



Winter 2004

## In a Twenty-First Century Minute

Steven G. Ingram

### Recommended Citation

Steven G. Ingram, *In a Twenty-First Century Minute*, 44 NAT. RES. J. 163 (2004).  
Available at: <https://digitalrepository.unm.edu/nrj/vol44/iss1/6>

This Article is brought to you for free and open access by the Law Journals at UNM Digital Repository. It has been accepted for inclusion in Natural Resources Journal by an authorized editor of UNM Digital Repository. For more information, please contact [disc@unm.edu](mailto:disc@unm.edu).

STEVEN G. INGRAM\*

## In a Twenty-First Century “Minute”

### ABSTRACT

*The Rio Grande River forms a boundary between the United States and Mexico. Under a treaty concluded in 1944, both the United States and Mexico regulate the allocation of the Rio Grande waters. Over the past decade, commentators have demonstrated that the 1944 Treaty needs updating, and they have made calls to adopt updated principles and understandings to enhance cooperation. By developing a proactive, policy-oriented twenty-first century Minute that makes an umbrella commitment to modern principles of international watercourse law, the International Boundary and Water Commission (IBWC) can respond to this call for modernization. The IBWC should incorporate current, prospective-looking, and pragmatic international law principles. The U.N. Convention for the Non-Navigational Uses of International Watercourses codifies these principles and has already been applied in a key international watercourse dispute, the Gabčíkovo-Nagymaros case. There is a clear need to add new, pragmatic vocabulary to the 1944 Treaty. The IBWC should use the U.N. Convention as a guide in future interpretations of the 1944 Treaty between the United States and Mexico.*

### I. INTRODUCTION

An early principle of international law stated that a nation exercises general and absolute sovereignty over those natural resources within its territory.<sup>1</sup> However, a question has perplexed lawmakers and public policy scholars for centuries: what happens when a vital natural resource straddles two sides of an international border? A dispute arising over an internationally shared watercourse is formidable and will not be resolved overnight. Nevertheless, the International Boundary and Water Commission (IBWC), an international governmental organization that oversees such disputes between the United States and Mexico, is in a

---

\* Steven G. Ingram, J.D. University of the Pacific, McGeorge School of Law 2001, LLM Transnational Business Practice, McGeorge School of Law 2002; B.A. University of Michigan; Attorney with Consumer Attorneys of California, Sacramento, CA. The author wishes to thank Prof. Stephen C. McCaffrey, Distinguished Professor at McGeorge School of Law, for his patient encouragement and for the benefit of his insightful suggestions.

1. Harmon Doctrine, 21 Op. Att’y Gen. 274 (1895).

strategic position to facilitate the settlement of current conflicts and to develop goals and frameworks for the settlement of future disputes. The IBWC focuses primarily on the shared waters of the Rio Grande straddling the United States and Mexico, specifically in the lower Rio Grande valley of Texas.

The IBWC is in a position to become a proactive force in the early years of the twenty-first century. Within a global context in which borders are viewed neither as boundaries nor barriers, but instead as permeable membranes of exchange and cooperation, the IBWC has a strategic opportunity to provide a useful example of a tradition-bound institution adapting to change. The IBWC's mandate covers a relatively narrow border area, yet it includes broad duties that potentially expand its sphere of influence in an era of heightened environmental concerns and increased commercial contacts.

IBWC jurisdiction extends along the United States-Mexico boundary and inland into both countries where the two nations have constructed international projects such as dams. The IBWC is charged with the application of the boundary and water treaties between the two nations and settling differences that may arise in their application. The IBWC's decisions regarding boundary disputes are subject to the approval of the respective governments.<sup>2</sup> An organization representing the interests of two nations, the IBWC is divided into a U.S. and a Mexican section, which are overseen by the U.S. Department of State and the Mexico Ministry of Foreign Relations, respectively.<sup>3</sup> An engineer acts as commissioner of each section and the sections may appoint engineering and legal advisors. The commissioners of the two sections have diplomatic status.<sup>4</sup> The specific mission of the IBWC is to distribute the waters of the Rio Grande and the Colorado River, in addition to preserving the international boundaries and regulating and conserving the waters of the rivers in the common interest of both the United States and Mexico.<sup>5</sup> This article proposes that the IBWC develop a policy-oriented Minute (twenty-first century Minute or "Policy Minute") utilizing modern international principles of watercourse law as articulated in the U.N. Convention on the Law of Non-Navigational Uses

---

2. International Boundary and Water Commission, available at [http://www.ibwc.state.gov/html/about\\_us.html](http://www.ibwc.state.gov/html/about_us.html) (last visited Mar. 11, 2004).

3. Harmon Doctrine, *supra* note 1, art. 2.

4. Treaty with Mexico Relating to the Utilization of the Waters of Certain Rivers, Feb. 3, 1944, U.S.-Mex., art. 2, 59 Stat. 1219 [hereinafter 1944 Treaty].

