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Interpreting Water Conservation Standards in Waukesha, Wisconsin: A Local Internalization of International Norms

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INTERPRETING WATER CONSERVATION STANDARDS IN WAUKESHA, WISCONSIN: A LOCAL INTERNALIZATION OF INTERNATIONAL NORMS?

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I. INTRODUCTION

Water scarcity is a contemporary issue of enormous importance.¹ Not surprisingly, many thirsty cities in the United States have their eyes on the Great Lakes—the world's largest freshwater resource—as a source for future water wealth.² In order to prevent other parts of the world from draining the

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1. See *Water Issues Dividing and Challenging the U.S.*, CIRCLE OF BLUE (Oct. 12, 2009, 11:40 PM), <http://www.circleofblue.org/waternews/2009/world/water-issues-dividing-and-challenging-the-u-s>.

2. See Greg Vandegrift, *Great Lakes Water Wars*, KARE 11 (March 28, 2008), http://www.kare11.com/news/news_article.aspx?storyid=251489.

ostensibly plentiful resource,³ eight Great Lakes states and two Canadian provinces reached an agreement in the form of the Great Lakes-St. Lawrence River Basin Water Resources Compact (“Compact” or “Great Lakes Compact”) in October 2008 to establish who has rights to the water.⁴

The topographic parameters of the Great Lakes Basin (“Basin”) are fixed by the area’s watershed surface divide: “[r]ain that falls inside that Basin line eventually finds its way to the Great Lakes, but rain that falls outside it ends up in the Mississippi, Atlantic, or Arctic watersheds.”⁵ Under the Compact, areas encompassed entirely by the Basin’s boundary have less-regulated rights to the water than those beyond the watershed’s reach.⁶ Although preference is all but entirely given to locales within this Great Lakes Basin line, the Compact does provide for limited exceptions to enable diversions of Great Lakes water to areas situated outside of the Basin, albeit via a rigorous application process.⁷

Under one such exception, a city that itself lies outside the basin line but whose county is situated partly within it—a straddling county—may file an application for a diversion.⁸ The Great Lakes Compact does not allow proposal for a diversion to a community in a straddling county unless all of the following requirements are met:

- a. The water is used solely for public water supply purposes;
- b. The community is otherwise without an adequate supply of potable water;
- c. The diversion meets the exception standard;
- d. The proposal maximizes the amount of water that originated in the basin that is returned to the basin and minimizes the amount of water that originated outside of the basin that is returned to the basin;
- e. There is no reasonable water supply alternative in the basin in which the community is located (in Wisconsin, that would be the upper Mississippi River basin), including conservation of existing water supplies;
- f. The proposal will not endanger the integrity of the Great Lakes basin ecosystem based upon a determination that the proposal will have no significant adverse impact on the Great Lakes basin ecosystem;
- g. The proposal is consistent with an approved water supply service area plan under WIS. STAT. ANN. § 281.348 that covers the public water supply system;
- h. The proposal is reviewed by the *regional body* (the Governors of the eight Great Lakes States and the premiers of Ontario and Quebec, Canada); and

3. *Id.* (noting the Lakes contain an estimated six quadrillion gallons of water and constitute ninety-five percent of the United States’ fresh surface water).

4. Great Lakes-St. Lawrence River Basin Water Resources Compact, Pub. L. No. 110-342, § 1.3, 122 Stat. 3739 (2008) [hereinafter *Compact*] (Compact member states and provinces include Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, Ontario, and Québec.).

5. PETER ANNIN, *THE GREAT LAKES WATER WARS* 60 (2006).

6. *See Compact* art. 4, § 4.9.

7. *See Id.*

8. WIS. STAT. ANN. §§ 281.343(4n)(d), 281.346(4)(f) (2011).

- i. The proposal is approved by the Great Lakes–St. Lawrence River Basin Water Resources Council (consisting of the Governors of the eight Great Lakes States) with no disapproving votes.⁹

As part of the proposal process, applicants must devise a conservation plan.¹⁰ But the question of whether a plan proves sufficient in meeting the sustainability goals of the Great Lakes Compact remains because the first out-of-basin diversion applicant only completed its application in July 2011.¹¹ The applicant—the City of Waukesha, Wisconsin—is awaiting the Wisconsin Department of Natural Resources’ (“DNR”) technical review and Environmental Impact Statement (“EIS”).¹²

The Waukesha diversion application and its corresponding water conservation plan will be the first true test of the standards set by the Great Lakes Compact.¹³ The relevant chapter of the Wisconsin Statutes defines the mandated “environmentally sound and economically feasible water conservation measures” as:

those measures, methods, technologies, or practices for efficient water use and for reduction of water loss and waste or for reducing a withdrawal, consumptive use, or diversion that are environmentally sound, reflect best practices applicable to the water use sector, are technically feasible and available, are economically feasible and cost-effective based on an analysis that considers direct and avoided economic and environmental costs, and consider the particular facilities and processes involved, taking into account the environmental impact, age of equipment and facilities involved, the processes employed, energy impacts, and other appropriate factors.¹⁴

The language the participating states’ codes have adopted is identical to that in the Compact.¹⁵ Still, the participating states must make individual determinations of proper conservation measures during the initial withdrawal,

9. *City of Waukesha Water Division Application—Background*, WISCONSIN DEPT OF NATURAL RES., <http://dnr.wi.gov/topic/WaterUse/WaukeshaDiversionApp.html> (last modified Oct. 16, 2012) (emphasis added).

10. WIS. ADMIN. CODE NR § 852.04(1) (2011).

11. Lynette Kalsnes, *Waukesha’s Request for Great Lakes Water is Complex First Test of Law*, CHICAGO PUBLIC MEDIA (June 21, 2011), <http://www.wbez.org/frontandcenter/2011-06-21/waukeshas-request-great-lakes-water-complex-first-test-law-88160>.

12. *City of Waukesha Water Division Application—Current Status*, WISCONSIN DEPT OF NATURAL RES. (May 14, 2012), <http://dnr.wi.gov/topic/WaterUse/WaukeshaDiversionApp.html> (“The DNR continues its work on the [drafts; once complete,] the DNR will post the documents to this website and schedule a public comment period and public hearings. The DNR has requested that the City of Waukesha further evaluate issues related to water supply and wastewater discharge. The timeline for the release of the Technical Review and EIS drafts is dependent on completion of this further evaluation.”).

13. Kalsnes, *supra* note 11, at 1.

14. WIS. STAT. ANN. § 281.343(1)(i) (2011).

15. See 45 ILL. COMP. STAT. ANN. 147/5 (West 2007); IND. CODE ANN. § 14-25-15-1 (West 2008); MICH. COMP. LAWS ANN. § 324.34201 (West 2008); MINN. STAT. ANN. § 103G.801 (West 2007); N.Y. ENVTL. CONSERV. LAW § 21-1001 (McKinney 2008); OHIO. REV. CODE ANN. § 1522.01 (West 2008); 32 P.S. PA. CONS. STAT. § 817.22 (West 2008); WIS. STAT. ANN. § 281.343 (West 2012); see also Compact art. 1 § 1.2.

consumptive use, or diversion application process before all other parties to the Great Lakes Compact get involved in subsequent phases of approval.¹⁶

Wisconsin's Administrative Code provides further guidance.¹⁷ It sets forth minimum requirements for conservation plans and outlines cost-effectiveness, environmental soundness, and economic feasibility analyses for each of three tiers, as established by the method of the applicant's request and the volume of its proposed withdrawal or diversion.¹⁸ However, given that Waukesha's diversion application will be the first test of these standards and may serve as a model for future proposals for diversion from the Great Lakes if approved,¹⁹ it is important that the Waukesha conservation plan sufficiently reflects current conservation norms.

