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Five Views of the Great Lakes and Why They Might Matter

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I. INTRODUCTION: WHY THE GREAT LAKES STATES AND PROVINCES FEAR TRANSBASIN DIVERSIONS

Compared to many of the world's contested international watersheds such as the Amu Darya in Central Asia, the Colorado River, or the Nile Basin, the Canadian-United States Great Lakes Basin is a paradox: the level of controversy about the management and use of the waters is inverse to the amount of water in the basin. The lakes themselves contain twenty percent of the world's fresh water.¹ However, comparatively

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little of this water is currently withdrawn, and only about five percent of that amount is consumed and not returned to the watershed.² In 2002, the International Joint Commission (IJC), the Canadian-United States body which administers the 1909 Boundary Waters Treaty, revised its previous consumptive use estimates downward by eighteen percent.³ Out-of-basin diversions are even smaller.⁴ The major transbasin diversion is the Chicago diversion. Chicago and its lakeshore suburbs are authorized by a United States Supreme Court decree to withdraw 3,200 cubic feet per second from Lake Michigan.⁵ Only the fact that the Mississippi watershed encompasses most of the metropolitan Chicago area makes this a transbasin diversion. The other major transwatershed diversion, the Long Lake and Ogoki diversions, actually add water to Lake Superior.⁶ However, despite the modest levels of present and projected consumptive use and the vast amount of water in the lakes, fears about future in-basin consumptive uses and transbasin diversions have been a major political and legal issue in the basin for more than two decades.

In the 1980s, proposals to supply a coal slurry pipeline in Wyoming with Lake Superior water and to bail out the Ogallala aquifer in the Great Plains created intense opposition within the eight Great Lakes states,⁷ the two Canadian provinces of Ontario and Quebec, and on the part of the Canadian federal government. At the same time these proposals were being floated, dreamers in Canada unveiled a plan to divert the

Great Lakes Governors. Preliminary versions of this article were presented at a workshop, *Legal Diversions or Legal Solutions: The Draft Annex 2001 Agreements*, jointly sponsored by the Chicago-Kent College of Law and the Munk Centre for International Studies at Trinity College, University of Toronto, held in Chicago on February 17, 2005 and at a similar July 29, 2005 Munk Centre-Michigan State University workshop held in Toronto, Ontario.

1. The Water Cycle: Freshwater Storage, <http://ga.water.usgs.gov/edu/watercyclefreshstorage.html> (last visited Sept 23, 2005).

2. International Joint Commission, *Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States* (2000), available at <http://www.ijc.org/php/publications/html/finalreport.html> [hereinafter *Protection of the Waters of the Great Lakes*].

3. International Joint Commission, *Protection of the Waters of the Great Lakes: Three Year Review*, 4 (Nov. 8, 2002) [hereinafter *Three Year Review*].

4. *Protection of the Waters of the Great Lakes*, *supra* note 2.

5. *Wisconsin v. Illinois*, 388 U.S. 426, 427 (1967), *amended by Wisconsin v. Illinois*, 449 U.S. 48 (1980).

6. *Protection of the Waters of the Great Lakes*, *supra* note 2.

7. Peter V. MacAvoy, *The Great Lakes Charter: Toward a Basinwide Strategy for Managing the Great Lakes*, 18 CASE W. RES. J. INT'L L. 49, 53-54 (1986).

waters of James Bay in the Hudson Bay drainage, which was being developed for large-scale hydroelectric production, into the Great Lakes for ultimate use in the arid areas of the two countries.⁸ The response to these highly speculative diversion proposals was the creation of a binational soft law regime, ultimately backed by federal law in both countries, which makes it extremely difficult, if not virtually impossible, for any public or private party to divert water out of the Great Lakes Basin or even into a Great Lakes province or state that lies outside the basin.⁹

The soft law regime is the 1985 Great Lakes Charter signed by the eight Great Lakes states and the provinces of Ontario and Quebec.¹⁰ Principle IV requires that a signatory state or province notify, consult, and seek the consent of the other signatories before approving any new or increased diversion or consumptive use “of the water resources of the Great Lakes” more than 5,000,000 gallons over a thirty-day average.¹¹ The charter was further implemented by the adoption of state laws that prohibit out-of-basin diversions.¹² The charter and the anti-diversion laws apply both to interstate and intrastate transbasin diversions. In 1986¹³ and again in 2000,¹⁴ the United States Congress passed legislation which allows the governor of any Great Lakes state to veto a transbasin diversion. In 2001, Canada amended the International Boundary Waters Act to prohibit all diversions outside of boundary waters’ basins, which includes the Great Lakes.¹⁵

8. Michael J. Donahue, Alicia A. Bixby, & David Siebert, *Great Lakes Diversion and Consumptive Use: The Issue in Perspective*, 18 CASE W. RES. J. INT’L L. 19, 40–42 (1986).

9. As the map of the Basin illustrates, there is no correspondence between hydrological and political boundaries. To further complicate matters, the surface and groundwater divides can also be different due to uncontrolled groundwater pumping. See N.G. Grannemann, R.J. Hunt, J.R. Nicholas, T.E. Reilly & T.C. Winter, *THE IMPORTANCE OF GROUND WATER IN THE GREAT LAKES REGION*, U.S. Geological Survey Water-Resources Investigations Report 00–4008 8 (2000).

10. The Great Lakes Charter: Principles for the Management of Great Lakes Water Resources, Feb. 11, 1985, available at <http://www.cglg.org/projects/water/docs/GreatLakesCharter.pdf>.

11. *Id.* at 2, 4.

12. *E.g.*, MICH. COMP. LAWS. 324.32703; See also *infra* notes 60–63 (providing a discussion of the Dormant Commerce Clause (more accurately Supreme Court doctrine) issues that these statutes raise and Congress’s power to waive the Supreme Court doctrine).

13. The Omnibus Water Resources Act of 1986, 42 U.S.C. § 1962d–20(d) (1988).

14. 42 U.S.C. § 1962d–20(d), as amended (2000).

