export or transfer water, as product, by enactment of the Compact. Rather the party states would expressly leave it up to each state as to whether or not it should be allowed at all; and even then, it would be subject to public trust law and the prohibitions, limitations, and standards imposed by the Compact. 141 In this way, public accountability for the waters of the Basin as a public resource would be better assured.

B. Problems in the Compact

1. Failure to Explicitly Invoke the Public Trust Doctrine

The Compact recognizes that all waters of the Basin are "public . . . resources . . . held in trust." The surface and connecting waters of the Great Lakes are impressed with a public trust. The bottomlands and waters of all navigable inland lakes and streams are owned by the public and impressed with a public trust. The public trust in bottomlands based on navigability determines the right of use by the public for various needs, including fishing, boating, and recreation. The public trust in water may well extend to waters upstream, the diminishment of which impairs the public trust.

^{141.} This is consistent with the intent of the Compact that states retain the right to impose more stringent requirements. Id. § 4.12.1.

^{142.} Id. § 1.3(1)(a).

^{143.} III. Cent. R.R. v. Illinois, 146 U.S. 387, 452 (1892); Obrecht v. Nat'l Gypsum Co., 105 N.W.2d 143, 149 (Mich. 1960).

^{144.} Moore v. Sanborne, 2 Mich. 519, 525-26 (1853); Collins v. Gerhardt, 211 N.W. 115, 118 (Mich. 1926); Bott v. Comm'n of Natural Res., 327 N.W.2d 838, 846 (Mich. 1982).

^{145.} Collins, 211 N.W. at 117 (stating that water, in so far as it is capable of owner-ship, is a public resource).

^{146.} Nat'l Audubon Soc. v. Superior Court, 658 P.2d 709, 712 (Cal. 1983) (discussing tributary stream); *In re* Water Use Permit Applications, 93 P.3d 643, 647 (Haw. 2004) (discussing ground water); Scanlan, et al., *supra* note 37, at 48-49.

water. 147 Moreover, statutes have declared that water is a public natural resource held in trust. 148

Because the Compact covers all waters of the Basin, including groundwater, it is reasonable to conclude that groundwater also is intended to be subject to the public trust doctrine. Although the common law court decisions of a state may not have addressed or agreed with that conclusion, the Compact would establish minimal public trust protections for the Great Lakes. However, the problem lies in the fact that the public trust standards have not been incorporated into the decision-making standard of the Compact. It can be argued that the lack of standards simply leaves it to the regional or state decision-making body or the courts to apply the public trust doctrine, or that the public trust doctrine appears to have been given only lip-service. The lack of explicit public trust standards in the Compact creates a significant legal dilemma, since as discussed above and shown below the private commercialization or diversion of public trust water in many instances would violate the public trust doctrine.

Once water is subject to the public trust doctrine, it cannot be disposed of, alienated, or transferred for private commercial purposes unless there is explicit legislative authority and the purpose is primarily a public one. ¹⁵¹ In addition, regardless of the purpose, the use, transfer, or withdrawal cannot significantly impair the public trust water or the public trust uses made of it

^{147.} Not even "nibbling" or minimal harm is allowed if the cumulative effects of allowing such harm would impair the public trust. People v. Broedell, 112 N.W.2d 517, 518-19 (Mich. 1961); see also Richard J. Lazarus, Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine, 71 Iowa L. REV. 631, 652 (1986). But see Michigan Citizens for Water Conservation v. Nestlé Waters N. Am. Inc., 709 N.W.2d 174, 202-05 (Mich. Ct. App. 2005), where the Michigan court rejected the connection between groundwater and the headwaters of a stream from the impacts to water itself that made up the navigable portion of the stream. It is important to distinguish the public trust in water, as a protection of the water itself, from the public trust in navigable waters that insulates public use for fishing, swimming, and other recognized public trust activities based on the notion of access. Id.

^{148.} See, e.g., Great Lakes Preservation Act, MICH. COMP. LAWS § 324.32701(1)(c) (2007); Inland Lakes and Streams Act (ILSA), MICH. COMP. LAWS § 324.30101 (2001), et seq. (now Part 301 of the Natural Resources and Environmental Protection Act). For states outside the Basin. see, for example, New Jersey, N.J. STAT. ANN. § 58:11A-2 (West 2006) ("including groundwaters, and the public trust therein"), and Delaware, DEL. CODE ANN. tit. 7, § 6001 (2001) (requiring that water resources of the state are managed by state as trustee for the public benefit).