The purpose of this Article is twofold. First, it describes the process through which Waukesha committed to and devised a conservation plan in response to norms developed through the multi-lateral processes of state and province parties to the Great Lakes Compact. Second, this Article analyzes how Waukesha's planning process fits within the theory of transnational, or transboundary, legal process. Part I of the Article provides an overview of Waukesha's proposed water conservation plan. Part II briefly describes transnational legal process theory. Part III introduces alternative approaches to water conservation that exist around the globe. Finally, Part IV analyzes Waukesha's proposed conservation plan in light of other conservation approaches to illustrate how this ostensibly domestic process transcends geographic boundaries and the role it plays in the international conversation about water conservation norms.

II. WAUKESHA'S PROPOSED CONSERVATION PLAN

As mandated by the Great Lakes Compact, the City of Waukesha crafted a conservation plan ("Plan") to accompany its diversion application materials.²⁰ In the Plan, Waukesha identifies three primary goals for its conservation planning efforts.²¹ First, it aims to reduce water use and thereby extend public water supplies.²² Second, the Plan includes an initiative to protect source water areas to ensure protection against pollution.²³ The Plan's third goal is to protect stormwater recharge areas and thus ensure the longevity of groundwater resources.²⁴ This Part first discusses Waukesha's proposed process and the City's timeline for implementing the Plan. Then, it explores model language and

16. See *Compact* art. 4, § 4.2(2).

17. See WIS. ADMIN. CODE NR §§ 852.01-.12 (2011).

18. *Id.*

19. Kalsnes, *supra* note 11, at 1.

20. *Water Conservation & Protection Plan*, WAUKESHA WATER UTILITY, 1 (2006), http://www.ci.waukesha.wi.us/c/document_library/get_file?folderId=42481&name=DLF E-9221.pdf [hereinafter *Plan*].

21. *Id.* at 2.

22. *Id.*

23. *Id.*

24. *Id.*

examples set by other U.S. jurisdictions and those jurisdictions Waukesha specifically selected for inclusion in its Plan.

A. THE CITY'S PROCESS AND TIMELINE

Waukesha identifies an eleven-step process for managing and implementing water conservation under the Plan.²⁵ The first step of the process includes identifying conservation goals.²⁶ In addition, the City plans to develop a program that provides monetary and other incentives to water users to reduce water use.²⁷ The Plan also references the City's intent to develop a Waukesha Water Utility Conservation Demonstration Program, a Water Use Profile and Forecast, and a Decision Support Tool to identify appropriate conservation measures by the water use sector.²⁸ Subsequent steps include an evaluation and design of conservation measures, as well as the identification and assessment of conservation incentives, costs, and benefits.²⁹ After establishing a schedule for implementing conservation measures and incentives, Waukesha will implement the Plan, and then conduct public outreach and education on its content.³⁰ As a final step, the City intends to further monitor, evaluate, and revise the conservation program as needed.³¹

In regard to implementing the Plan, Waukesha established a three-tiered timeline. The first tier—short-term activities—considers the implementation of public education programs, continuing water main and property replacement efforts, developing a water conserving billing structure, looping water mains, and developing outdoor water use ordinances.³² Additionally, the Plan calls for organizing a stakeholder group to advise the utility on the Plan.³³ The utility will also work with the city housing authority to update plumbing and work with other city departments and schools to reduce outdoor water use.³⁴ Other short-term activities include auditing water use in city buildings, working with the Focus on Energy program, the coordination of public education efforts with the Meter Change Out program, and the inception of regional source water protection planning with surrounding communities.³⁵

25. *Id.* at 7-9.

26. *Id.* at 7 (“Waukesha has set a preliminary goal of a 20% reduction in per capita water use reduction [citywide] by 2020. This goal is based on prior experience with other municipal water conservation programs in other states. Waukesha is also seeking to reduce peak water demand by 1 million gallons per day (MGD) through controls on water sprinkling.”).

27. *Id.* at 8; *see also id.* at 10-12 (proposing programs that include detecting and reducing leakage in the city water system; adopting an outdoor water use restriction ordinance; considering non-sprinkling related water use ordinances, such as those Illinois requires of any communities receiving Lake Michigan water; and indoor conservation measures, such as plumbing modifications).

28. *Id.* at 8.

29. *Id.* at 8-9.

30. *Id.* at 9.

31. *Id.*

32. *Id.* at 22.

33. *Id.*

34. *Id.*

35. *Id.* at 22-23.

The second-tier—mid-term activities—includes continuing education programs, developing incentive and rebate programs, developing water use restriction ordinances, recycling filtered backwash water, implementing a city water audit, and working with the commercial sector to encourage water conservation.³⁶ Finally, the City's third-tier objectives—classified as long-term activities in the Plan—stress the continuance and acceleration of system leak detection, implementing unidirectional flushing, enacting smart growth-oriented land use planning and zoning, updating stormwater management requirements, and continuing to work with the commercial and industrial sectors to audit water use.³⁷

In addition to its original planning documents, Waukesha produced a supplement in response to requests from the Wisconsin DNR.³⁸ The resulting Water Conservation Plan Supplement ("Supplement") includes a more technical set of findings on the city water system and service area, its historical water use and demand forecasts, its conservation efficiency measures, and an evaluation of additional conservation and efficiency measures.³⁹ The City further sets forth "next steps" in the Supplement, including a 2011 update to the City's 2006 Plan.⁴⁰

B. EXAMPLES BORROWED FROM OTHER US JURISDICTIONS

Waukesha opted to include examples from other U.S. jurisdictions in its conservation Plan to serve as potential models for its own program.⁴¹

1. Ordinance Language. Model ordinance language includes examples from Santa Monica, California;⁴² Santa Fe County, New Mexico;⁴³ San Antonio, Texas;⁴⁴ Arlington Heights, Illinois;⁴⁵ Durham, North Carolina;⁴⁶ the Illinois Department of Natural Resources;⁴⁷ and the Massachusetts Department of Conservation and Recreation.⁴⁸

36. *Id.* at 23-24.

37. *Id.* at 24.

38. *Water Conservation Plan Supplement*, CITY OF WAUKESHA, at 1-1 (2011), http://www.ci.waukesha.wi.us/c/document_library/get_file?uuid=5890f364-1146-46e5-980c-b9486ecc5bbb&groupId=10113 [hereinafter *Supplement*].

39. *Id.* at 3-1.

40. *Id.* at 6-1.

41. *See Water Conservation & Protection Plan*, WAUKESHA WATER UTILITY, app. at A-1 (2006), http://www.ci.waukesha.wi.us/c/document_library/get_file?folderId=42481&name=DLFE-9221.pdf.

42. *Id.*; *see* SANTA MONICA, CAL., MUN. CODE OF ORDINANCES § 7.18.050 (2012).

43. WAUKESHA WATER UTILITY, *supra* note 41, app. at A-1 to -2.

44. *Id.* app. at A-3 to -4 (2006); *see* SAN ANTONIO, TEX., ORDINANCE 100322 (2005).

45. WAUKESHA WATER UTILITY, *supra* note 41, app. at A-2 to -3; *see* ARLINGTON HEIGHTS, ILL., MUN. CODE § 21 (2012).

46. WAUKESHA WATER UTILITY, *supra* note 41, app. at A-13; *see* DURHAM, N.C., CODE OF ORDINANCES ch. 26, art. III, div. 2 (2011).

47. WAUKESHA WATER UTILITY, *supra* note 41, app. at A-21; *see* ILL. ADMIN. CODE tit. 17, ch. I, § 3730 (2003).

48. WAUKESHA WATER UTILITY, *supra* note 41, app. at A-21; *see* COMMONWEALTH OF MASS. WATER RESOURCES COMMISSION, INTERBASIN TRANSFER ACT: PERFORMANCE

2. *Incentive Programs.* A section of the Plan dedicated to incentive programs⁴⁹ references initiatives employed by Half Moon Bay, California;⁵⁰ San Francisco Bay Area, California;⁵¹ Tucson, Arizona;⁵² Eagle/Vail, Colorado;⁵³ Tampa, Florida;⁵⁴ Seattle, Washington;⁵⁵ and the Commonwealth of Massachusetts.⁵⁶

3. *Conservation Subdivision Ordinances.* Waukesha relied on model conservation subdivision ordinances,⁵⁷ including language from Minnesota counties⁵⁸ and Washington State,⁵⁹ in addition to local Wisconsin sources.