5. *Id.* In Mexico, the Rio Grande is named the Rio Bravo del Norte. The Rio Bravo is fed by the Rio Conchos, which is fed in turn by five tributaries.

of International Watercourses,<sup>6</sup> (Convention or U.N. Convention) as a guide.

The IBWC records its decisions in Minutes. Minutes are recorded in English and in Spanish, and, within three days of the date of signature, the IBWC forwards copies to each government. Unless the express terms of the 1944 Treaty call for specific governmental approval, a Minute becomes officially approved if there are no objections within 30 days.<sup>7</sup>

The IBWC's critical flaw is that its functions are tied to the outdated 1944 Treaty between the United States and Mexico. By incorporating newly emerging principles of international law, which recognize the importance of evaluating international watercourses in a holistic manner, the IBWC will more effectively address "twenty-first century-type" problems along the Rio Grande.

Times have changed and some of the provisions of the 1944 Treaty have lost their vitality. The early years of the twenty-first century are characterized by heightened levels of economic exchange; a burst of technological innovations based upon myriad, interconnected networks that can be accessed simultaneously; and the commitment to find trans-boundary solutions to environmental concerns. New economies, new technologies, and a shared network approach to the environment necessitate new methods of communication and problem solving. The 1944 Treaty is outdated because it has an historically entrenched focus on physical borders and the sovereign delimitation of a shared natural resource. The IBWC needs to be ready to adapt and respond to this new period of heightened international connections.

The disputes over the internationally shared waters of the Rio Grande grow in importance each year and might soon test the thinly stretched limits of diplomacy between the United States and Mexico. Since the second half of the nineteenth century, it has been a matter of concern that, as population and cultivation increase along the Rio Grande, the danger grows that water will ultimately run out and serious troubles will arise between the two nations.<sup>8</sup> The U.S. Secretary of War expressed his alarm in 1878 to the U.S. House of Representatives over the waters of the Rio Grande as an inadequate irrigation source.<sup>9</sup> Even then

---

6. Report of the 6th Committee, U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, U.N. Doc. A/RES/51/869 (1997) [hereinafter U.N. Convention].

7. 1944 Treaty, *supra* note 4, art. 25.

8. James Simsarian, *The Diversion of Waters Affecting the United States and Mexico*, 17 TEX. L. REV. 27, 30 n.10 (1938).

9. *Id.*

the potential for Rio Grande water disputes to seriously disrupt U.S. and Mexico relations was apparent. In 2001, commentators characterized the Rio Grande between Texas and Mexico as a "lifeline" for both countries.<sup>10</sup> However, due to water shortages, this so-called "lifeline" is in danger of drying up for good. Indeed, in 2001 the Rio Grande stopped flowing into the Gulf of Mexico for the first time in recorded history.<sup>11</sup>

This article addresses the current dispute over the waters of the Rio Grande flowing between the United States and Mexico and suggests an approach that will facilitate efforts to solve this crisis and to prevent future crises. Part II discusses the background of U.S.-Mexico Rio Grande water relations as structured in treaties, namely the 1906 and 1944 Treaties. Part II also focuses upon the role of the IBWC as the designated arbiter of the Rio Grande waters. Part III addresses the current water rights debate between the United States and Mexico concerning Mexico's failure to meet scheduled repayment of a water debt to the United States. Part III also focuses on the challenges confronted by the IBWC in its efforts to seek solutions to the current problems. Next, part IV proposes the development of a new twenty-first century Minute to the 1944 Treaty. This Minute would be dedicated to a statement of policy that recognizes existing obligations under the 1944 Treaty while simultaneously modernizing the IBWC's problem-solving approach, incorporating guiding principles and understandings of modern international watercourse law. Finally, part V examines the contribution of the U.N. Convention to the codification of modern international principles of watercourse law and proposes that the Convention provide a framework to energize the U.S.-Mexico water right deliberations. Part VI concludes by stating that the IBWC should incorporate reference principles of the Convention as a scaffold to help integrate a twenty-first century approach into the 1944 Treaty. This new approach would encourage lawmakers to view the Rio Grande region as a "community of interest" rather than simply a boundary between sovereigns.