15. An Act to amend the International Boundary Waters Treaty Act, 2001 S.C.,

After its passage in 1986, the Congressional legislation and the charter were applied in the gubernatorial review of several relatively small diversion proposals in the United States. The charter was also raised in litigation but no interpretative judgments were rendered.¹⁶ A Wisconsin diversion was approved in 1989.¹⁷ Michigan, however, vetoed a plan to augment the supply of the small Indiana community of Lowell, located just outside the basin.¹⁸ In the drought summer of 1988, Canada strenuously objected to an Illinois request that the United States Army Corps of Engineers increase the Chicago diversion to relieve barges stranded along the Illinois River, and the request was in fact denied.¹⁹ The jurisdiction of the charter and the Water Resources Development Act of 1986 (WRDA) were raised in objections to the Crandon Mine proposal in northern Wisconsin. The company planned to divert ground water from the Great Lakes to the Mississippi River drainage, and NGOs argued that this triggered WRDA. However, the United States Army Corps of Engineers ruled that the groundwater was not within WRDA.²⁰ These actions, while relatively minor, ultimately shaped the ongoing dialogue about standards that should apply to the use of Great Lakes waters. For example, in his 1992 veto of the proposed Lowell, Indiana diversion, Governor Engler suggested that diversions might be allowed if no imminent adverse health, safety, and welfare risks were demonstrated, there was meaningful conservation, and clean water was returned to the lakes after use.²¹

This soft law regime has effectively taken large-scale diversions off the political agenda, but it has not eased fears of raids on the lakes.²² Fears also exist regarding the cumulative impact

ch.40 (Can.).

16. See James P. Hill, *The New Politics of Great Lakes Water Diversion: A Canada-Michigan Interface*, TOL. J. GREAT LAKES' L. SCI. & POL'Y 75, 80 (1999).

17. *Id.* at 81.

18. *Id.* at 83.

19. *Id.* at 80.

20. *Id.* at 84.

21. See *id.* at 83.

22. The Great Lakes states will lose more than a dozen members of Congress by 2025, triggering fears that the arid states may push for federal authorization of large-scale interbasin transfers. See Peter Luke, *Great Lakes States Circle the Wagons on Fresh Water*, BOOTH NEWSPAPERS, July 10, 2005, available at http://www.greatlakesdirectory.org/mi/071105_great_lakes.htm. The Transportation Research Board estimates that the 2000–2025 population growth rates will be 13.5 percent in the Midwest versus 27.2 and 33.4 percent in the South and West respectively. TRANSP. RES. BD., NAT'L RES. COUNCIL, COSTS OF SPRAWL—2000, at 67 (2002).

of small diversions, especially for cities that straddle the divide between the Great Lakes and other basins such as the Mississippi or the Ohio. Raid fears resurfaced after a 1998 proposal to ship bulk water drawn from the lakes to Asia.²³ The media and political reaction triggered a new round of concern in Canada,²⁴ and to a lesser extent in the United States, and ultimately led to efforts to harden the existing soft law regime.

The current effort is fueled both by these highly speculative fears and two resulting major legal developments. First, in 1999, the Council of Great Lakes Governors pledged to reinvigorate the charter.²⁵ The council commissioned a legal opinion by a western water law lawyer. The opinion concluded that the U.S. federal statute which supported the soft antidiversion regime was unconstitutional and that the states and provinces should negotiate a binational state-provincial allocation and management compact.²⁶ Second, contrary to the conclusions of almost all trade experts,²⁷ influential Canadian nationalist-greens asserted that the North American Free Trade Agreement and the General Agreement on Tariffs and Trade potentially strip Canada and the United States of their sovereign authority to manage their waters. The argument is that Canadian water is at risk of flowing to the wasteful United States and other arid countries because it is a good.²⁸ Canadians follow carefully the efforts of the arid West to squeeze more water for urban growth out of its variable water resources.²⁹

Opposing Great Lakes diversions makes good politics both in the eight basin states and in Canada. Thus, it is not surprising that new antidiversion initiatives would follow. Starting in 2001, the basin states, the two Canadian basin provinces, and the federal governments of Canada and the United States have been trying to develop an effective

23. See Protection of the Waters of the Great Lakes, *supra* note 2.

24. See *id.*

25. Council of Great Lakes Governors, Great Lakes Water Management Initiative (Oct. 15, 1999), <http://www.cglg.org/projects/water/statement.asp>.

26. JAMES S. LOCKHEAD ET AL., REPORT TO THE COUNCIL OF GREAT LAKES GOVERNORS: GOVERNING WITHDRAWALS OF WATER FROM THE GREAT LAKES (1999).

27. See Protection of the Waters of the Great Lakes, *supra* note 2.

28. See A. DAN TARLOCK, JAMES N. CORBRIDGE, JR. & DAVID H. GETCHES, WATER RESOURCE MANAGEMENT: A CASEBOOK IN LAW AND PUBLIC POLICY 1017-18 (5th ed. 2002).

29. A strong antidiversion policy is one of the key issues for Canadian nationalists. See, e.g., MAUDE BARLOW & TONY CLARKE, BLUE GOLD: THE FIGHT TO STOP THE CORPORATE THEFT OF THE WORLD'S WATER (New Press 2002).

binational regulatory regime for the lakes despite the fact that a functioning regulatory regime already exists—the 1909 Boundary Waters Treaty,³⁰ administered by the IJC. The IJC has played a constructive role in the debate, but the states and provinces have decided to create a new regime which will be administered by the states and provinces rather than the IJC.

Through the binational process, or Annex 2001, the states, provinces, and two federal governments have reached a consensus that the lakes should be conserved by maintaining their natural fluctuating levels and by minimizing large and small diversions.³¹ However, this consensus has neither translated into a new regional and state or provincial hard law allocation and management regime for the lakes nor into a consensus about the desired regime. Significant differences exist among the stakeholders about the degree of ecological and political risk of diversions and thus about the extent to which they should be permitted. There are many reasons for these differences, but at base the major public and nongovernmental stakeholders still have substantially different views on the uses of the lakes. The debates over technical issues such as the standards for different types of diversions reveal a fundamental division about the way the resources of the lakes should be categorized.