4. *Management Practices.* Finally, the Plan includes a copy of the town of Franklin, Massachusetts's Best Development Practices Guidebook to serve as a model for Waukesha's own management practices.⁶⁰

III. TRANSNATIONAL LEGAL PROCESS

As articulated by Harold Koh, a scholar on transnationalist jurisprudence, transnational (or transboundary) legal process⁶¹ refers to the method whereby a

STANDARDS GUIDANCE, 4-5 (2012), available at <http://www.mass.gov/dcr/waterSupply/intbasin/docs/finalps.pdf>.

49. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-1.

50. *Id.* at B-1 to -2; see *Water Use Efficiency*, COASTSIDE CNTY. WATER DIST., <http://www.coastsidewater.org/water-use-efficiency.html> (last visited Dec. 6, 2012).

51. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-1 to -2; see *Submeter Retrofit Incentive Program*, E. BAY MUN. UTIL. DIST., <http://ebmud.com/for-customers/for-residential-customers/conservation-rebates-and-incentives/submeter-retrofit-incent>; see also *Residential Indoor Water Conservation Study*, E. BAY MUN. UTIL. DIST. (July 2003), available at http://www.ebmud.com/sites/default/files/pdfs/residential_indoor_wc_study_0.pdf (utility cost savings through clothes washing machine rebate program potentially offered by participating Bay Area water agencies).

52. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-2, B-9 to -11; see *Water Conservation*, CITY OF TUCSON, available at <http://cms3.tucsonaz.gov/water/conservation> (last visited Dec. 6, 2012); see also *Residential Water Use Analysis*, CITY OF TUCSON, available at http://cms3.tucsonaz.gov/water/zanjero_analysis (last visited Dec. 6, 2012).

53. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-1 to -2; see *Use Water Wisely: Free Water Conservation Kit*, THE EAGLE RIVER WATER & SANITATION DIST., available at <http://www.erwsd.org/wise-use/free-water-conservation-kit> (last visited Dec. 6, 2012).

54. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-3; see *Tampa Water Dep't Residential Water Conservation Study*, CAL. URBAN WATER CONSERVATION COUNCIL, xvii (2004), available at www.cuwcc.org/WorkArea/downloadasset.aspx?id=12162.

55. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-3; see *Seattle Home Water Conservation Study*, CAL. URBAN WATER CONSERVATION COUNCIL, xv. (2000), available at <http://www.cuwcc.org/WorkArea/downloadasset.aspx?id=12152>.

56. WAUKESHA WATER UTILITY, *supra* note 41, app. at B-11; see COMMONWEALTH OF MASS. WATER RESOURCES COMM'N, INTERBASIN TRANSFER ACT: PERFORMANCE STANDARDS GUIDANCE, 4-5 (2012), <http://www.mass.gov/dcr/waterSupply/intbasin/docs/finalps.pdf>.

57. WAUKESHA WATER UTILITY, *supra* note 41, app. C.

58. *Id.* app. C at 9 (referencing WASHINGTON CNTY., MINN., PLANNING AND ADMIN. SERVICES, METRO. COUNCIL, OPEN SPACE DESIGN DEVELOPMENT: A GUIDE FOR LOCAL GOVERNMENTS (1997)).

59. *Id.* (referencing WASH. STATE DEPT OF CMTY. DEV., EVALUATING INNOVATIVE TECHNIQUES FOR RESOURCE LANDS—PART I—CLUSTERING (1992)).

60. TOWN OF FRANKLIN, MASS, FRANKLIN BEST DEV. PRACTICES GUIDEBOOK (2001), reprinted in *Water Conservation & Protection Plan*, WAUKESHA WATER UTILITY, app. D, *supra* note 41.

variety of actors interact in various fora to project, interpret, enforce, and internalize rules of international law.⁶² According to Koh, the three key elements of transnational legal process are interaction, interpretation, and internalization.⁶³ As Koh explains, “[t]hose seeking to embed certain norms into national conduct seek to trigger interactions that yield legal interpretations that are then internalized into the domestic law of even resistant nation states.”⁶⁴ This Part of the Article first introduces the concept of transnational legal process and then discusses its application in death penalty jurisprudence to provide a backdrop for its application to water conservation.

A. THE FEATURES OF TRANSNATIONAL LEGAL PROCESS

Transnational legal process has four distinctive features. First, it is “non-traditional” in that it merges “two traditional dichotomies that have historically dominated the study of international law: between domestic and international, public and private.”⁶⁵ Second, it is nonstatist in that the actors in this process include nation-states and non-state actors alike.⁶⁶ Third, the process is dynamic as opposed to static:⁶⁷ “[t]ransnational law transforms, mutates, and percolates up and down, from the public to the private, from the domestic to the international level and back down again.”⁶⁸ Fourth, it is normative.⁶⁹

From this process of interaction, new rules of law emerge, which are interpreted, internalized, and enforced, thus beginning the process all over again. Thus, the concept embraces not just the descriptive workings of a process, but the normativity of that process. It focuses not simply upon how international interaction among transnational actors shapes law, but also on how law shapes and guides future interactions: in short, how law influences why nations obey.⁷⁰

Importantly, “[t]ransnational norms do not travel by themselves. They are constructed conveyed, and carried by actors, including government officials, members of international secretariats, professionals, business representatives, and civil society activists.”⁷¹ Though these processes are, more often than not, driven by actors with agendas, at times “the legal norms may be carried less

61. Harold Hongju Koh, *Transnational Legal Process*, 75 NEB. L. REV. 181, 183 (1996) [hereinafter Koh, *Transnational Legal Process*].

62. Harold Hongju Koh, *Jefferson Memorial Lecture Transnational Legal Process After September 11th*, 22 BERKELEY J. INT'L L. 337, 339 (2004) [hereinafter Koh, *Jefferson*].

63. *Id.*

64. *Id.*

65. Koh, *Transnational Legal Process* at 184.

66. *Id.*

67. *Id.*

68. *Id.*

69. *Id.*

70. *Id.*

71. Gregory Shaffer, *Transnational Legal Process and State Change*, 37 LAW & SOC. INQUIRY 229, 236 (2012).

consciously as a reflection of intensified cross-border interaction characterizing economic and cultural globalization.”⁷²

Koh offers a computer-aged operational definition of transnational law as “(i) law that is ‘downloaded’ from international to domestic law . . . ; (ii) law that is ‘uploaded, then downloaded’ . . . ; and (iii) law that is borrowed or ‘horizontally transplanted’ from one national system to another[.]”⁷³ Importantly, these norms address purely national activities in addition to transnational ones.” For instance, although municipal water services regulation is an exclusively national activity, it “can be significantly shaped by the transnational construction and flow of legal norms. . . . The transnational legal norms in question may be adopted voluntarily in a planned fashion pursuant to harmonization efforts, or adopted without a plan as part of a process of diffusion conveyed through transnational actors and interactions.”⁷⁵

B. TRANSNATIONAL LEGAL PROCESS AS APPLIED TO DEATH PENALTY JURISPRUDENCE

Death penalty jurisprudence, as shaped by the Eighth Amendment to the U.S. Constitution’s ban on cruel and unusual punishment,⁷⁶ is a concrete example of transnational legal process.⁷⁷ Over time, the “cruel and unusual punishment” provision has been interpreted in the context of “evolving standards of decency that marked the progress of a maturing society.”⁷⁸ During the 1950s, the U.S. Supreme Court acknowledged that this “evolving” standard must be determined in reference to both international and domestic measures, with the Court often looking to international authority in making a determination of usual or unusual conduct.⁷⁹

Nearly fifty years later, the Court abolished the practice of executing persons with intellectual disabilities in *Atkins v. Virginia*.⁸⁰ “In doing so, they took note of the fact that, within the world community, the imposition of the death penalty for crimes committed by [individuals with intellectual disabilities] is overwhelmingly disapproved.”⁸¹ In fact, at the time *Atkins* was decided, the United States and Kyrgyzstan “were the only countries *in the world* that permitted the execution of persons with [intellectual disabilities],” and the latter had effectively ceased the practice many years prior.⁸² Thus, the United States

72. *Id.*

73. Harold Hongju Koh, *Why Transnational Law Matters*, 24 PENN ST. INT’L L. REV. 745, 745-46.

74. Gregory Shaffer, *Transnational Legal Process and State Change*, 37 LAW & SOC. INQUIRY 229, 234 (2012).

75. *Id.*

76. U.S. CONST. amend. VIII.

77. Koh, *Jefferson* at 342-43 (discussing Harold Koh and his colleagues’ amicus brief to the U.S. Supreme Court in support of abolishing the practice of sentencing people with intellectual disabilities to death).