The water shortage on both sides of the U.S.-Mexico border in 2004 sets forth an early and urgent test for twenty-first century U.S.-Mexico diplomacy generally and the IBWC specifically: managing scarce natural resources in one of North America's fastest growing regions. A

---

10. Ross E. Milloy, *A Rift over Rio Grande Water Rights*, N.Y. TIMES, Sept. 18, 2001, at A14.

11. *Id.* The Rio Grande stopped flowing in February 2001. In fact, due to water shortages, silt ridges have formed along the riverbed, creating new, informal border crossings between the United States and Mexico. These exposed, unstable ridges have become symbolic of the strained relationship between the two countries.

flurry of diplomatic initiatives may yet turn the water crisis into an exemplar of cross-border cooperation, producing a new approach to joint long-term planning and management of the Rio Grande.<sup>12</sup> While fresh water is one of the basic requirements of life and in theory there is enough of it to meet the needs of all, in practice it is a scarce resource with "each drop belonging to someone."<sup>13</sup> Significantly, a prolonged drought in the early 1990s severely depleted available water. Politicians and statesmen frame the discussion over water in starkly proprietary terms. A recent diplomatic exchange emphasizes the point: U.S. Secretary of State Colin Powell asked Mexican Foreign Minister Jorge G. Castaneda, "Got any water for me?" To which Mr. Castaneda replied, "Yeah, Colin, I always have water for you."<sup>14</sup>

"The joint use of international watercourses has always depended on the cooperation between countries along their banks, regulated in some cases by international treaties and organizations."<sup>15</sup> Nevertheless, sole emphasis upon treaties viewed in isolation will invariably result in parties viewing each other from parallel universes, looking at a shared resource from different perspectives.<sup>16</sup> In times of crisis, it is often tempting for the respective parties to discount the role of a treaty.<sup>17</sup> Recent issues involving shared watercourses like the Rio Grande demonstrate the need for an international framework that can both inform the interpretation of existing treaties and pave the way for the development of future agreements.<sup>18</sup> By incorporating the principles

---

12. *Id.*

13. Jo Jo White, Irrigation District Manager for the Rio Grande, CNN Transcripts, July 18, 2002 (stating that "every drop of water going down that river belongs to somebody, it's been ordered by somebody whether it's a farmer, city...").

14. Ginger Thompson & Tim Weiner, *Mexico Struggles for Attention of Pre-occupied U.S.*, N.Y. TIMES, Oct. 13, 2002, at A4.

15. MOSTAFA K. TOLBA & IWONA RUMMEL-BULSKA, GLOBAL ENVIRONMENTAL DIPLOMACY: NEGOTIATING ENVIRONMENTAL AGREEMENTS FOR THE WORLD 1972-1973, at 47-48 (1998).

16. Alison Gregor, *Mexico Aqueduct Plan Irks Farmers in Valley*, SAN ANTONIO EXPRESS-NEWS, Nov. 16, 2001, at 3B.

17. *Id.*

18. STEPHEN C. MCCAFFREY, THE LAW OF INTERNATIONAL WATERCOURSES, NON-NAVIGATIONAL USES 233, 246 (2001). The water resources of the Nile River Basin will be the subject of negotiations throughout the coming years, as upper riparians begin to develop water resources. There are potential conflicts among Egypt, Sudan, Ethiopia, Uganda, and Kenya. There are ongoing disputes between India and Pakistan over the shared waters of the Indus and the Ganges rivers. *Id.* at 247-56. A recent dispute occurred over pollution in the Rhine River (*Rhine Salt Case Dispute*) that involved Switzerland, Austria, Germany, France, and the Netherlands (Judgment of 23 Sept. 1988, HR 13, 303 Rechtspraak, Van De Week (1988) 150 (Neth.)). *Id.* at 256-60. Central Asian Republics recently concluded the Agreement on Cooperation in the Management, Utilization and Protection of Interstate Water Resources, 18 Feb. 1992. *Id.* at 263.

that form the framework of the U.N. Convention, the IBWC could provide a meaningful degree of flexibility to its present structure and become a model for the solution of international water disputes.

## II. THE HISTORY OF THE U.S.-MEXICO RIO GRANDE CONTROVERSY

Recognizing the important relationship between the United States and Mexico...whereas the United States and Mexico share a special bi-lateral friendship...it is in keeping with the just interests of the United States that the special nature of the relationship between the United States and Mexico be recognized and further cultivated to the mutual benefit of both countries.<sup>19</sup>

The United States and Mexico are inextricably linked by their shared water resources. Both states have upper riparian and lower riparian status under the IBWC template.<sup>20</sup> The 1944 Treaty<sup>21</sup> provides for the distribution of the waters of the Colorado and the Rio Grande rivers that form part of the international border between the United States and Mexico. The portion of the Rio Grande downstream of El Paso, Texas, is the focus of the current disputes between the United States and Mexico. This section of the Rio Grande is fed by the Rio Conchos, which flows approximately 100 miles in Mexico downstream into the Rio Grande. Five tributaries feed the Rio Conchos: the San Diego, San Rodrigo, Escondido, and Salado rivers and the Las Vacas Arroyo. These rivers and tributaries ultimately feed into the Rio Grande and the water is stored in IBWC maintained reservoirs: the Amistad Reservoir (built in 1954 and covering 78,300 acres) and the Falcon Reservoir (built in 1965, covering 67,000 acres).<sup>22</sup> In October 2003, these reservoirs were at 34 percent capacity.<sup>23</sup>

---

19. H.R. Con. Res. 206, 107th Cong. (1st Sess. 2001).

20. Aaron Schwabach, *The United Nations Convention on the Law of Non-Navigational Uses of International Watercourses, Customary International Law and the Interests of Developing Upper Riparians*, 33 TEX. INT'L L.J. 257, 263 (1998); MCCAFFREY, *supra* note 18, at 52. Riparian states are, in the broad sense, states that share freshwater resources with another state.