^{149. 2005} Great Lakes Compact, supra note 6, § 4.12(1).

^{150.} Id. § 4.11.

^{151.} III. Cent. R.R. v. Illinois. 146 U.S. 387, 423 (1892); Collins v. Gerhardt, 211 N.W. 115, 117-18 (Mich. 1926); People ex rel. Scott v. Chi. Park Dist., 360 N.E.2d 773, 779 (III. 1976).

by the public.¹⁵² Further, there is a general recognition that, even if a private use or transfer meets the public purpose test and will not cause harm to public trust interest, there must also be fair compensation for the privilege.¹⁵³

Diversions not subject to the ban under the Compact, such as straddling communities or counties, should be made explicitly subject to public trust standards. Water exports, particularly those based on direct withdrawals from public trust waters, should be limited by the public purpose and other standards of the public trust doctrine.¹⁵⁴

Some have argued that the public trust doctrine will always apply to Basin waters, and therefore no further standards are needed in the Compact. This relies on the assumption that citizens or communities will be able to protect themselves from adverse decisions under the Compact by filing lawsuits. The problem with this approach is that it assumes that citizens have the financial resources to mount such a challenge and that the particular state's law recognizes such a claim. A related problem is that generally the public trust is presumed, and the burden of proof is on those who seek to divert, alter, or commercialize it for private gain. ¹⁵⁵ Given the importance of the Great Lakes as a public trust commons for all constituents in the Basin, public trust duties and standards are better included in the Compact. ¹⁵⁶

It may be that the declaration of public trust is sufficient notice that its principles are reserved by each party state. If that is the case, though, then the Compact should expressly say so. If not expressly and clearly preserved, other provisions, such as those condoning the export of water for commercial use, could be viewed as overriding the public trust doctrine. In turn, this creates a crisis for the Compact, because under the principles of *Illinois Central Railroad* the Supreme Court has made it clear that a state does not have the authority under public trust law to grant private rights in public trust waters absent explicit legislation and public purpose. ¹⁵⁷ The public trust doctrine is so critical, especially as a limitation on water transfers and uses of any kind directly from the surface of the Great Lakes and tributary waters themselves, that a state should not remain silent or exhibit temerity when limiting any private commercial sale or diversion that vio-

^{152.} James M. Olson & John D. Noonan, *Public Trust Doctrine*, in Michigan Environmental Law Deskbook, Inst. of Continuing Legal Educ. 13-1, 13-4 (Jeffrey K. Haynes & Eugene E. Smary eds., 1992).

^{153.} See, e.g., Great Lakes Submerged Lands Act, Mich. Comp. Laws § 324.32501, et seq. (2007).

^{154.} Scanlan et al., supra note 37, at 59.

^{155.} See supra Part I.B.

^{156.} See 2005 Great Lakes Compact, supra note 6, §§ 4.9, 4.11.

^{157.} See supra Part I.B.

lates the public trust nor risk exploitation by a vacuum of such timidity in favor of trade agreement limitations on the doctrine. 158

2. Incomplete Treatment of Riparian Rights and Its Effects on the Environment

With the exception of Ohio, which follows the Restatement (Second) Torts' rules regarding water use, most states around the Great Lakes follow some form of the "reasonable use" doctrine. Under this doctrine, owners of land on lakes or streams have a right of reasonable use of water in connection with their land so long as that use does not unreasonably interfere with the use of other riparians. 159 Riparians on the same body of water share the use in common with one another. However, the water cannot be diverted, as against other riparians who share the water in common, out of a watershed.160 At the very least, a diversion should be considered unlawful if it diminishes the flow or level of a lake or stream. 161 The same general rules apply to the reasonable use of groundwater, 162 although in Nestlé the Michigan Court of Appeals loosened the traditional standard by allowing a diversion of groundwater out of a watershed if the diverter can demonstrate there is an adequate surplus of water and that the benefits of export outweigh the harm to riparian or other interests. 163

The Compact follows a significant adverse impact standard to measure harm. While this may be appropriate for the protection of the environment and aquatic resources, it is inconsistent with common law standards that protect the integrity of the flow and level of streams from their headwaters down to and including the Great Lakes. Aquatic life and human use of water depend on the flows and levels of lakes and streams.164 The Compact recognizes the application of common law standards in each state, but fails to embody these common law standards when approving a permitted ex-

See IJC FINAL REPORT, supra note 130, at § 8. States must be careful to articulate their protection and reservation of the control and ownership of water and avoid inconsistent provisions or face international trade agreement challenges.

See supra Part I.C. 159.