78. *Id.* at 342 (quoting *Trop v. Dulles*, 356 U.S. 86, 101(1958)).

79. *Id.*

80. *Id.* at 342-43 (discussing *Atkins v. Virginia*, 536 U.S. 304 (2002)).

81. *Id.* at 343.

82. *Id.* (emphasis added)

alone condoned the imposition of such punishment, which the Court struck down shortly thereafter as “unusual” under the Eight Amendment.⁸³

C. TRANSNATIONAL NETWORKS

As scholar Eric Dannenmaier articulates, transboundary legal process theory is often “the product of a dynamic interplay of domestic experience and international interests promoted by transboundary constituencies that import and adapt ideas across boundaries.”⁸⁴ Scholars Margaret Keck and Kathryn Sikkink use the term “transnational advocacy networks” to describe interactions between various parties, such as economic actors and firms, scientists and experts, or among activists, that influence international and regional policies.⁸⁵ A number of scholars have also explored the application of this theory to transboundary environmental negotiation in the context of improving global environmental treaty-making.⁸⁶

IV. GLOBAL PERSPECTIVES ON WATER CONSERVATION

Global perspectives on water conservation offer insight to approaches employed in North America and beyond.⁸⁷ This Part of the Article first provides an overview of select North American, European, and Asian approaches to water conservation. Then, it explores conservation efforts by countries employing the concept of Integrated Water Resources Management (“IWRM”) and offers a comparison of IWRM to transnational legal process.

A. NORTH AMERICA

1. *United States.* Water conservation has become a policy issue in the United States only within the past several decades.⁸⁸ This is primarily due to

83. *Id.* (referencing the Court’s decision in *Atkins*, 536 U.S. at 321).

84. Eric Dannenmaier, *Environmental Law and the Loss of Paradise*, 49 COLUM. J. TRANSNAT’L L. 467, 493 (2010).

85. Margaret E. Keck & Kathryn Sikkink, *Transnational Advocacy Networks in International and Regional Politics*, 51 INT’L SOC. SCI. J. 89, 89 (1999).

86. See David W. Bowker & Michael Castellano, *Enforcing International Environmental Treaties in Domestic Legal Systems*, TRANSBOUNDARY ENVTL. NEGOTIATION: NEW APPROACHES TO GLOBAL COOPERATION 230 (Lawrence Susskind et al. eds., 2002).

87. See, e.g., World Water Assessment Programme, *The United Nations World Water Development Report*, (4th ed. 2012), available at <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/wwdr4-2012/>; see *Water Conservation Planning Introduction*, ALLIANCE FOR WATER EFFICIENCY, http://www.allianceforwaterefficiency.org/Water_Conservation_Planning_Introduction.aspx (last visited Dec. 6, 2012); GLOBAL WATER PARTNERSHIP TOOLBOX, <http://www.gwptoolbox.org> (last visited Dec. 6, 2012); *International Organisations and Websites*, SAVEWATER!, <http://www.savewater.com.au/research-and-resources/resources/international-links> (last visited Dec. 6, 2012); WATERWISE, <http://www.waterwise.org.uk> (last visited Dec. 6, 2012).

88. Mary Ann Dickinson, *Water Conservation in the United States: A Decade of Progress*, available at <http://www.docstoc.com/docs/43116678/Water-Conservation-in-the-United-States-A-Decade-of>.

the country's rapid urban population growth, sparking a demand for water that exceeds the national supply.⁸⁹ In response to these evolving strains, the U.S. Environmental Protection Agency ("EPA") Guidelines suggest a voluntary nine-step conservation planning process to cope with conservation concerns:

1. Specify conservation planning goals;
2. Develop a water system profile;
3. Prepare a demand forecast;
4. Describe planned activities;
5. Identify water conservation measures;
6. Analyze benefits and costs;
7. Select conservation measures;
8. Integrate resources and modify forecasts; and
9. Present implementation and evaluation strategy.⁹⁰

The Great Lakes Conservation Toolkit ("Toolkit") provides a three-step process to aid regional conservation efforts in the Great Lakes area. The first step is to develop a Water-Use Profile.⁹¹ The second step is to identify, evaluate, and assess conservation measures and incentives.⁹² These include traditional best management practices for water conservation such as public education, residential water use reduction, industrial water use reduction, agricultural water use reduction, thermoelectric water use reduction, and water reuse and reclamation.⁹³ The third and final step under the Toolkit is for an entity to select which conservation measures and incentives to employ.⁹⁴

The measures mandated by the State of Texas offer insight as to how one of the most arid states in the United States is coping with a stressed water supply.⁹⁵ The Texas Water Development Board ("TWDB") instated a conservation plan checklist that requires twelve key materials of those vying for the state's water resources.⁹⁶ First, the TWDB prescribes an evaluation of the applicant's water and wastewater system, including a water conservation utility profile.⁹⁷ Second, it mandates inclusion of quantified five- and ten-year targets.⁹⁸ Third, applicants must submit an implementation schedule.⁹⁹ Fourth, applicants must consider and outline a method for tracking the implementation and

89. *Id.*

90. *Water Conservation Plan Guidelines*, U.S. ENVTL. PROT. AGENCY, 41 (1998), http://epa.gov/watersense/docs/part2_508.pdf [hereinafter *EPA Guidelines*].

91. Jodi H. Sinykin & Donna L. McGee, *Opportunities and Challenges for State Implementation of Water Conservation Under the Great Lakes Compact: A Report and Toolkit*, 2006 MICH. ST. L. REV. 1193, 1221 (2006) [hereinafter *Toolkit*].

92. *Id.* at 1224.

93. *Id.* at 1225-29.

94. *Id.* at 1230-31.

95. See Samuel F. Helmle, *Water Conservation Planning: Developing a Strategic Plan for Socially Acceptable Demand Control Programs*, APPLIED RESEARCH PROJECTS, TEXAS STATE UNIV. — SAN MARCOS, 4-7 (2003), <https://digital.library.txstate.edu/bitstream/handle/10877/3730/fulltext.pdf?sequence=1>.

96. *Water Conservation Plan Guidance Checklist*, TEXAS WATER DEV. BD. (2011), available at <http://www.twdb.state.tx.us/conservation/municipal/plans> [hereinafter *Texas Checklist*].