21. 1944 Treaty, *supra* note 4.

22. Clint Shields, *H2owe: South Texas Area Thirsty for Water from Mexico* (FISCAL NOTES, Newsletter of the Office of the Texas State Comptroller), Oct. 2003, available at RIO GRANDE REGIONAL WATER PLANNING GROUP, <http://www.riograndewaterplan.org/H2owe.php> (last visited May 14, 2004). Procedurally, Texas farmers request Rio Grande water from the Texas Commission on Environmental Quality's (TCEQ) Watermaster, Carlos Rubenstein. The TCEQ approves requests and forwards its authorization to the IBWC.

23. *Id.*

The two nations have long disputed the terms of the water diverted from the Rio Grande. Dialogues between the two countries began in earnest in the late nineteenth and early twentieth centuries.<sup>24</sup> As early as the 1880s, the U.S. Department of State recorded complaints from the Governor of Texas concerning Mexican citizens digging ditches to divert water from the Rio Grande.<sup>25</sup> When the U.S. Secretary of State characterized the ditch digging as contrary to the "good feeling and harmony that ought to exist between co-laborers in peaceful pursuits," the Mexican Minister blamed the water scarcity on the dry season.<sup>26</sup> Furthermore, he claimed that Mexicans were suffering more than Texans, and he added that wasteful use of Rio Grande water by Americans in Colorado and New Mexico aggravated the water shortage.<sup>27</sup> Discussions between the United States and Mexico continued for the next ten years. In 1895, U.S. Attorney General Judson Harmon submitted an opinion addressing Mexican concerns with U.S. diversions of Rio Grande waters. The now famous "Harmon Doctrine" stated a principle of international law: a nation has general and absolute sovereignty over those resources within its territory.<sup>28</sup> The Harmon Doctrine, with its brittle defensive posture, was an uneasy conclusion to the early conflict along the Rio Grande.<sup>29</sup>

However, rather than acting on the basis of the Harmon Doctrine, which arguably entitled the United States to the lion's share of Rio Grande water, the United States acceded to Mexican requests to enter into an agreement that apportioned the waters in an equitable manner.<sup>30</sup> In 1896, the United States and Mexico requested that the International Boundary Commission<sup>31</sup> develop a solution to the Rio Grande problem.<sup>32</sup> The International Boundary Commission (IBC), a precursor to

---

24. Simsarian, *supra* note 8, at 27.

25. *Id.* at 28.

26. *Id.*

27. *Id.*

28. Harmon Doctrine, *supra* note 1.

29. In 1895, U.S. Attorney General Judson Harmon supported his doctrine with reference to a U.S. sovereign immunity case, *Schooner Exchange v. M'Faddon*, 7 Cranch 116, 136 (1812), that discussed how allowing Mexico to restrict U.S. diversions would in fact be a "servitude upon the waters of the Rio Grande that would interfere with the U.S. right to develop its resources in the interests of self-preservation." MCCAFFREY, *supra* note 18, at 89-91.

30. Stephen C. McCaffrey, *The Harmon Doctrine One Hundred Years Later: Buried, Not Praised*, 36 NAT. RESOURCES J. 549, 588 (1996).

31. The IBC had been established seven years earlier to settle border disputes resulting from naturally shifting boundaries.

32. Simsarian, *supra* note 8, at 36-37.



the IBWC, had been established in March 1889.<sup>33</sup> The IBC's mandate was to settle "[a]ll differences or questions that may arise on...the frontier between the United States...and...Mexico where the Rio Grande and the Colorado rivers form the boundary line, whether such differences...arise out of alterations or changes" to the natural river beds or "any other cause affecting the boundary line[.]"<sup>34</sup> The IBC recommended that the United States and Mexico enter into a treaty for the final settlement of all questions regarding the distribution of the waters of the Rio Grande.<sup>35</sup> Relying on the Commission's studies, the United States and Mexico signed their first water distribution treaty on March 1, 1906 (1906 Treaty).<sup>36</sup>

### A. The 1906 Treaty

The Preamble of the 1906 Treaty emphasized that the distribution of the Rio Grande waters was for irrigation purposes and that the 1906 Treaty aspired to erase all causes of controversy between the United States and Mexico with respect to the Rio Grande.<sup>37</sup> Article I of the 1906 Treaty provided for the delivery by the United States to Mexico of 60,000 acre-feet of Rio Grande water annually.<sup>38</sup> Importantly, Article II required that, in the event of extraordinary drought, the amount of water delivered to Mexico would be diminished in the same proportion as water delivered under the same system to the United States.<sup>39</sup> The 1906 Treaty set up a precise month-by-month schedule of delivery of water from the newly constructed Engle, New Mexico, storage dam, totaling 60,000 acre-feet per year.<sup>40</sup> The 1906 Treaty stated that any deviation from this schedule due to a major drought would result in reduced deliveries to Mexico from the Engle Dam, but, in the

---

33. *Id.* n.33

34. *Id.*

35. *Id.* at 38.