The Annex 2001 process is difficult because it initially contemplated the creation of a binding international agreement among the second level governmental units (provinces and states) of two fundamentally different federal systems. A great deal of subfederal unit cooperation exists in practice but it does so in an ill-defined international law regime. International law remains focused on nation-to-nation relations or the universal human rights of individuals rather than on more arcane questions such as cross-border subfederal unit relations. What law exists suggests that it may be easier under U.S. constitutional law for the states to enter into a binding compact with Ontario and Quebec than it would be for the provinces to do so

30. Treaty between the United States and Great Britain Relating to Boundary Waters Between the United States and Canada, U.S.-Britain, Jan. 11, 1909, 36 Stat. 2448 [hereinafter, the 1909 Boundary Waters Treaty].

31. See Protection of the Waters of the Great Lakes, *supra* note 2. The Report recommended, *inter alia*, that no transbasin diversion be authorized “unless the proponent can demonstrate that the removal will not endanger the integrity of the Great Lakes Basin” and no new or increased major consumptive uses be allowed to proceed unless full consideration was given to the potential cumulative impacts and conservation alternatives.

under Canadian constitutional law. The United States has traditionally been viewed as having a strong federal government and Canada a weak one, but Canada has asserted a very strong federal interest in Great Lakes diversions. In contrast, the United States appears far more willing to let the states decide the level of diversions.³²

During the diversion debates, at least five different views of the lakes have emerged. This paper sets out the five possible views and their first order consequences based on the societal values that they represent and opines why the adoption of a particular view might make a difference to the debate about the appropriate management and regulatory regime for use of the lakes' waters. The views try to capture the perspectives of the major stakeholders, states, provinces, Indian tribes, Canadian First Nations, and user and environmental NGOs. At base, the views reflect potentially divergent views about how the lakes should be managed and used and thus the value of alternative use and management scenarios to the basin's economy and future. These views have emerged over the past two decades, although they have seldom been articulated as distinct with potentially different consequences. Many of the views share common elements but there are equally important differences. This essay argues that an explicit recognition of the different views will help clarify the debate about the appropriate management regime. It also argues that it is necessary to appreciate the differences between the federal regimes in Canada and the United States in order to understand what type of binational regime is possible.

II. FIVE POSSIBLE VIEWS OF THE LAKES AND THEIR FIRST ORDER CONSEQUENCES

The following five views of the lakes and their first order consequences have emerged in Canada and the United States during the past three decades. The five views are seldom articulated as such and much Great Lakes diversion discourse uses many of them interchangeably. The Preamble to the latest Annex 2001 standards melds many of the views. For example, it recognizes that the lakes are "a shared public treasure, that

32. See *infra* Part III, for a more detailed discussion of the differences between Canadian and United States federalism and how these differences might influence the law that each country applies to the Great Lakes.

management is essential to maintaining the integrity of the Great Lakes Basin ecosystem," and that "[t]he States and provinces must balance economic and social development and environmental protection as interdependent and mutually reinforcing pillars of sustainable development."³³

A. PERPETUAL GIFT

This categorization is an attempt to capture the emerging Native American perspective, which takes the intrinsic value of the lakes as a given cultural norm. Native Americans possess littoral lands on the lakes in both Canada and the United States. Tribes and bands were the first inhabitants of the region but are late comers to the diversion debate because they have no vested or potential conventional water rights in the lakes themselves to protect.³⁴ But the riparian and nonriparian tribes in the basin have long viewed the watershed as a cherished, sustainable gift of fish and game.³⁵ This view has not been a major factor in Great Lakes debates. The reservations and other Native American lands are not major consumptive users; the impact of the prospective diversions on Native American uses is highly speculative at best, and there have been few modern disputes about off-reservation treaty fishing rights in the lakes,³⁶ as opposed to the tributaries. However, tribes have begun to object to tributary uses of waters and are in the process of articulating a distinctive, intergenerational view of the lakes, although the interests focus more on the right to have their voice heard than on the substantive issues of the conditions under which small diversions will be allowed.

The first assertion of Native American rights occurred in a

33. The Great Lakes Charter Annex, A Supplementary Agreement to the Great Lakes Charter, June 18, 2001, *available at* <http://www.cglg.org/projects/water/docs/GreatLakesCharterAnnex.pdf>; Great Lakes Basin Sustainable Water Resources Agreement, May 20, 2005.

34. Native American water rights are either asserted for a specific amount of water to fulfill a reservation's purpose, usually irrigation, or to protect reserved hunting and fishing rights. *See, e.g.,* United States v. Adair, 723 F.2d 1394, 1397-99 (9th Cir. 1983).

35. Chief John Beaucage, Presentation of Grand Council of Union of Ontario Indians at Munk Centre-Michigan State University: The Future of the Great Lakes Basin for Students, Citizens, and Media (July 29, 2005).