97. *Id.*

98. *Id.*

99. *Id.*

effectiveness of the plan.¹⁰⁰ Fifth, the TWDB mandates installation of a master meter to measure and account for the amount of water diverted from the source of supply.¹⁰¹

Next, the checklist mandates universal metering program for customer and public water usages.¹⁰² Seventh, plans must include measures to determine and control unaccounted-for water uses.¹⁰³ Eighth, a continuous leak detection program is necessary prior to approval.¹⁰⁴ Ninth, the TWDB requires the implementation of a continuing educational and informative program in regard to water conservation.¹⁰⁵ Tenth, the TWDB requires a cost-based, non-“promotional” water rate structure that will discourage excessive water use.¹⁰⁶ Eleventh, applicants must submit evidence of a means of implementation and enforcement.¹⁰⁷ Finally, the TWDB calls for documentation that the regional water-planning group for the applicant’s service area was notified of the conservation plan.¹⁰⁸

2. *Canada.* Canadian territories have also taken actions to cope with projected water shortages and to proactively combat unnecessary water loss. For example, the Town of East Gwillimbury developed a Water and Wastewater Conservation Strategy founded on five pillars: “(i) Protecting and enhancing the environment; (ii) providing and advocating for quality programs and services to the community; (iii) investing in municipal infrastructure; (iv) managing growth to ensure a sustainable community; (v) supporting a municipal organization focused on excellence.”¹⁰⁹

The Town’s cooperative conservation programs include “Water for Tomorrow,” “Sustainable Development through Leadership in Energy and Environmental Design Highrise Program,” “Sustainable Home Incentive Program,” and an “Inflow and Infiltration Reduction and Prevention.”¹¹⁰ The Town’s water-efficient development implementation plan was the result of collaboration between Town and regional staff, community representatives, and expert consultants to develop a specific water conservation and inflow infiltration reduction/prevention program for the Town.¹¹¹ The plan also briefly outlines incentive levels, the release of increased allocation, and sustainable community program components.¹¹²

100. *Id.*

101. *Id.*

102. *Id.*

103. *Id.*

104. *Id.*

105. *Id.*

106. *Id.*

107. *Id.*

108. *Id.*

109. George Zukovs & Wayne Hunt, *Town of East Gwillimbury—Water and Wastewater Conservation Strategy*, ALLIANCE FOR WATER EFFICIENCY, 2, <http://www.allianceforwaterefficiency.org/East-Gwillimbury-Water-Cons-Plan.aspx> (last visited Dec. 6, 2012) [hereinafter *Gwillimbury Strategy*].

110. *Id.* at 3-4.

111. *Id.* at 4.

112. *Id.* at 4-8.

Canada has also initiated conservation planning for federal government facilities.¹¹³ These efforts resulted from two important policies. First, the 1987 Federal Water Policy set out a national strategy for Canada's natural resource management.¹¹⁴ Second, the 1990 Green Plan reaffirmed the tactics of the Federal Water Policy and recognized a need for federal government leadership in environmental matters through the adoption of a Code of Environmental Stewardship, which declares "the federal government will incorporate sensitivity into all aspects of its operations and practices."¹¹⁵ According to the federal facilities conservation plan, its purpose is twofold.¹¹⁶ First, it serves to provide the country's federal departments with an understanding of the opportunity for water conservation.¹¹⁷ Second, the planning is meant to give the same departments the information, tools, and support that are critical to the successful implementation of water efficiency programs in their facilities.¹¹⁸

B. EUROPE

Both population and water resources are unevenly distributed across Europe, which creates varying degrees of water stress throughout European cities and nations.¹¹⁹ As a result, European regions have developed different approaches to conservation in response to the stresses on their individual systems.

1. *United Kingdom.* U.K.-based non-governmental organization Waterwise conducted a comprehensive study of global water conservation efforts that highlights best practice case studies from around the world.¹²⁰ In particular, the study identified metering measures in France, regulatory incentives in Sydney, Australia, and community engagement strategies in South East Queensland, Australia as exemplary instances of global conservation efforts.¹²¹

The U.K. borough of Dacorum developed its Local Water Conservation Plan in response to climate change, on a national level, and more local factors such as the arid nature of the region, lack of groundwater protection and conventional drainage systems.¹²² The plan identified aims to:

113. *A Water Conservation Plan for Federal Government Facilities*, ENV'T CANADA, <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=9EF4554E-1> (last visited Dec. 6, 2012) [hereinafter *Government Facilities Plan*].

114. *Id.*

115. *Id.*

116. *Id.*

117. *Id.*

118. *Id.*

119. *European Water Resources—Overview*, EUROPEAN ENVTL. AGENCY (Feb. 18, 2008), <http://www.eea.europa.eu/themes/water/water-resources>.

120. *Ensuring Water for All—Scoping Study Final Report*, ENV'T AGENCY, 26-28 (March 5, 2010), http://www.waterwise.org.uk/data/resources/6/ensuringwaterforall_final_repor.pdf [hereinafter *Waterwise Study*].

121. *Id.*

122. *Dacorum Borough Local Plan 1991-2011*, DACORUM BOROUGH COUNCIL, 6-7 (July 2005), http://www.dacorum.gov.uk/PDF/Water_SPD.pdf [hereinafter *Dacorum Plan*].

(i) reduce water consumption where possible; (ii) ensure adequate water resources are available to meet consumers' needs by managing and meeting the demand for water from households, agriculture, and industry; (iii) sustain the aquatic environment; (iv) manage the discharge of waste water and control pollution; (v) replenish the chalk aquifer; and (vi) sustain the chalk stream habitat.¹²³

Furthermore, it cited principles for development such as source control and sustainable drainage systems.¹²⁴

2. *Germany.* The International Water Study Group, *Länderarbeitsgemeinschaft Wasser ("LAWA")*, conducted a study to address flowing, still, ground, and coastal water conservation in Germany.¹²⁵ The study identified three fundamental objectives: the protection of surface waters and coastal waters as the natural habitats for humans, animals, and plants; the protection of ground water as a natural life resource; and the assurance of a lasting water supply for the population, agriculture, industry and commerce, recreation, and fishing.¹²⁶

In light of unavoidable conflicts of interest, the plan identifies four politically-minded requirements for the successful implementation of water conservation strategies: "(i) clear political and legal stipulations; (ii) a high standard of technical and scientific expertise; (iii) a high level of financial and manpower resources; and (iv) trans-media standardisation and interlinking of water conservation strategies with the strategies of other technical sectors of environmental politics, as well as those of other political spheres."¹²⁷ According to LAWA, successful water resources management must look beyond "the traditional water management strategies of purification and ground water development."¹²⁸ Moreover, water management strategies must help forestall potential water pollution and be implemented with prevention, rather than mere restoration, "as the guiding principle."¹²⁹

A separate German initiative, "The Stralsund Declaration on Water Conservation," sets forth ten guidelines for water conservation management.¹³⁰ The first step is to secure and re-establish the water systems as natural habitats.¹³¹ Second, it is necessary to preserve ground water in its natural state.¹³² The third goal is to practice preventative avoidance of substance discharge.¹³³ Fourth, it encourages rational handling of water in households, industry, commerce, and

123. *Id.* at 8.

124. *Id.* at 9-10.

125. *National Water Conservation Plan, Länderarbeitsgemeinschaft Wasser* [INT'L WATER STUDY GROUP], 2 (1996), http://www.lawa.de/documents/Gewschutzkonzept_0504_3f4.pdf [hereinafter *LAWA Plan*].

126. *Id.* at 4.

127. *Id.*

128. *Id.* at 9.

129. *Id.*

130. *Id.* at 17-19.

131. *Id.* at 17.

132. *Id.*

133. *Id.*

agriculture.¹³⁴ Fifth, it cites the development of effluent processing plants as an important part of the process.¹³⁵

The plan's sixth step mandates establishing targets and water assessment methods, including ongoing system monitoring.¹³⁶ The seventh identified step is to consider "catchment areas" in developing integrated ecological water system assessment methods.¹³⁷ Eighth, implementing parties are encouraged to take steps to limit the effects of traffic emissions, including improvements in vehicle technology and infrastructure.¹³⁸ Ninth, the plan recommends the development of management principles that reduce the release of plant treatment substances into the soil.¹³⁹ Finally, those employing the plan must strive to incorporate Germany's nationwide groundwater conservation and pollution effect principles as major components of European water policy.¹⁴⁰

C. ASIA

In 2002, the Chinese government amended its 1988 Water Law to establish a legal foundation for integrated water resource and demand management.¹⁴¹ "The amended 2002 Water Law enshrines the principles that everybody should have access to safe water, and that water conservation and protection are a priority."¹⁴² The Law focuses on five areas for managing the country's water resources: "(i) water allocation; (ii) water rights and water withdrawal permits; (iii) river basin management; (iv) water-use efficiency and conservation; and (v) protecting water resources from pollution."¹⁴³

China's eleventh Five-Year Plan ("FYP") for Water Resources Development "sets specific objectives with action plans for water resource development and management and reform."¹⁴⁴ With respect to water resource development, the eleventh FYP focuses on the construction of water works and technological innovation for securing water supply and potability, enhancing flood control and disaster mitigation, and improving conservation.¹⁴⁵ With respect to water resource management, the FYP proposes such actions as reformation of the management system; the establishment of a water rights trading and administration system; the introduction of quantity control and quota management; a shift to integrated river basin management; the establishment of mechanisms for water financing; the strengthening of water conservation in rural areas; and

134. *Id.* at 18.