36. Convention Between the United States and Mexico Providing for the Equitable Distribution of the Waters of the Rio Grande for Irrigation Purposes, May 21, 1906, U.S.-Mex., 34 Stat. 2953, available at <http://www.ibwc.state.gov/Files/1906Conv.pdf> [hereinafter 1906 Treaty] (last visited May 14, 2004).

37. *Id.* Preamble, A Proclamation. The Convention sought the equitable distribution of the Rio Grande waters for irrigation purposes. Emphasizing "international comity," the drafters sought to develop a feasible method of regulating the use of the waters. There was general recognition that Mexico had been denied an equitable distribution in the past and, consequently, the drafters emphasized the forward vision of the 1906 Treaty as a means of addressing and moving beyond past grievances.

38. *Id.* art. I.

39. *Id.* art. II.

40. *Id.*

interest of comity, the deliveries would be diminished by a percentage no more than the corresponding reductions of water delivered to the United States from the same dam.<sup>41</sup> Article V of the 1906 Treaty encapsulated one of its foundational tenets: the 1906 Treaty would *not* establish any general legal principle or precedent.<sup>42</sup>

## B. The 1944 Treaty

In 1944, the United States and Mexico expanded their shared international watercourse regime by entering into the 1944 Treaty.<sup>43</sup> Specifically, the 1944 Treaty allotted Rio Grande water to the United States and to Mexico under a schedule of water rights.<sup>44</sup> The terms of the Treaty are as follows: between Fort Quitman, Texas (approximately 80 miles south of El Paso, Texas) and the Gulf of Mexico, Mexico receives one-half of the flow of the main channel of the Rio Grande (named Rio Bravo del Norte in Mexico). Mexico also receives two-thirds of the water that feeds into the Rio Grande from the Rio Conchos in Mexico.<sup>45</sup> The Rio Conchos is, in turn, fed by tributaries: the Rio San Diego, Rio San Rodrigo, Rio Escondido, Rio Salado, and the Arroyo de las Vacas. The United States, completing the Mexican allocation template, receives the other half of the Rio Grande water below Fort Quitman and the remaining one-third of the Rio Conchos water.<sup>46</sup> Significantly, the U.S. share, one-third of the Rio Conchos water, must average an amount not less than 350,000 acre-feet annually, measured in five-year cycles.<sup>47</sup>

Currently, the allocation scheme requires the following amounts: Mexico must deliver 350,000 acre-feet of water to the United States from the Rio Grande annually. The United States is required to deliver 1.5 million acre-feet of water from the Colorado River to Mexico every year.<sup>48</sup> If Mexico, because of extraordinary drought, is deficient in its delivery to the United States of the one-third portion, after the run of a designated five-year cycle, it must make up any deficiency in the five-year cycle that immediately follows. In the event of such deficiency,

---

41. *Id.* arts. I, II.

42. *Id.* art. V. "The United States in entering into their treaty, does not thereby concede, expressly or by implication, any legal basis for any claims heretofore asserted or which may be hereafter asserted, nor does the United States in any way concede the establishment of any general principle or precedent by the concluding of this treaty." *Id.*

43. 1944 Treaty, *supra* note 4.

44. *Id.* art. 4.

45. *Id.*

46. *Id.*

47. *Id.* art. 4 A(c), B(c).

48. *Id.* art. 4(B).

Mexico would have to pay "double" for a five-year period: the debt from the previous five-year cycle and "the allotment for the next five-year period."<sup>49</sup> This assumes that any drought or other "extraordinary" circumstance would self-correct and make up for losses in neat five-year increments. Unfortunately, the Treaty never actually defined the term "extraordinary."<sup>50</sup>

### C. The International Boundary Water Commission

Besides articulating a system of water rights, the 1944 Treaty had additional significance: it extended the jurisdiction and the responsibilities of the IBC.<sup>51</sup> The 1944 Treaty changed the organization's name to the International Boundary and Water Commission (IBWC). The earlier mandate of the IBC, delineated in the 1906 Treaty, had been relatively narrow. It focused upon land ownership issues resulting from changes in the flow of the Rio Grande. The new mandate extended the newly created IBWC's jurisdiction to include not only the U.S.-Mexico boundary but also areas inland in both countries where international dams had been built.<sup>52</sup>