See sources cited supra note 30.

See id. As noted earlier, the effect on flows and levels is also at the heart of proposals regarding the Great Lakes under the Boundary Waters Treaty of 1909. See supra Part I.D.

See Schenk v. City of Ann Arbor, 163 N.W. 109 (Mich. 1917).

See Mich. Citizens for Water Conservation v. Nestlé Waters N. Am. Inc., 709 N.W.2d 174, 202-05 (Mich. Ct. App. 2005).

^{164.} See MICHEL SLIVITZKY, A LITERATURE REVIEW ON CUMULATIVE ECOLOGICAL IMPACTS OF WATER USE AND CHANGES IN LEVELS AND FLOWS (2001), http://www.glpf.org/interest/cum_impact_final.pdf, for an exhaustive list of references and research showing the importance of relying on flows and levels to prevent direct or cumulative environmental impacts.

emption to diversion, such as the New Berlin and Waukesha, Wisconsin proposals.¹⁶⁵

The Compact should apply a two-tiered approach in distinguishing and addressing both hydrological effects and impacts in administering its decision-making standards. First, it should require a showing that a proposed diversion or export will not diminish the flow or level of a stream or lake. Second, once flows and levels have been evaluated, there must be a showing that no direct or cumulative significant adverse impact to the environment will likely occur.

3. Arguments over the Straddling Community Exception

The Compact establishes exceptions for municipalities with water systems that straddle the Basin divide. It also does the same for counties. The straddling community exception merely recognizes that a municipality has authorized and implemented a taxpayer- and state-supported public water supply system, and that the system may serve the residents and businesses within the boundaries of the municipality of water district, regardless of whether such boundary crosses the basin divide. The straddling county exception is not based, however, on an existing or authorized municipal water system, but a political boundary. Allowing a diversion into any part of a county outside the Basin is not much different than drawing a boundary for diversion at the state line. This is likely to lead to arguments under the Commerce Clause or NAFTA that such a political line favors counties near the Basin and not others.

4. Intra-Basin Exception May Put Water into Commerce

The Compact's intra-basin exception allows for diversions from one Great lake sub-basin to another without requiring return flow. New diversions from Lake Superior water can be authorized for any area within the Lake Michigan and Huron basin. Lake Huron basin water can be diverted to Lake Erie or Ontario. From the perspective of NAFTA or GATT, this could be viewed as unfair treatment or access to the water for diversion outside of the Great Lakes Basin. An argument could be made that once the water from a Great Lakes sub-basin can be moved around within the Great

^{165.} See City of New Berlin, Wisconsin Application for Water Diversion (Apr. 2006) (on file with author).

^{166.} See supra Part I.C. This is also consistent with the standard in the International Boundary Waters Treaty. See Boundary Waters Treaty, supra note 31, arts. III-IV; see also supra Part I.D (discussing the International Boundary Waters Treaty).

^{167.} See 2005 Great Lakes Compact, supra note 6, § 4.9(1).

^{168.} See id. § 4.9(3).

^{169.} See id. § 4.9(2).

Lakes Basin, without return to the lake basin of origin, the water has "entered into commerce" in the sense that it has been severed, and that to restrict its diversion to the sub-basin of another Great Lake would be arbitrary and discriminatory.

5. Neglect of Climate Change

Surprisingly the Compact does not address climate change in any express or comprehensive way. Given the predictions by many studies, as described by Peter Annin in his recent book, The Great Lake Water Wars, 170 it is difficult to understand why an agreement of this magnitude and importance over the waters of the Basin would not recognize and provide for the adaptation to the predicted effects and impacts attributable to climate change. The words "climate change" appear once in the Compact, and then only as part of the recital of factors to be considered by the parties to the Compact in conducting a periodic assessment of the agreement. Section 4.15(1)(b) requires the parties to consider cumulative effects of climate change or other significant impacts to the Basin, and section 4.15(1)(c) requires a consideration of changing scientific knowledge and uncertainties.¹⁷¹ These provisions appear to anticipate the need for adaptive management principles given such changing uncertainty and science for issues like climate change. But there is no mechanism in the Compact to require a comprehensive ongoing assessment, dialogue, and implementation of legal and scientific changes that should be made before the more dramatic climate changes overtake the Great Lakes Basin waters. At the very least, the Compact should reserve any and all rights and powers by state law or amendment to the Compact to change any regulation, standard, or any other provision of the Compact based on present or future predicted or unforeseen effects attributable to climate change.