135. *Id.*

136. *Id.*

137. *Id.*

138. *Id.*

139. *Id.* at 19.

140. *Id.*

141. Jian Xie et al., *Addressing China's Water Scarcity—Recommendations for Selected Water Resource Management Issues*, THE WORLD BANK, 28 (2009), http://www-wds.worldbank.org/external/default/WDSContentServer/WDS/IB/2009/01/14/000333037_20090114011126/Rendered/PDF/471110PUB0CHA0101OFFICIAL0USE0ONLY1.pdf.

142. *Id.*

143. *Id.*

144. *Id.*

145. *Id.*

improvements in water pricing.¹⁴⁶ The FYP also elaborates on measures to encourage its effective execution, including “setting up financial mechanisms, defining authorities and responsibilities of government institutions, improving accountability, conducting research and staff training, and enhancing public participation in water resource management.”¹⁴⁷

A number of studies dedicated to water resources management contend that necessary government commitments, plans, and implementation actions include: “establishing a rational water resource management system, setting up [a] rational pricing mechanism, adopting water conservation technologies and measures, facilitating the development of water efficient industries, strengthening water pollution prevention and control, and raising the public awareness water conservation.”¹⁴⁸

D. COUNTRIES EMPLOYING INTEGRATED WATER RESOURCES MANAGEMENT

Integrated Water Resources Management (“IWRM”) is the process of bringing all of the interested parties and decision-makers to the negotiating table and guiding deliberations towards an informed understanding of optimal water management choices.¹⁴⁹ Ideally, the IWRM process should account for water conservation interests as one part of the whole.¹⁵⁰ Countries across the globe, from Africa to Canada, use this approach.¹⁵¹

Like transnational legal process, IWRM emphasizes a holistic approach that extends beyond what is traditionally considered the decision-making level.¹⁵² Further, it encourages participants to develop water management strategies that integrate supply and demand considerations, as well as human and environmental needs; thus, taking into account a more representative composite of concerns than non-IWRM alone.¹⁵³ In theory, transnational legal processes contemplate and represent these concerns on an even broader level by looking to global interactions and norms in the abstract rather than relying on the actual presence of affected actors in decision-making discussions.

146. *Id.*

147. *Id.*

148. *Id.* at 27.

149. *Integrated Water Resources Management*, GLOBAL WATER PARTNERSHIP TOOLBOX, http://www.gwptoolbox.org/index.php?option=com_content&view=article&id=8&Itemid=3 (last visited Dec. 6, 2012) [hereinafter *IWRM Toolbox*].

150. *Id.*

151. *Id.*; see *Integrated Watershed Management*, ENV'T CANADA, <http://www.ec.gc.ca/eau-water/default.asp?lang=En&n=13D23813-1> (last visited Dec. 6, 2012).

152. See *Integrated Water Resources Management (IWRM): A Way to Sustainability*, INFORESOURCES (2003), available at http://www.inforesources.ch/pdf/focus1_e.pdf [hereinafter *IWRM*].

153. *Id.*

V. TRANSBOUNDARY LEGAL PROCESS AT LOCAL AND INTERNATIONAL LEVELS

Waukesha's proposed Plan credits a number of national influences that served as models for its own conservation initiatives.¹⁵⁴ This Part of the Article discusses identifiable features of American conservation processes and planning that likely served as templates for the Waukesha Plan. Next, this Part explores the interplay of global approaches to conservation planning as evidenced by Waukesha's resulting planning materials. Though it is beyond the scope of this Article to draw *direct* connections between Waukesha's proposed conservation efforts and those employed by its international counterparts, this Part offers observations regarding the Plan's likeness to those discussed in Part III of this Article. Finally, this Part concludes with an evaluation of Waukesha's planning efforts, and also includes suggestions for incorporating potentially overlooked methodologies in the event the Plan needs to be modified in the future.

A. REGIONAL INFLUENCES: WAUKESHA'S PLAN, UP CLOSE

At first blush, Waukesha's 176-page 2006 Plan and 367-page 2011 Supplement appear to be totally comprehensive.¹⁵⁵ However, upon closer scrutiny, it is apparent the City's application materials are less an entirely original composition and more of a compilation of related ideas inspired by similar conditions around the country.¹⁵⁶ This genre of indirect, cross-border interaction among entities confronted with similar concerns—here, a need to conserve a strained resource—illustrates the transboundary legal process. In this case, an interplay of norms is occurring at a sub-boundary level among regional entities, as well as at a transboundary level among international entities.¹⁵⁷

Of the 367 pages of Supplement material, fewer than forty appear to have been crafted completely from scratch as a direct response to the proposal re-

154. See *City of Waukesha Water Division Application—Current Status*, WISCONSIN DEPT OF NATURAL RES. (May 14, 2012), <http://dnr.wi.gov/topic/WaterUse/WaukeshaDiversionApp.html> (explaining that the technical review of the city's application is not expected to be publicly available before the City of Waukesha provides further evaluation on issues related to water supply and wastewater discharge).

155. *Water Conservation & Protection Plan*, WAUKESHA WATER UTILITY (2006), http://www.ci.waukesha.wi.us/c/document_library/get_file?folderId=42481&name=DLFE-9221.pdf; *Water Conservation Plan Supplement*, CITY OF WAUKESHA (2011), available at http://www.ci.waukesha.wi.us/c/document_library/get_file?uuid=5890f364-1146-46e5-980c-b9486ecc5bbb&groupId=10113 (the supplement includes a full-text version of the former, therefore I will refer to supplemental materials together).

156. See generally *Water Conservation & Protection Plan*, WAUKESHA WATER UTILITY (2006), http://www.ci.waukesha.wi.us/c/document_library/get_file?folderId=42481&name=DLFE-9221.pdf; *Water Conservation Plan Supplement*, CITY OF WAUKESHA (2011), available at http://www.ci.waukesha.wi.us/c/document_library/get_file?uuid=5890f364-1146-46e5-980c-b9486ecc5bbb&groupId=10113.

157. See *supra* Part II.

quest.¹⁵⁸ These pages include an updated background of the City's water conservation planning efforts, data on historical water use and demand forecasts, a summary of the current system, evaluation of additional conservation and efficient measures, and next steps for Waukesha to take in achieving identified conservation goals.¹⁵⁹ The remaining 300-plus pages of the Supplement contain a variety of exhibits, the most significant of which include examples of methods employed by a select group of U.S. regions that Waukesha may or may not opt to draw upon when the time comes for it to implement its own conservation plan.¹⁶⁰ Notably, approximately half of the City's application, just shy of 150 pages, is dedicated to these examples.¹⁶¹

City officials identify the American Water Works Association ("AWWA") Manual on water conservation planning as its muse.¹⁶² The process embraces a sequence of nine steps, from conducting appropriate research and establishing conservation priorities, to setting goals, identifying and evaluating potential conservation and efficiency measures, defining and implementing a plan of action, and finally monitoring and evaluating progress with routine updates to that plan of action.¹⁶³ Even absent explicit reference to other theories of conservation planning, a deconstruction of the roughly forty-page application section reveals the Plan implicitly embraces influences of other U.S. conservation strategies, namely those of the EPA and State of Texas.¹⁶⁴ Further, the remainder of the supplemental materials explicitly borrows model language and strategies from U.S. sources previously named in this article.¹⁶⁵ Thus, at a domestic level, the Waukesha Plan both implicitly and expressly emulates American-based models of water conservation from across the United States, evincing a series of sub-boundary exchanges.