Currently, the IBWC has the status of an international body. It consists of a U.S. section and a Mexican section, each focusing upon their respective national interests. While the commissioners have diplomatic status, they historically have operated above all else as protectors of their respective national sovereign interests.<sup>53</sup>

The IBWC's formal duties reflect government priorities at the close of World War II, which centered on water allocation rights to international river waters, mitigation of floods, and dealing with droughts.<sup>54</sup> In many ways, the IBWC is a bureaucratic hybrid.<sup>55</sup> The IBWC has a bipolar mandate of treaty interpretation and of operational responsibilities for managing both the border and international dams. It has a virtual monopoly on agreements dealing with transboundary

---

49. *Id.* (B)(d).

50. *Id.* art. 4.

51. *Id.* art. 2.

52. *Id.*

53. *Id.* art. 2.

54. Stephen P. Mumme, *Managing Acute Water Scarcity on the U.S.-Mexico Border: Institutional Issues Raised by the 1990's Drought*, 39 NAT. RESOURCES J. 149, 155-56 (1999); Stephen P. Mumme, *Innovation and Reform in Transboundary Resource Management: A Critical Look at the International Boundary and Water Commission, United States and Mexico*, 33 NAT. RESOURCES J. 93, 94 (1993).

55. James F. Smith, *Testing the Waters of Cooperation: Joint Effort to Solve a Natural Resource Crisis May Help Bring the U.S., Mexico Closer*, L.A. TIMES, May 29, 2001, at A1.

water management.<sup>56</sup> From its inception, the IBWC was locked into a scheme of "dividing the waters," an ironic system given that these waters were understood, even in 1944, as incapable of satisfying the U.S.-Mexico border area's demands.<sup>57</sup> Essentially, the IBWC's mandates to build and to operate joint works and to resolve disputes have forced the IBWC to operate in a reactive, ad hoc manner rather than utilizing a proactive, systematic, and prospective approach.<sup>58</sup>

There is a need for the IBWC to become an active integrator in twenty-first century water dispute resolution. As a growing variety of multilateral treaties, conventions, and agreements connect the United States and Mexico with the global community, the static IBWC model has become increasingly outmoded. In earlier years, this system may have been effective. In those days, the IBWC was able to analyze and resolve Rio Grande water disputes between the United States and Mexico in isolation. In contrast, in the twenty-first century, the IBWC's decisions have implications that stretch beyond the realm of isolated water disputes. They influence the U.S. and Mexican investment commitments under the North American Free Trade Agreement (NAFTA),<sup>59</sup> the General Agreement on Tariffs and Trade (GATT),<sup>60</sup> and, potentially, the Free Trade Agreement of the Americas (FTAA).<sup>61</sup> They can also affect treaty obligations with other nations in the international community, including various environmental treaties such as the Convention on International Trade in Endangered Species of Wild Fauna & Flora (CITES)<sup>62</sup> and the Montreal Protocol on Ozone Depleting Substances.<sup>63</sup> Consequently, the current U.S.-Mexican Rio Grande controversy presents both problems and opportunities for the IBWC in the twenty-first century.

---

56. Stephen P. Mumme, *Reinventing the International Boundary and Water Commission*, 9 BORDERLINES 1 (2001).

57. *Id.* at 2, ¶ 12.

58. *Id.* at 4, ¶ 26.

59. Dec. 8, 1993, Can.-Mex.-U.S., 107 Stat. 2057, 32 I.L.M. 289 [hereinafter NAFTA].

60. Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S.

61. Summit of the Americas: Declaration of Principles and Plan of Action, Dec. 11, 1994, 34 I.L.M. 808 (1995).

62. Mar. 3, 1973, 12 I.L.M. 1085 (1973).

63. Sept. 16, 1987, 26 I.L.M. 1550 (1987).

### III. THE PROBLEM PRESENTED BY THE CURRENT WATER CRISIS BETWEEN THE UNITED STATES AND MEXICO ALONG THE RIO GRANDE

#### A. The Evolution of the Current Rio Grande Water Crisis: The Early Phase 1995-2000

In 2002, a water war between farmers on both sides of the Rio Grande forming the border between the United States and Mexico escalated into an international stand-off. This is a bad omen for the future of the Rio Grande to see international water policy result in this [situation].<sup>64</sup>

Over the last decade, Mexico has repeatedly been unable to pay its water debt to the United States under the allocation scheme required by the 1944 Treaty.<sup>65</sup> According to the Treaty, Mexico must deliver 350,000 acre-feet of water to the United States from the Rio Grande annually, while the United States is required to deliver 1.5 million acre-feet of water from the Colorado River to Mexico every year.<sup>66</sup> Since 1992, Mexico has been unable to fulfill its Treaty obligations, due to extreme drought.<sup>67</sup>

The deficiency has affected the nations, both politically and socially. For example, Rio Grande valley farmers in Texas have become increasingly infuriated by Mexico's inability to deliver scheduled allotments.<sup>68</sup> South Texas farmers dispute whether drought is really the cause of the default.<sup>69</sup> It is equally important to note that the tension over unmet water deliveries causes friction and ill will *internally* in regions within the United States and Mexico. For example, Northern Texas farmers are alarmed over the competition between their agricultural needs and those of South Texas's urban centers.<sup>70</sup> Likewise, neighboring

---

64. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, 156 (1999).