Climate change could cause larger human-induced drops in flows and levels of the waters of the Basin, from the tributary groundwater or headwaters of streams to the Great Lakes. It would seem that the magnitude of this threat would merit a review of the Compact or consideration of companion legislation by the party states or provinces to condition or disclaim the creation of any rights, interests, or implications regarding water use, diversion, or export under the Compact. At the same time, the Compact should look to the future and require a new section that establishes a panel to monitor climate change data, reports, and changes in flows and to recommend minimum flows and levels, which if reached would allow the repeal or modifica-

^{170.} See Annin, supra note 5, at 40-56; see generally Schwartz & Randall, supra note 10 (discussing consequences of abrupt climate change).

^{171.} See 2005 Great Lakes Compact, supra note 6, §§ 4.15(1)(b)-(c).

tion of any portion of the Compact. The exceptions or bulk water transfer provisions in the Compact, for example, should be permissive to the extent climate change should require a prohibition of a diversion or transfer under the Compact as it is presently worded. In short, the Compact must require the states and Canadian provinces to take a more proactive approach.

6. Deleterious Implications of Section 1.3's "Multiple Use" Language

The Compact water regime should not be characterized as a "multiple use" approach to water resources management. The Compact finds in section 1.3(1)(c) that:

The Waters of the Basin can concurrently serve multiple uses. Such multiple uses include municipal, public, industrial, commercial, agriculture, mining, navigation, energy development and production, recreation, the subsistence, economic and cultural activities of native peoples, Water quality maintenance, and the maintenance of fish and wildlife habitat and a balanced ecosystem. And, other purposes are encouraged, recognizing that such uses are interdependent and must be balanced.....

This cuts against the public trust doctrine and various common law regimes in each jurisdiction. Homogenizing a long history of legal property rights and values associated with land and water, which vary from jurisdiction to jurisdiction, impliedly would turn water management or use into an allocation system that merely balances competing interests rather than honor long-held attributes of property ownership. While not conclusive by any means, it could be argued by export or diversion proponents that this provision would support the idea that water rights have shifted toward equality for any water use, apparently whether severed from a watershed or not, and the notion that water is viewed by the Compact as a "product" or as "entered into commerce." Without a clear statement of hierarchal values and priorities regarding uses, diversions, exports, or standards and criteria, the inclusion of this language will tend to be interpreted as an equal allocation system of water management that will tend to reduce management of the waters of the Basin to the lowest common denominator. The idea of multiple use is contrary to the finding in section 1.3(1)(a) that "[t]he Waters of the Basin are precious public natural resources shared and held in trust."173

7. Inadequate Emphasis on Water Conservation

There are other problems that should be corrected before the Compact is enacted, such as imposing a more stringent water planning and conserva-

^{172. 2005} Great Lakes Compact, supra note 6, § 1.3(1)(c) (emphasis added).

^{173.} See id. § 1.3(1)(a).

tion regime. These issues are not addressed here, as they have been addressed by others.174

However, the need to strengthen conservation requirements in the Compact will continue to haunt the states and provinces unless immediate steps are taken to implement them. Conservation is critical globally, regionally, and locally, and the Great Lakes Basin states and provinces should be given a broader mandate to take the lead in conforming water use and technology toward a softer path. I argue that almost everything we do on earth, except maintaining the flows and levels of water in all systems and life, we could do with less water, and that is the soft path. As identified during the energy crisis in the late 1970s, this is a different way of thinking than the predominant path of the twentieth century, when the simple answer to every demand was "let's go get some water." 175

8. Insufficient Legal Remedies

The Compact, or companion state legislation, should also strengthen citizen enforcement and provide authority for the courts, in their discretion, to award costs and attorney fees to a prevailing party or in the interests of justice in those instances where a vigorous debate and airing of the issues advances the public interest and common good of the Great Lakes Basin water and its citizens. If the public trust doctrine and principles of public participation have any meaning and application, as declared by the Compact, communities, citizens, or other interests such as the Great Lakes tribal interests should have adequate access to the courts, including the right to sue in any jurisdiction where the proposed action will or is taking place.

The Compact provides only "aggrieved persons" with a right of administrative review and judicial review. Judicial review must be filed within ninety days in a federal district court where a regional body office is maintained. 176 The use of the "aggrieved person" standard normally signals a narrow basis for standing by those affected by an action to bring a lawsuit or administrative challenge. Moreover, administrative challenges shackled by narrow standing means that a decision cannot be appealed without lengthy agency proceedings, which in turn generally are upheld by the courts so long as the decision is not arbitrary or an abuse of discretion. It also means significant and costly logistics to file in a federal district court, which is likely located some distance from the water source, making it diffi-

^{174.} See, e.g., Scanlan et al., supra note 37, at 65-75.