36. *See generally* United States v. Michigan, 471 F. Supp. 192 (W.D. Mich. 1979); Lac Coutre Oreilles v. Wisconsin, 653 F. Supp. 1420 (W.D. Wis. 1987). For a brief history of some of the reasons why the Chippewa people lost the ability to fish in the lakes, *see* CHARLES WILKINSON, BLOOD STRUGGLE: THE RISE OF MODERN INDIAN NATIONS 153-57 (2005).

challenge by three Michigan bands to the location of the Perrier bottled water plant in Michigan. Perrier planned to pump 400 gallons per minute from a spring that eventually reaches two tributaries of Lake Michigan. The bands opposed the proposed diversion, arguing that it would interfere with their treaty fishing rights. The Michigan Department of Environmental Quality had issued a license, but the governor had not invoked the charter process. Nonetheless, the bands claimed that the extraction violated the anti-export prohibition in WRDA 2000. However, after tracing the history of Great Lakes diversion controversies from the Chicago diversion to Annex 2001, the court dismissed the complaint because WRDA created no private rights.³⁷ United States Supreme Court jurisprudence requires that persons claiming implied rights under federal statutes designed to advance a general public interest demonstrate that they fall within a specially benefited class, that Congress intended implicitly or explicitly to create the right, that the right is consistent with the statutory scheme, and that a federal interest is at stake.³⁸ Applying this restrictive test, the court held that riparians were not a specially benefited class because any rights extend to the public generally, there was no indication of congressional intent to create a private cause of action, the right would be inconsistent with the statutory scheme, which contemplates gubernatorial decision making, and “tribal rights . . . are fairly peripheral to the . . . statute.”³⁹ This decision will not be the last word on Native American claims to the lakes and their tributaries.

B. WORLD HERITAGE ECOSYSTEM

The category of world heritage ecosystem could be subdivided into two classifications, world heritage resource and high-value ecosystem, but I have combined them because the two concepts are often tightly linked. Many world heritage sites are high-value ecosystems. As with the Native American/First Nation view, the core of this classification is the idea that the lakes constitute a nonrenewable, functioning system that should be maintained in as close to its natural condition as possible for

37. *Little Traverse Bay Bands of Odawa Indians v. Great Springs Waters of Am., Inc.*, 203 F. Supp. 2d 853 (W.D. Mich. 2002).

38. *E.g.*, *Alexander v. Sandoval*, 532 U.S. 275, 286–87 (2000).

39. *Little Traverse Bay Bands of Odawa Indians*, 203 F. Supp. 2d at 863.

the benefit of present and future generations.⁴⁰ The legal basis for the claim is the emerging field of international environmental law, which is in the process of adding a new category of global commons to such traditional areas as the high seas and upper atmosphere.⁴¹ In brief, heritage resources are vulnerable ecosystems of global significance such as rain forests and coral reefs. The rationale is that the potential adverse global impacts of ecosystem modification are so substantial that the international community has an interest in these resources. However, in contrast to the Native American view, this view is ultimately a utilitarian one because it protects the ecosystem services of natural systems, which are the common heritage of humankind.⁴² However, the management and diversion standards are substantially the same.

The idea of common heritage commons originated in Article 136 of United Nations Law of the Sea, which came into force in 1994. Article 136 declares that deep sea beds are "the common heritage of mankind."⁴³ The concept has arguably been extended to the Antarctic, which is the only continent not yet divided among nation states. The Antarctic Treaty, which came into force in 1961, freezes the territorial claims of the various states,⁴⁴ and the 1991 Madrid Protocol on the Antarctic Environment expressly imposes a number of stringent assessment and protection duties on an activity that threatens to damage the continent's ecosystems.⁴⁵ The idea of extraterritorial duties toward areas of global concern is reflected in Principle 21 of the Stockholm Declaration, which has been affirmed in Principle 2 of the 1992 Rio Declaration on

40. See Protection of the Waters of the Great Lakes, *supra* note 2 (recommending practices aimed at preservation of the Great Lakes Basin).

41. *Developments in the Law—International Environmental Law*, 104 HARV. L. REV. 1485, 1534–36 (1991) distinguishes among three categories: (1) areas within a single country or group of countries, such as a rain forest, that have global impacts, (2) unallocated commons, and (3) true commons for which the assignment of sovereign rights is impossible.

42. M. A. Fitzmaurice, *International Protection of the Environment*, in RECUEIL DES COURSES: COLLECTED COURSES OF THE HAGUE ACADEMY OF INTERNATIONAL LAW 150–61 (Martinus Nijhoff Publishers 2002); ALEXANDRE KISS & DINAH SHELTON, *INTERNATIONAL ENVIRONMENTAL LAW* 31–37 (3d ed. 2004).

43. United Nations Convention on the Law of the Sea, art. 136, Dec. 10, 1982, U.N. Doc. A/CONF.62/122 (1982), 21 I.L.M. 1261, 1293.

44. The Antarctic Treaty, art. IV, Dec. 1, 1959, 19 I.L.M. 860.

45. Protocol on Environmental Protection to the Antarctic Treaty, Oct. 4, 1991, 30 I.L.M. 1461; see Francesco Francioni, *The Madrid Protocol on the Protection of the Antarctic Environment*, 28 TEX. INT'L L.J. 47 (1993).

Environment and Development⁴⁶ and the 2002 Johannesburg Summit—the ten-year follow up to the 1992 Rio Earth Summit. Principle 21 qualifies the right to develop by the responsibility not to “cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”⁴⁷ The international community still resists the extension of the common heritage principle beyond traditionally recognized common resources.⁴⁸ For example, the Preamble to the 1992 Convention on Biological Diversity states only that biological diversity is a “common concern of human kind,”⁴⁹ and this represents a rejection of stronger classifications of biodiversity which might constrain national discretion. Nonetheless, the idea of heritage or ecosystems of common concern continues to evolve through state practice.

The ecosystem component of this view underscores the fact that although the lakes contain large amounts of water, volumes are needed to perform vital ecological and human services. Thus, changes in the system, including large and small withdrawals, should be viewed skeptically. First, for example, it takes over one hundred years to flush pollutants through the system.⁵⁰ Second, the levels needed to sustain navigation and the Chicago diversion are high, and a small drop in lake levels could impact these services. Third, although global climate change scenarios are not consistent, many suggest lowered levels and thus reinforce the precautionary idea that the levels of Lakes should be left to their natural fluctuating cycles.⁵¹ The

46. United Nations Conference on Environment and Development, June 3–14, 1992, *Rio Declaration on Environment and Development*, principle 2, U.N. Doc A/CONF.151/5/Rev.1, 31 I.L.M. 874, 876 [hereinafter Rio Declaration].