65. IBWC, MINUTE 307, Mar. 16, 2001, at 2; Milloy, *supra* note 10.

66. 1944 Treaty, *supra* note 4, art. 4(B).

67. Milloy, *supra* note 10.

68. Melissa Sattley, *Boiling Point Reservoir Wars Along the U.S.-Mexico Border*, TEXAS OBSERVER, Nov. 23, 2001, at 1.

69. Jim Yardley, *Water Rights War Rages on Faltering Rio Grande*, N.Y. TIMES, Apr. 19, 2002, at A14.

70. Douglas Jehl, *Saving Water, U.S. Farmers Are Worried They'll Parch*, N.Y. TIMES, Aug. 28, 2002, at A1.

states within Mexico, such as Tamaulipas and Chihuahua, accuse each other's farmers of taking more than their fair share of allocated waters.<sup>71</sup>

In March 1995, after three years of failing to meet its Treaty obligations, Mexico requested a "water loan" from the Rio Grande water reserves of the United States in order to assist drought stricken farmers in northern Mexico. The United States initially turned down the request.<sup>72</sup> A U.S. official stated that shortages were severe on both sides of the Rio Grande.<sup>73</sup> Then Texas Governor George W. Bush summed up the dilemma in 1995 by pointing out that while Texas sympathized with its Mexican neighbors, Texas's first obligation was to Texans.<sup>74</sup> Even though the 1944 Treaty permits water loans when one country has an overabundance,<sup>75</sup> the United States determined that it could not risk a loan from its reserves.

Nevertheless, after months of negotiations, the United States and Mexico reached an accord on the issue of the water loan.<sup>76</sup> The loan cleared the way for Mexico to tap up to 3.5 billion cubic feet of U.S. water.<sup>77</sup> By this point, Mexico had terminated agricultural irrigation for the rest of 1995 and declared five states in northern Mexico a disaster area.<sup>78</sup> While the loan was specifically described as a "line of credit for a certain sum of water in case of emergency," Texas farmers viewed it as an attempt by the IBWC to smooth over the rapidly accumulating Mexican water debt.<sup>79</sup>

In 1996, conditions continued to deteriorate and soon eclipsed the dispute over the 1995 water loan to Mexico. As drought conditions worsened in mid-1996, Texas cities began to initiate mandatory conservation programs.<sup>80</sup> Two Rio Grande reservoirs, the Falcon and the Amistad, were at historic low points.<sup>81</sup> A Texas water official observed, "the IBWC administered water allocation system along the Rio Grande works well as long as there is plenty of water but with a severe drought

---

71. Julie Watson, *U.S. and Mexico in Standoff over Water*, ENVTL. NEWS NETWORK, May 3, 2002, at [http://www.enn.com/news/wire-stories/2002/05/05032002/ap\\_47117.asp](http://www.enn.com/news/wire-stories/2002/05/05032002/ap_47117.asp) (last visited Mar. 13, 2004).

72. *Id.*

73. Enrique Range, *U.S. Rejects Mexico's Water Plea*, DALLAS MORNING NEWS, May 19, 1995, at 1D.

74. *Id.*

75. 1944 Treaty, *supra* note 4, art. 9(e), art. 15 D, E, F.

76. IBWC, MINUTE 293, Oct. 4, 1995.

77. *Id.* at 2.

78. Wayne Slater, *US Agrees to Loan Water to Drought Stricken Mexico, Pact Would Be Used Only in Emergency*, DALLAS MORNING NEWS, Oct. 5, 1995, at 17A.