See Michael Specter, The Last Drop: Confronting the Possibility of a Global Catastrophe, New Yorker, Oct. 23, 2006; see also SANDRA POSTEL, PILLAR OF SAND: CAN THE IRRIGATION MIRACLE LAST? 6 (1999) (discussing the global problems of water scarcity and need for widespread and diverse conservation measures).

^{176.} See 2005 Great Lakes Compact, supra note 6, § 7.3(1).

cult for citizens or locally-affected interests to participate in or bring an action. No costs or attorney fees can be recovered for judicial review of major decisions by the regional body or party state. Similarly, only an "aggrieved person" can file a direct enforcement action against a decision-making body or water withdrawal or diversion subject to the Compact that has not been approved. This means only a limited number of persons or entities could sue to stop the most blatant violations of the Compact. Affected citizens, governmental interests such as local governments and tribes and their members, or other organizations should have the right to seek judicial review when their interests or uses, or those of their members, that will probably be affected by the proposed action, and they should have the right to request costs and attorney fees if the affected public interest organization prevails, considerably advances the public debate, or vindicates the public interest. On the public interest.

C. A Word About Water and Democracy

The Compact focuses primarily on information, diversions, exceptions, and consumptive uses, and the impact standards for approving authorized diversions or uses. Other than the general declaration that the waters are "public resources held in trust," however, the Compact does not address the fundamental issues of ownership, control, or privatization of water resources. If water of the Great Lakes Basin is impressed with a perpetual public trust to assure the protection of the water and natural resources and the basic rights of citizens and communities in the Basin to survive, then how can the scepter of commercialization or control of water by private interests be ignored? Public trust demands public accountability to and ultimately control by citizens who are the beneficiaries of this trust.

While the Great Lakes and their tributary waters, like other areas of the world, 179 must be protected from adverse impacts, there is more here than just impacts. These waters transcend generations and go to the heart of citizens' liberty and freedom as members of local, state, and regional communities that have evolved for centuries, all of them interdependent by design but still dependent on the water as a secure public commons. The Compact should be more carefully evaluated for risks of unintended subordination, privatization, or commercialization of these treasured water commons. Otherwise, there is a strong possibility that others may gain private

^{177.} See 2005 Great Lakes Compact, supra note 6, § 7.3(3).

^{178.} See id. ("The available remedies shall include equitable relief, and the prevailing or substantially prevailing party may recover the costs of litigation, including reasonable attorney and expert witness fees, whenever the court determines that such an award is appropriate.").

^{179.} See Specter, supra note 14.

rights to use or sell these waters—a vast public treasure held in trust—into a reservoir that is servile to the global economy in which citizens, or even their elected and appointed officials, end up having little say. 180

CONCLUSION

A pause is needed to evaluate whether or not the Compact lives up to the vision for the Great Lakes based on the nature of the lakes, historic principles, and the needs and rights of citizens and communities, including biological, within the Basin. If the Compact does not live up to this vision, embodied in the public trust, should the Compact be enacted without a cure to the defects in the definitions of "diversion" and "product," and its treatment of bulk and small container water transfers? Presently, Compact provisions may open the door to water exports and leave the states with weaker and uncertain control or leverage to treat water exports, including bottled water, as a diversion, or further restrict or condition their approval. Such a cure should be made through change in the Compact, or alternatively, through tie-barred legislation adopted simultaneously in each state when the Compact is considered or enacted.

In addition, even if states desire to enact the Compact, they should carefully and emphatically correct some problems with the Compact regarding the public trust doctrine, riparian and groundwater limitations, trade, commerce, conservation, and legal remedies. The Compact should declare and reserve their sovereignty over the public control and trust rights of their citizens and the states in the waters within each state before and at the time of the passage of any law or compact regarding the waters of the Great Lakes Basin in the future. ¹⁸¹

Further, states should expressly reserve the right to repeal, change, modify any diversion, permit, approve, provision in the Compact based on the foreseeable and unforeseeable effects or impacts of climate change. In the meantime, the Council of Great Lakes Governors or the parties to the Compact could be required to develop information and specific responses to climate change in the Great Lakes Basin—leading to an agreement for a management regime and standards that the Great Lakes Basin states, provinces, and local units of government will use to address the alternations of flows, levels, and all the various rippling effects and impacts from climate

^{180.} See James M. Olson, Annex 2001 and the Future of the Great Lakes: New Wine into Old Wine Skins, in Decision Time: Water Diversion Policy in the Great Lakes Basin 7, 7-12 (2004), available at www.wilsoncenter.org/topics/pubs/ACF1D93.pdf.