1. EPA Guidelines and Texas Recommendations. Though the Waukesha Plan does not overtly credit either as a direct influence, the nine-step EPA planning process and the twelve-item checklist developed by the State of Texas are both perceptible in the City's conservation planning materials.¹⁶⁶ Given the open-ended nature of Waukesha's task and EPA's prominence in national environmental issues, it would be surprising for any U.S. city to not utilize the agency's accessible selection of resources on the subject.¹⁶⁷ Thus, its ostensible influence on the City's Plan should come as no surprise.

158. See *Water Conservation Plan Supplement*, CITY OF WAUKESHA, III, (2011), available at http://www.ci.waukesha.wi.us/c/document_library/get_file?uuid=5890f364-1146-46e5-980c-b9486ecc5bbb&groupId=10113.

159. *Id.*

160. *Id.* at IV.

161. *Id.*

162. *Supplement*, *supra* note 38, at 1-2.

163. *Id.* at 1-2 tbl.1-1.

164. See generally *Id.* at 1-1 to 6-1; *EPA Guidelines*, *supra* note 90; *Texas Checklist*, *supra* note 96 (establishing that similar elements are recommended for use in the procedures for each of these water conservation strategies such as the use of efficiency measures and benchmarks).

165. See *supra* Part I.B.

166. See *supra* Part III.A.1.

167. See, e.g., *General Questions*, WATERSENSE, <http://epa.gov/watersense/general.html> (last visited Dec. 6, 2012) (providing an example of a national EPA partnership program that pro-

Alternatively, it is seemingly less expected for a small city in Wisconsin to look to a southerly neighbor for inspiration in its conservation planning process. Although Waukesha authorities did not cite the Texas conservation-planning checklist as a resource actually utilized by those responsible for crafting the Plan, its influence is apparent. Specifically, Waukesha's sections on pricing and metering appear to have ties to Texas's guidelines.¹⁶⁸ The guidelines in relevant part call for cost-based pricing that does not encourage excessive use, and the implementation of a master meter to measure and account for all water diverted from the original supply source.¹⁶⁹ With respect to pricing, Waukesha identifies the development of a conservation-minded water billing structure among its short-term goals for implementation of the Plan.¹⁷⁰ In regard to metering, another of the city's short-term goals is to coordinate public education and outreach with its Meter Change Out Program.¹⁷¹

2. *Internal Citation to Domestic Conservation Efforts.* Not only did Waukesha apparently draw upon national norms in devising its diversion application, it also explicitly referenced other U.S. jurisdictions as potential models to ensure successful implementation of its Plan. As Part I of this Article discussed, the materials accompanying the base application include a sampling of model language and practices from all parts of the country: Arizona, California, Colorado, Florida, Illinois, Massachusetts, Minnesota, New Mexico, North Carolina, Texas, Washington, and Wisconsin.¹⁷²

The presence of these references renders it indisputable that those responsible for mapping out Waukesha's conservation efforts relied on conversations that took place in the aforementioned states. By borrowing facets of other regions' plans it considered to be exemplary, Waukesha projected acceptance of the conservation norms embraced by those other localities. Further, its actions added to the conversation about conservation in that the process through which Waukesha narrowed its focus from all potential models to a mere handful is a direct reflection of how international standards continue to evolve, and how those standards are influencing conservation efforts at a domestic level.¹⁷³

B. REFLECTIONS ON INTERNATIONAL ASPECTS

As stated earlier, though it is beyond the scope of this Article to draw conclusions on any direct influence of international conservation schemes, it is worth noting the similarities between the conservation measures embraced by Waukesha and those employed around the globe.

vides water management resources to local markets across the country with the purpose of encouraging the use of efficient products and practices).

168. *Compare Plan*, *supra* note 20, at 22-23, with *Texas Checklist*, *supra* note 96.

169. *Texas Checklist*, *supra* note 96.

170. *Plan*, *supra* note 20, at 22.

171. *Id.*

172. *Id.* at 35-176; *See supra* Part I.

173. *See generally Supplement*, *supra* note 38.

1. *Goal of Decreased Consumption.* The goal of decreased consumption is a prevalent theme in the conservation efforts of every country previously discussed.¹⁷⁴ This is not surprising when one considers the increasing threat of water scarcity and the impact of freshwater shortages at an international level, if and when the world's demand exceeds its supply.¹⁷⁵ Thus, this universal attempt to decrease consumption appears to be an international norm that has been collectively embraced by local markets across the globe.¹⁷⁶

2. *Regulatory Incentives.* Australia, Canada, and the United States each employ regulatory incentive programs as a means of achieving conservation ends.¹⁷⁷ Likewise, Waukesha identifies the development and implementation of incentive programs as part of its short-term goals.¹⁷⁸ Though the City incorporated model language and program ideas only from U.S. states in devising its Plan, those states—which include Arizona, California, Colorado, Florida, Massachusetts, and Washington—could have been influenced by international norms in their own planning processes, thus continuing the cycle.¹⁷⁹

3. *Community Involvement and Public Awareness.* Like regulatory incentives, community involvement and public awareness efforts serve to engage the public and engender participation from those who might otherwise sit on the figurative sideline.¹⁸⁰ Many countries, including Germany, the United Kingdom, the United States, Canada, and other IWRM locales emphasize the importance of community involvement and public awareness in crafting their respective conservation plans.¹⁸¹

4. *Ongoing System Monitoring.* Each of the localities discussed in Part III of this Article reference ongoing system monitoring as an integral part of achieving identified conservation measures.¹⁸² Thus, in spite of geographical differences, each locality has embraced continual assessment and improvement as integral to successful water conservation.¹⁸³ Following in suit, the City of Waukesha has stated that it will monitor, evaluate, and revise its conservation program as needed as the eleventh and final step in its Plan for implementation.¹⁸⁴

5. *Pricing.* Conservation efforts in China disclose pricing improvements as a target area for reform in its current system, specifically the adoption of ra-

174. See *supra* Part III.A.1 (overviewing the different plans for each country).

175. See Schneider, *supra* note 1.

176. See *supra* Part III.

177. See *Waterwise Study*, *supra* note 120, at 26-28; *Gwillimbury Strategy*, *supra* note 109, at 3-5; *EPA Guidelines*, *supra* note 90; *Texas Checklist*, *supra* note 96.

178. *Plan*, *supra* note 20, at 22.

179. See *id.* at B-1 to B-3.

180. See *id.* at B-8 to B-9.

181. See generally *LAWA Plan*, *supra* note 125, at 18; *Waterwise Study*, *supra* note 120, at 20; *EPA Guidelines*, *supra* note 90; *Texas Checklist*, *supra* note 96; *Gwillimbury Strategy*, *supra* note 109, at 3-5.

182. See *supra* Part III.

183. *Id.*

184. *Plan*, *supra* note 20, at 9.

tional pricing models.¹⁸⁵ Likewise, Waukesha proffers a plan to implement a pricing structure that encourages water conservation.¹⁸⁶

6. *Metering*: UK-based Waterwise's study on best practices from around the globe complimented French metering programs on their effectiveness.¹⁸⁷ As discussed above, Waukesha makes reference to a Meter Change Out Program in its conservation planning materials, which it believes will aid in increasing the efficiency of its water usage.¹⁸⁸

C. WAUKESHA STANDING ALONE: A PORTRAIT OF THE CITY'S PLAN

Waukesha's conservation measures offer a glimpse into policies and procedures other countries are embracing and employing in response to water supply issues. Still, select departures from global approaches discussed in Part III of this Article could shed light on potential areas where Waukesha's Plan could be modified if the approval process requires such modifications in the future. Waukesha's Plan does not address the following issues, but could and should in the future, as the City faces these issues.