47. *Id.*

48. In 2005, the Brazilian Senate Foreign Relations and National Defense Commission held a debate on the threats posed by the views of “the international community” which perceive the Amazon rain forest as “collective public goods.” Fleet Admiral Miguel Angelo Davena announced that the military has prepared a strategy of resistance should the region be threatened by a “superior power.” *Brazil Marshalls Defenses to Fight Amazon Internationalization*, ENV’T NEWS SERVICE, Apr. 11, 2005, available at <http://www.ens-newswire.com/ens/apr2005/2005-04-11-04.asp>.

49. Convention on Biological Diversity, June 5, 1992, 31 I.L.M. 818, 822 (1992).

50. NAT’L RES. COUNCIL U.S. & ROYAL SOC’Y CAN., *THE GREAT LAKES WATER QUALITY AGREEMENT: AN EVOLVING INSTRUMENT FOR ECOSYSTEM MANAGEMENT 2* (1985) [hereinafter NAT’L RES. COUNCIL].

51. Nine of ten climate models predict some lowering of lake levels. *Climate Change Impacts on the US: Great Lakes, Educational Resources*, <http://www.usgcrp.gov/usgcrp/nacc/education/greatlakes/greatlakes-edu-3.htm> (last visited Sept. 24, 2005).

approach is also an extension of decades-long efforts by the two countries to improve the quality of the lakes. Canada and the United States have adopted an ecosystem approach to guide future pollution control strategies.⁵² In addition, as stated previously, Canadian and United States laws, supported by the IJC,⁵³ make it very difficult to divert substantial quantities of water from the lakes. The net result is that there is an increasing recognition, particularly in Canada,⁵⁴ that the lakes are a heritage resource.

Thus, the guiding principle should be the long-term conservation of a functioning natural system, and this principle should be implemented by regulators' use of the precautionary principle to scrutinize significant alterations in the system. The 2000 IJC reference on diversions concluded, *inter alia*, that (1) "[i]f all interests in the Basin are considered, there is never a 'surplus' of water in the Great Lakes system; every drop of water has several potential uses, and trade-offs must be made when, through human intervention, waters are removed from the system," and (2) "[a]ny water taken from the system has to be replaced to restore the system's lost resilience The precautionary principle dictates that removals should not be authorized unless it can be shown, with confidence, that they will not adversely affect the integrity of the Great Lakes Basin ecosystem."⁵⁵

C. NATURAL RESOURCE

Canada and the United States developed through the exploitation of the natural resources, such as timber, fisheries, grazing lands, and minerals, with which the countries were endowed.⁵⁶ Both Canada and the United States have long

52. See NAT'L RES. COUNCIL, *supra* note 50, at 27-33; PERSPECTIVES ON ECOSYSTEM MANAGEMENT FOR THE GREAT LAKES: A READER (Lynton K. Caldwell ed. 1988).

53. Protection of the Waters of the Great Lakes, *supra* note 2 (describing the lakes as "a central feature of the natural and cultural heritage of the Great Lakes region").

54. See ELIZABETH MAY, THE GREAT LAKES PRIMER: A CITIZEN'S PRIMER TO PROTECT THE GREAT LAKES AND THE ST. LAWRENCE RIVER (2005), <http://www.sierraclub.ca/national/great-lakes/great-lakes-primer.pdf>.

55. Protection of the Waters of the Great Lakes, *supra* note 2.

56. RICHARD N.L. ANDREWS, MANAGING THE ENVIRONMENT, MANAGING OURSELVES: A HISTORY OF AMERICAN ENVIRONMENTAL POLICY 136 (Yale University Press 1999) (noting that in the 19th century, "[t]he dominant environmental policies were to encourage the conversion of the continent's environmental assets into economic commodities.").

viewed the lakes as a resource to be used for human benefit and have tried to ensure that they are open to multiple uses.⁵⁷ Fortunately for the future of the lakes, the uses have been primarily for non-consumptive navigation, but the long tradition of human use has led to a widespread perception among many in the user community that the lakes are an exploitable, free resource.⁵⁸ The natural resource view differs from the perpetual gift and world heritage views. All consumptive and non-consumptive uses are equal since human benefit is the underlying norm. Followers of this view seek primarily to develop procedures and standards to decide the conditions under which the use should take place.

D. COMMODITY

The commodity view of the lakes sees them as a natural resource to be exploited for human benefit, but compared to the traditional view of the lakes as a multiple-use resource, this view seeks a regime that encourages consumptive use. This view is best articulated in the 1999 Lockhead opinion prepared for the Council of Great Lakes governors.⁵⁹ The opinion argued that the U.S. federal legislation approving state laws that prohibit interbasin transfers is unconstitutional. The opinion also argued that state export prohibitions violated the Dormant Commerce Clause and that the federal legislation was an insufficient exercise of Congress's power to waive the Dormant Commerce Clause.⁶⁰

One of the recurring issues in Great Lakes diversion politics, and one addressed by the Lockhead opinion, is the effect

57. Nature is a contested human construct. Basically, the modern contest is between nature as a Garden of Eden versus nature as storehouse of commodities to be used for human betterment. See UNCOMMON GROUND: TOWARD REINVENTING NATURE 34-52 (William Cronon ed., 1995).

58. See LOCKHEAD, *supra* note 26. The report recommended that the Great Lakes states and provinces adopt a diversion standard to avoid a court holding that the Water Resources Development Act of 1986, *infra* note 74, was an unconstitutional delegation of power. The report suggested that the states and provinces adopt a "resource improvement" standard which would allow ecosystem restoration to compensate for the potential adverse impacts of a withdrawal. For the response of Canadian environmentalists, see ELIZABETH MAY, *supra* note 54. Industrial users also objected to having to pay for the use of the lakes which have historically been open access commons. The standard was dropped without a word of explanation in the July, 2005 Annex 2001 Draft.