^{181.} For example, see Vilsak Letter, *supra* note 129, where Governor Vilsak stated; "It is my understanding that public water services and water for human use has not been committed nor offered, and I would like to affirm that it should not be considered in any future negotiations. Water is a basic human right and should not be treated as a commodity."

change. Such standards would supersede the 2005 Compact where necessary and anticipate and address policy and legal issues surrounding reductions or rises in water levels in the Great Lakes below or above the range of fluctuation based on historical data. Plus, it would seem natural for the International Joint Commission to assist the parties in implementing climate change provisions as it has in developing its water quality agreements. 183

For example, if water levels have historically fluctuated five to six feet, what would happen if levels dropped another four or five feet, almost doubling the range of low levels? How far can water levels drop below the current or future anticipated base flow required to protect the water and aquatic plant and animal life, fishing, shipping, navigation, harbors, marinas, municipal water systems, energy production, farming, commerce, and recreation? If that base level is below the normal range and climate change will reduce levels at least that far, is there any surplus water to even think about any type or form of diversions or exports? Would bottomlands belong to the states under the public trust doctrine or would they be considered uplands available for disposition to or use by others?¹⁸⁴ Will dried up wetlands become upland available for development?

Finally, in the context of periodic review of the Boundary Waters Treaty, an effort could be made to explore how the protection against "affecting flows and levels" under the Treaty might be extended to all tributary waters of the Great Lakes, whether streams or groundwater. In 1909, science had not yet understood the laws of hydrology and geology. Given the recognition today that the Great Lakes and such tributary waters are a single flowing, moving hydrologic system, as Justice Cooley understood water, it seems apt that the Treaty should protect flows and levels from the headwaters to the Great Lakes themselves. This would also serve as a "check and balance" on decisions under the Compact as to the extent of the jurisdiction, requirements, arbitrations, or advisories of the International Joint Commission.

^{182.} This question was triggered by the remarks of Professor Joe Sax on the occasion of the 25th Anniversary of the Environmental Section, State Bar of Michigan, East Lansing, November 9, 2006, in which Professor Sax asked similar questions about the expected rising levels of the ocean.

^{183.} See International Joint Commission, Twelfth Biennial Report on Great Lakes Water Quality (Sept. 2004), http://www.ijc.org/php/publications/html/12br/pdf/12thbrfull_e.pdf.

^{184.} See Glass v. Goeckel, 703 N.W.2d 58 (Mich. 2005); State ex rel. Sprynczynatyk v. Mills, 523 N.W.2d 537 (N.D. 1994). These cases illustrate courts' resolution of conflicts between riparian landowners and the state or members of the public over ownership and use of the shore between the high and low water marks. If, as in Glass, the public has rights to walk the shore below the ordinary high water mark in the beach zone, marked by the action of waves, under the public trust doctrine, as wave action moves further below the higher water marks, does the state nonetheless retain its public trust title and control?

^{185.} See Boundary Waters Treaty, supra note 31, arts. III-IV.

The most important overall conclusion in all of this is that for the integrity of the Great Lakes Basin waters to be protected against diversion, abuse, or private expropriation, there must be a heightened effort on the part of the states and local governments to enact laws (including the Compact enactment process) or initiate constitutional amendments¹⁸⁶ that pay more than lip-service to public ownership of water, the importance of concentrating efforts on the interests of citizens under public trust law, and the anchors of the common law to watersheds and the flows and levels of our lakes and streams, from their headwaters down to and including the Great Lakes. This may brighten the beacons and maintain the vision by which the region navigates the future application of the Compact and better prevent a collision with the hidden reefs of international trade or national and regional commerce. It will also promote the common good at all levels. Regardless of special or different concerns or interests, this is where the public trust and stewardship over the waters of the Basin should start and end.

^{186.} Several states have enacted constitutional amendments or legislation declaring that all water is public and subject to the public trust. See, e.g., HAW. CONST. art. XI, § 1 ("All public natural resources are held in trust by the State for the benefit of the people."). The Supreme Court of Hawaii has ruled that all water, including groundwater, was subject to the public trust and could not be disposed of for solely private purposes. See In re Water Use Permit Applications, 9 P.3d 409, 447 (Haw. 2000).