1. *Pollution and Emissions Considerations*. Though the Plan cites an initiative to protect source water areas against pollution, the City does not reference any specific objectives to accomplish this goal.¹⁸⁹ Both Germany and China take pollution and emissions into account when formulating their respective conservation plans.¹⁹⁰ Such considerations shift the focus from preventative measures regarding the use of water supply to unintended consequences of pollutants and emissions potentially harming that supply. In doing so, the countries equip themselves with a tool to combat water scarcity from a different angle than their global counterparts. Their counterparts focus exclusively on managing the water itself, rather than dealing with inadvertent environmental factors that may negatively impact the already limited water supply.¹⁹¹

2. *Political Emphasis*. Unlike countries where politics play a silent but dominant role in water planning, Germany gives voice to this force by making explicit reference to the role of politics in the water conservation process.¹⁹² Specifically, Germany's documents cite a need for clear legal and political stipulations, alongside efforts of trans-media standardization, in order to avoid conflicts of interest and successfully implement its conservation planning measures.¹⁹³

185. Xie et al., *supra* note 141, at 27-28.

186. *Plan*, *supra* note 20, at 2, 8, 11-12, 14-15, 22.

187. *Waterwise Study*, *supra* note 120, at 26.

188. *Plan*, *supra* note 20, at 23.

189. *Id.* at 2-3.

190. *See LAWA Plan*, *supra* note 125, at 16-19; Xie et al., *supra* note 141, at 16-19.

191. *Compare LAWA Plan*, *supra* note 125, at 16-19 (listing specific objectives of how environmental and water conservation policies in Germany should support each other), *and* Xie et al., *supra* note 141, at 27-28, 46, 111-112 (explaining the measures that China has undertaken to improve sustainable economic development as it pertains to pollution and emission), *with Plan*, *supra* note 20, at 2-3 (omitting any references to specific objectives of how Waukesha can prevent water pollution).

192. *LAWA Plan*, *supra* note 125, at 4-5.

193. *Id.* at 4.

3. *Natural Disaster Precautions.* China's conservation planning strategies allude to precautions in the event of natural disaster, namely flood control and disaster mitigation.¹⁹⁴ Perhaps the risk of natural disaster is less concrete for Waukesha and the other locations discussed herein than it is for China. Though it appears this type of planning has yet to permeate water conservation methodology at an international level, consideration of unforeseeable natural disaster is one major conservation-related tactic emanating from China.¹⁹⁵ Only those intimately familiar with Waukesha's unique situation can decide whether to add to or dismiss the discussion on precautionary measures because the risks associated with a natural disaster are by nature location-specific.

4. *Integrated Water Resource Management (IWRM) Approach.* The holistic IWRM approach enables interested parties from various parts of society to interact and partake in the formulation of that society's conservation efforts.¹⁹⁶ Alternatively, the comparatively horizontal processes that other countries employ do not necessarily afford affected actors at the non-decision-making end of the spectrum the authority to directly contribute to the planning process.¹⁹⁷ It is true that the Great Lakes Compact in general and Waukesha Plan in particular do call for public comment periods, thus providing a chance for members of the public to critique the Plan's content.¹⁹⁸ Nonetheless, those in positions of authority reserve a right to determine the bulk of the research and development phase, and therefore, the majority of the Plan arguably lacks open, multi-level interactions among various community actors.¹⁹⁹

5. *Consideration of Agricultural Water Use.* Waukesha's conservation planning documents consider only commercial and industrial sector use and do not take agricultural water use into consideration.²⁰⁰ Alternatively, several countries—including Germany and the United Kingdom—opt to reference agricultural water use in their planning processes.²⁰¹ No doubt the prevalence of agriculture in a region's culture and economy will influence whether the region feels a prerogative to include such conditions. However, as a practical matter, agricultural uses comprise upwards of seventy percent of global water use patterns.²⁰² Regardless of whether a local market rises and falls with the state of its

194. Xie et al., *supra* note 141, at 28.

195. *Id.*

196. See *IWRM Toolbox*, *supra* note 149; *IWRM*, *supra* note 152, at 5-6.

197. Compare *Gwillimbury Strategy*, *supra* note 109, at 1, 4 (the Canadian town of East Gwillimbury allows its landowners and development community to collaborate with the government to develop a water conservation program), with *Supplement*, *supra* note 41, at 1-2 to -3 (the US town of Waukesha refers to the City government as the only participant in the water conservation planning).

198. *City of Waukesha Water Diversion Application*, *supra* note 9 ("Once the Technical Review and EIS drafts are complete, the DNR will post the documents to this website and schedule a public comment period and public hearings"); *Plan*, *supra* note 20, at 9.

199. *Supplement*, *supra* note 41, at 1-2 to 1-3.

200. *Id.* at 3-1.

201. *Dacorum Plan*, *supra* note 115, at 8; *LAWA Plan*, *supra* note 125, at 6-8, 18-19.

202. *Water Consumption—Sources and Methods*, WORLDOMETERS, <http://www.worldometers.info/water> (last visited Dec. 6, 2012) ("Worldwide, agriculture accounts for [seventy percent] of all water consumption, compared to [twenty percent] for industry and [ten percent] for domestic use.").

agricultural economy, it can still add its voice to norms regarding agricultural water conservation, an issue with global implications. Waukesha might consider self-selecting as one of these conversation-starters.

Generally speaking, the international community employs several strategies that could be of use to Waukesha later in the approval process.²⁰³ For instance, to enhance the effectiveness of its conservation efforts, the City could explore preventative measures on pollution and emissions that threaten its water supply. It might also consider including precautionary measures against natural disasters so as to address another potential threat to its water base. Finally, because agricultural conservation measures constitute such an enormous segment of international water use, Waukesha should also contemplate incorporating such measures into its planning efforts.

VI. CONCLUSION

In devising a conservation plan, the City of Waukesha partook in a transboundary discussion on the standards of water conservation, which adds yet another layer to environmental norms permeating societies at an international level. Transnational legal process does not place an emphasis on the destination to which the path ultimately leads; instead, it focuses on steps one takes in arriving there. The selection of steps reveals much more about the projections, acceptance, and internalization of norms in a given area than the end result standing alone. Thus, each of the challenges that Waukesha encountered as it developed its conservation strategy—from those it contemplated using during its brainstorming process to those it ultimately used in formulating its Plan—offers insight into the state of international water conservation norms at the time the City was devising its Plan.

Perhaps Waukesha's Plan is not doing as much work as it could, and the City should have narrowed its focus from the beginning to ensure successful implementation. On the other hand, the City might be better off in the long run precisely because it opted to keep its options open from the beginning. To offer a prediction on the potential success of the Waukesha Plan is beyond the scope of this Article and will soon be in the hands of the governing body of the Great Lakes Compact.²⁰⁴ That said, the City's contribution to the global conversation on water conservation should receive recognition for the role it has played and will continue to play in a greater transnational legal process.

Ultimately, this process reflects the key concept that every conversation planning process matters, as each exchange has a unique opportunity to shape international standards in a distinctive way. International conversations regarding death penalty jurisprudence played a role in the eventual abolition of death sentences for offenders with intellectual disabilities in the United States.²⁰⁵ Likewise, the international conversations regarding water conservation practic-

203. See, e.g.s, *Dacorum Plan*, *supra* note 122; *LAWA Plan*, *supra* note 125; *IWRM*, *supra* note 152; Xie et al., *supra* note 141 ; *Gwillimbury Strategy*, *supra* note 109.

204. *Waukesha Diversion Application*, *supra* note 9.

205. *Limiting the Death Penalty*, DEATH PENALTY INFORMATION CENTER, <http://www.deathpenaltyinfo.org/part-ii-history-death-penalty> (last visited Dec. 6, 2012).

es have played a role in shaping Waukesha's proposed water conservation Plan as the City is the first applicant for an out-of-basin diversion from the Great Lakes under the Great Lakes Compact. While those privy to the Compact have yet to weigh in with their assessment of the Plan's conservation measures, for now—as freshwater supply issues continue to make their way onto international agendas—Waukesha's Plan will contribute to future discussions on best practices and water conservation.