59. See LOCKHEAD, *supra* note 26.

60. See generally *New England Power Co. v. New Hampshire*, 455 U.S. 331 (1982) (holding that Congress may expressly waive the Dormant Commerce Clause).

of the U.S. Supreme Court's 1981 *Sporhase* decision, which held that water was an article of commerce and that state export bans were unconstitutional discriminatory legislation unless the state had a strong conservation rationale for the ban.⁶¹ Justice Stevens' majority opinion indicated that a "demonstrably arid State" may possibly make out a conservation defense.⁶² Since the Great Lakes Basin is a humid one, this standard could never be met. To solve the problems posed by *Sporhase* and the non-delegation doctrine, the opinion further argued that the Great Lakes states should follow the model of the western states and adopt an interstate water allocation compact. The compact would quantify the states' respective shares of Great Lakes water to which the states are entitled under the doctrine of equitable apportionment. Each state would then be free to use its share. Others have gone further and proposed a cap and trade scheme.⁶³ Each state would be given a definite amount of water to be allocated as each chooses between in- and out-of-basin uses.

To date, the Great Lakes have moved in the opposite direction toward the heritage-constrained resource end of the spectrum, but the commodity view continues to excite fears that a transcendent legal regime such as the U.S. Constitution or international trade law will preempt state and provincial control by "commodifying" the lakes.⁶⁴ This fear seems the most plausible rationale for the decision of the Governor of Michigan to order state officials to block a proposal by Nestle to withdraw spring water for bottled water sales unless Nestle could prove that the bottles would be sold exclusively within the basin.⁶⁵ This protectionism has no basis in water law or in any of the five views of the lakes.⁶⁶

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

62. *Id.* at 958.

63. Mark Squillace, Univ. of Toledo, Address at Legal Diversions or Legal Solutions: The Draft Annex 2001 Agreements and the Future of the Great Lakes Basin, jointly sponsored by the Chicago-Kent College of Law and the Munk Centre for International Studies at Trinity College, University of Toronto (Feb. 17, 2005).

64. See Christine Elwell, *NAFTA Effects on Water: Testing for NAFTA Effects in the Great Lakes Basin*, 3 TOL. J. GREAT LAKES' L. SCI. & POL'Y 151 (2001); Sanford E. Gaines, *Fresh Water: Environment or Trade?*, 28 CAN.-U.S. L. J. 157 (2002); and Cynthia Bauman, *Water Wars: Canada's Upstream Battle to Ban Bulk Water Exports*, 10 MINN. J. GLOBAL TRADE 109 (2001).

65. Luke, *supra* note 22.

66. This anti-commodity argument was made in *Michigan Citizens for Water Conservation v. Nestle Waters N. Am., Inc.*, Case No. 01-14563-CE (Mich. 49th Judicial Cir. 2003), available at <http://www.envlaw.com/decisions/>

E. CONSTRAINED NATURAL RESOURCE

The process initiated by the Great Lakes Charter has led to a synthesized view of the lakes. In the past two decades, the eight Great Lakes states have come to view the lakes as a constrained natural resource. This view is premised on the assumption that consumptive and non-consumptive uses are legitimate but that the former should be carefully assessed and conditioned to minimize interference with the ecosystem. Under this view, diversions should be limited in quantity and geographical scope and the precautionary principle followed.⁶⁷ This approach recognizes that the lakes have long been used and must be used in the future to sustain Canada's major population concentration and a major region of the United States. Thus, limited tradeoffs between environmental and human use values are permitted to a greater extent than they would be under the gift and heritage views. The difference between the resource and constrained resource view is the range of tradeoffs are much narrower under the latter. The different views are at the heart of the debate about Annex 2001. To the dismay of Canadian nationalists such as the Council of Canadians, no Annex 2002 draft excludes all consumptive uses. The drafts have progressively limited the range of permitted transbasin diversions and increased the standards and review of intrabasin withdrawals.

The June 2005 draft of the Great Lakes Basin Water Resources Compact,⁶⁸ which Congress must approve, divides

MCWC%20decision.pdf. The reasonable use rule of groundwater limits use to overlying land and the opponents of the plan argued that when groundwater was used to produce commodities, the commodities could only be consumed on the overlying land. The trial court rejected the argument.

67. The precautionary principle posits that a high degree of certainty about the adverse impacts of an activity is not a necessary prerequisite to limit or regulate it and is one of the foundations of international environmental law. See, e.g., 1992 Rio Declaration on Environment and Development, June 3–24, *Rio Declaration on Environment and Development* ¶ 15, U.N. Doc. A/Conf.151/26/Rev. 1 (August 12, 1992), reprinted in 31 I.L.M. 874 (1992) (endorsing the precautionary principle). The principle remains much contested. See Christopher D. Stone, *Is There a Precautionary Principle?*, 31 ENVTL. L. REP. 10790, 10792 (2001) (arguing the principle is incoherent and unfair); Frank B. Cross, *Paradoxical Perils of the Precautionary Principle*, 53 WASH. & LEE L. REV. 851 (1996) (advancing a similar argument). Crucial issues such as who bears the burden of proof and how feedback loops should operate remain unresolved, but properly used, it is an essential principle of modern ecosystem management.

68. Great Lakes Basin Water Resources Compact (Draft) (June 30, 2005), http://www.mnr.gov.on.ca/mnr/water/greatlakes/GREAT_LAKES_BASIN_WATER_RESOURCES_COMPACT_6-30-05.pdf.

withdrawals into four major categories. New and increased diversions—which are defined as transfer of water outside the Great Lakes Basin or between the watersheds of one lake to another—are prohibited subject to limited exceptions.⁶⁹ New or increased *intrabasin* withdrawals of 100,000 gallons per day or greater over a ninety-day period are regulated only by the jurisdiction in which they originate.⁷⁰ Withdrawals for *intrabasin* use between 100,000 and 5,000,000 gallons over a ninety-day period must meet stringent standards such as certain return flow requirements and a showing that there is no reasonable available alternative water supply.⁷¹ Withdrawals over 5,000,000 gallons over a ninety-day period must meet the same standards and are subject to regional review.⁷² The only *interbasin* transfers allowed are those for cities or counties that straddle the basin. One of the major political issues in the current diversion debate is the question of whether small, trans-basin diversions should be allowed in areas where the basin boundary extends only a few miles inland or where there is a difference between the surface and groundwater boundary, and if so, under what conditions.⁷³ Originally, the governments of the eight basin states thought that such diversions should be allowed and under conditions that included a “resource improvement” standard. On the whole, the two Canadian provinces and the federal government of Canada thought the answer was that there should be a diversion only if there was a “no net loss” standard. This gap was considerably narrowed when the Council of Great Lakes governors withdrew a previous draft which included a resource improvement standard and issued a new one that omitted it.⁷⁴

69. *Id.* art. IV, § 4.6.

70. *Id.* art. IV, § 4.8.

71. *Id.* art. IV, §§ 4.7(2)(b)(ii)–(iii).

72. *Id.* art. IV, §§ 4.7(2)(c)(i)–(iii).

73. The current focus is on rapidly growing Waukesha County, Wisconsin. The county lies just outside the Great Lakes watershed, although there is some evidence that the area’s groundwater pumping has reversed the flow of the aquifer and may actually be drawing water that would otherwise reach Lake Michigan. See Dan Egan, *Water Pressures Divide a Great Lakes State*, MILWAUKEE J. SENTINEL, November 23, 2003, at 1A; Felicity Barringer, *Growth Stirs New Water Battle, for Great Lakes*, N.Y. TIMES, August 12, 2005, at A12.

74. The 2000 amendment to the 1986 Water Resources Development Act required the states to develop a standard that included “resource improvement.” 42 U.S.C. § 1962d–20(b)(2) (2000). A great deal of money was expended between 2000 and 2005 to determine how the standard could be made operational, and a number of students of Great Lakes policy were surprised to see the standard dropped without explanation. Email from Henry Henderson, Principal, Policy Solutions, Inc.

III. CANADIAN AND UNITED STATES FEDERALISM

The commitment to negotiate a binding mechanism to regulate Great Lakes diversions that applies to both the Great Lakes states and Canadian provinces is a legal as well as political challenge. The two countries have different views of the lakes for a variety of reasons. Environmental nationalism is strong in Canada and opposition to any diversion resonates more with Canadians than it does with Americans. Further, the practice of federalism in the two countries plays an important role. In brief, the U.S. government is much more willing to defer to the states as long as the Boundary Waters Treaty is not compromised, but the Canadian government views the lakes as a foreign affairs issue and thus the exclusive province of the federal government and the IJC.

Canada is usually described as having a weak federal government compared to the United States.⁷⁵ This norm applies differently to Great Lakes issues, however. The Canadian government has asserted the exclusive power to legislate on Great Lakes issues because of the Boundary Treaty Act of 1909.⁷⁶ In contrast, despite the U.S. government's plenary power, the states have both greater discretion to select the use and management objectives for the lakes and to obtain federal validation for their choices. The issue is important because the eight basin states cooperate closely with Canadian provinces and would like to include them in an interstate compact.

Congress and the executive branch have elected not to assert the full reach of the commerce power and thus have allowed the states great discretion to control the Great Lakes diversion agenda themselves, subject to federal approval.⁷⁷ The Great Lakes are international navigable waters⁷⁸ and thus the federal government could assert full plenary power over them under the Commerce Clause or the treaty power. To date, the federal government has chosen to share its authority with the states. For example, after the Lockhead opinion, the basin

to A. Dan Tarlock, Professor of Law, Chicago-Kent College of Law (July 26, 2005) (on file with author).

75. See Patrick Monahan, *Canada's Federalism and Its Impact on Cross-Border Trade*, 17 CAN.-U.S. L.J. 19 (2001).

76. See the 1909 Boundary Waters Treaty, *supra* note 30.

77. See Three Year Review, *supra* note 3, at 27.

78. See Sharon A. Williams, *Public International Law and Water Quality Management in a Common Drainage Basin: The Great Lakes*, 18 CASE W. RES. J. INT'L L. 155 (1986).

states succeeded in obtaining new federal legislation. Section 504 of the WRDA 2000 directs the states, in cooperation with the two Canadian basin provinces, "to develop and implement a mechanism that provides a common conservation standard embodying the principles of water conservation and resource improvement for making decisions concerning the withdrawal and use of water from the Great Lakes Basin."⁷⁹ WRDA standards reflect in part the position of Governor Engler of Michigan in voting for a straddling community diversion in Indiana.⁸⁰

The highest level of interstate cooperation is an interstate compact, into which the states can enter. Article I, Section 10, Clause 3 of the U.S. Constitution provides, "[n]o state shall, without the Consent of Congress . . . enter into any Agreement or compact without another state, or with a foreign Power" The Compact Clause has been interpreted to allow states to enter into binding agreements to define or share their quasi-sovereign powers. In the twentieth century, a number of states entered into compacts to define their inchoate equitable shares of interstate rivers. An interstate compact is a federally-approved binding agreement among the states. Once approved, the compact becomes federal law and federal common law applies.⁸¹

The language of the Compact Clause also permits compacts with foreign powers. Article I, Section 10, Clause 1 draws a distinction between compacts and treaties. The latter are reserved exclusively to the federal government, but the former are not. No general international rule exists to prohibit a subordinate or member unit of a federal system from entering into formal relations with other nations or the subordinate units of those nations.⁸² The scope of state power remains undefined. Some commentators have argued that the Compact Clause is limited to agreements among the U.S. states. However, Professor Lawrence Tribe argues that the clause encompasses other agreements and suggests only two limitations.⁸³ Any state-provincial agreement must not interfere with the President's exclusive foreign affairs power or be inconsistent with existing treaties. It is unlikely that Congress would

79. 42 U.S.C. § 1962d-20(b), as amended (2000).

80. See Three Year Review, *supra* note 3, at 27, n.39.

81. Texas v. New Mexico, 446 U.S. 540 (1980).

82. 2 ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 366 (1995).

83. 1 AMERICAN CONSTITUTIONAL LAW 650 n.37 (Foundation Press, 3rd ed. 2000).

consent to a state-provincial compact that was inconsistent with either Canada's or the United States' interpretation of the Boundary Waters Treaty of 1909.

Canada, on the other hand, views Great Lakes diversions as a federal matter. In 2001, it amended its Boundary Treaty Act. The Minister of Foreign Affairs may issue a license for a person to "use, obstruct or divert boundary waters, either temporarily or permanently, in a manner that affects, or is likely to affect, in any way the natural level or flow of the boundary waters on the other side of the international boundary" subject to exceptions that are made for "the ordinary use of waters for domestic or sanitary purposes, or the exceptions specified in the regulations."⁸⁴ Section 11 clearly reflects Canada's obligations under Article III of the Boundary Waters Treaty. Section 13 provides that, notwithstanding section 11, "no person shall use or divert boundary waters by removing water from the boundary waters and taking it outside the water basin in which the boundary waters are located."⁸⁵ Moreover, section 13 also includes a deemer provision which states that any such removal "is deemed, given the cumulative effect of removals . . . to affect the natural level or flow of the boundary waters on the other side of the international boundary."⁸⁶

CONCLUSION

The evolving law of the Great Lakes recognizes that they are North America's great fresh water reserve, which support a wide range of non-consumptive and consumptive uses, and a functioning ecosystem which provides a wide range of services. However, the amount of fresh water makes them a prime candidate, at least in the eyes of many in Canada and the United States, for transbasin diversions to augment supplies in water-deprived areas. Global climate change helps fuel the persistent regional fear that the lakes will be tapped to augment water supplies outside the basin, although the lakes are less vulnerable to the projected effects of global climate change than small bodies of water in arid regions.⁸⁷ There is an emerging

84. An Act to Amend the International Boundary Waters Treaty Act, 2001 S.C., ch. 40 (Can.).

85. *Id.*

86. *Id.*

87. See Stanley Changnon, *Understanding The Physical Setting: The Great Lakes Climate and Lake Level Functions*, in LAKE MICHIGAN DIVERSION AT CHICAGO

consensus within the basin that the lakes should be conserved by maintaining their natural, fluctuating levels and by minimizing diversions. The question is how to incorporate these views into legal standards.

Many environmentalists are upset that the current Annex 2001 drafts do not affirm that the waters of the Great Lakes are subject to the public trust, as did initial drafts.⁸⁸ On one level a reference is unnecessary. The law is clear: all Great Lakes states hold the beds of navigable waters in trust for the people.⁸⁹ The public trust notion is much loved because it is both a source of public rights and a potential constraint on the states' power to allow exploitation of trust resources. A late nineteenth-century U.S. Supreme Court case invalidated a legislative grant of a large portion of the Chicago lakefront as inconsistent with the state's duty to devote trust resources to the public benefit.⁹⁰ In the much noted Mono Lake case, *National Audubon Society v. Superior Court of Alpine County*,⁹¹ the California Supreme Court held that the public trust extends to environmental values and applies to vested water rights. The case also held that environmental protection must be accommodated by the protection of trust resources even for public benefit, in this case the water supply of Los Angeles. The public trust doctrine should be understood to be a background principle which reinforces the regulatory efforts to limit Lake uses to non-consumptive uses except when consumptive uses do not impair the integrity of the Great Lakes ecosystem. It is not a strict doctrine that mandates ecosystem conservation to the exclusion of all other uses. While the doctrine is a source of state legislative authority to prefer non-consumptive over consumptive uses, it is not a talisman. In the end, the public trust is shorthand for a state's reserved sovereign power to manage its

AND URBAN DRAUGHT: PAST, PRESENT AND FUTURE REGIONAL IMPACTS AND RESPONSES TO GLOBAL CLIMATE CHANGE 39 (Stanley Changnon ed., 1994). The IJC recently reviewed the models and concluded that they suggest that "some lowering of water levels is likely to occur." Protection of the Waters of the Great Lakes, *supra* note 2.

88. Andy Guy, *Whose Water is it Anyway? Critics Say Great Lakes Proposal Retreats on Public Trust, Industry Responsibilities*, GREAT LAKES BULL. SERV., Aug. 5, 2005.

89. *E.g.*, *People ex rel. Scott v. Chicago Park Dist.*, 360 N.E.2d 773 (Ill. 1973); *Obrecht v. Nat'l Gypsum Co.*, 105 N.W.2d 143 (Mich. 1960); *State v. Slotness*, 185 N.W.2d 530 (Minn. 1971); *Lake Sand Co. v. State ex rel. Attorney General*, 120 N.E. 714 (Ind. App. 1918).

90. *Ill. Cent. R.R. Co. v. Illinois*, 146 U.S. 387 (1892).

91. 658 P.2d 709 (Cal. 1983).

waters.⁹² All five views of the lakes have been found to be consistent with the public trust at various times in various states.⁹³

To ensure a sustainable future for the lakes, states and provinces must strike a balance among the five views. The public trust doctrine reminds the states that they must approach use and management of the lakes with humility. In addition, the states need to improve their domestic legislation to address under-regulated problems such as groundwater extraction and the environmental impacts of surface and groundwater withdrawals. Ultimately, however, the lakes can only be sustained by diversion standards that impose strict limitations on consumptive uses of the lakes. These standards must be imposed by institutions that will ensure that they will be applied consistently and will be based on the continuous assembly and synthesis of relevant scientific information.

92. Frank J. Trelease, *Government Ownership and Trusteeship of Water*, 45 CAL. L. REV. 638 (1957).

93. A. DAN TARLOCK, LAW OF WATER RIGHTS AND RESOURCES §§ 8.22–8.25 (1988 & Supp. 2005).