79. *Id.*

80. Dane Schiller, *This Parched Land*, SAN ANTONIO EXPRESS-NEWS, July 14, 1996, at 7N.

81. *Id.* See also Shields, *supra* note 22.

there are some people who throw the rules out of the window.”<sup>82</sup> Tensions were high. Mexican farmers were observed operating illegal pumps along the Rio Grande. Texas officials considered sending out extra police protection on patrols that monitored the U.S. side of the Rio Grande.<sup>83</sup>

By early 2000, mutual empathy between the United States and Mexico was as scarce as the water in dispute. Texas farmers requested assistance from Governor Bush, pointing out that Mexico had accumulated a significant water debt. Governor Bush wrote to the IBWC asking that the matter be resolved quickly and fairly.<sup>84</sup> U.S. farmers began to suggest that the border should be closed to incoming Mexican agricultural crops that had been irrigated with water that should have been used to pay down Mexico’s water debt.<sup>85</sup> Crop growers specifically suggested that, until Mexico lived up to its part of the 1944 Treaty, the United States should limit imports of water-intensive produce regulated under NAFTA.<sup>86</sup> A newspaper editorial cited a joint report from the Rio Grande Regional Water Planning Group and the Lower Rio Grande Valley Economic Development Council indicating that Mexico had been hoarding water in its reservoirs.<sup>87</sup> The editorial suggested the United States “lean” on Mexico to uphold their obligations under the Treaty.<sup>88</sup> Both countries produced satellite images that were used to support their respective contentions: U.S. photos showed Mexicans hoarding water, while Mexican images depicted U.S. reserves.<sup>89</sup>

---

82. *Id.*

83. Placing the illegal Mexican pumping in a wider context, a Texas Natural Resource Conservation Commissioner stated, “Mexicans risk it because it’s the difference between putting food on the table or nothing.” Schiller, *supra* note 80. Texans and Mexicans on opposite sides of the Rio Grande often see mirror reflections of their own plight on the other side of the river. *Id.* at 8. “Many people don’t realize how much South Texas is linked to Mexico and how much Mexico is linked to South Texas. It is only a river (Rio Grande) and the culture has always gone back and forth.” Barbara Karkabi, *Canvassing History, Mural Project Explores Close Ties Between Mexico, South Texas*, HOUSTON CHRONICLE, Sept. 30, 2002, at 1 (comments of mural painter, painting the history of a South Texas ranch family that had intermarried with a Mexican family).

84. Schiller, *supra* note 80.

85. Alison Gregor, *Valley Farmers Say Mexico Owes Water*, SAN ANTONIO EXPRESS-NEWS, Feb. 18, 2000, at 10A.

86. *Id.*

87. *Water Dispute, Mexico Needs to Fulfill Its Treaty Obligation*, DALLAS MORNING NEWS, Apr. 4, 2000, at 16A [hereinafter *Water Dispute*]. See also Lower Rio Grande Valley Water District Managers Ass’n, *Fact Sheet on Rio Grande Treaty Violations*, available at [www.fernandezgroupinc.com/portfolio/mwd-factsheet1](http://www.fernandezgroupinc.com/portfolio/mwd-factsheet1) [hereinafter *Fact Sheet*].

88. *Water Dispute, supra* note 87.

89. David Rennie, *Mexico and U.S. Heading for Water War*, LONDON DAILY TELEGRAPH, May 31, 2002, at 19.

The blame laying and the finger pointing continued. The planning group and the Rio Grande Valley's Council reported that Mexico had received approximately 81 percent of normal rainfall between 1993 and 1997 and had actually collected excess water.<sup>90</sup> The reports were given to the U.S. Commissioner of the IBWC.<sup>91</sup> Mexican officials, meanwhile, contested the accuracy of the findings, arguing that, while Mexico had received rainfall during that period, it was exceedingly light rain that did not flow into the Rio Grande.<sup>92</sup> As evidence, Mexican officials pointed out the drastic measures that had been implemented, including significantly reduced cattle herds and a government recommendation to farmers to plant cactus crops as a means of withstanding the drought.<sup>93</sup> The Mexican section of the IBWC called the drought the second worst of the twentieth century.<sup>94</sup> The U.S. and Mexican IBWC commissioners indicated that they were working together to solve the water crises. Nevertheless, critics in the United States were skeptical of the commissioners' efforts and took action to seek the counsel of the U.S. Secretary of State, Madeleine Albright.<sup>95</sup>

## B. The Crisis Continues to Worsen: Promises and Concerns

In March 2001, Mexico agreed to repay approximately 20 percent of the water debt that it owed to the United States under the 1944 Treaty.<sup>96</sup> The agreement was characterized as a first step toward a new

---

90. *Fact Sheet*, *supra* note 87; Steven H. Lee & Brendan M. Case, *Parched Battle: Rio Grande Valley Drought Sparks Friction on Both Sides of Border*, DALLAS MORNING NEWS, Mar. 26, 2000, at 1H.

91. *Fact Sheet*, *supra* note 87.

92. Lee & Case, *supra* note 90.

93. *Id.*

94. *Id.*

95. *Id.* Texas Governor Rick Perry and Texas State Agricultural Commissioner Susan Combs sent a joint letter to John Bernal, the U.S. Commissioner of the IBWC, asking him to press for a resolution to the problem. Texas U.S. Senator Kay Bailey Hutchison complained to the Mexican Ambassador Jess Reyes Heróles, who indicated that he would relay the U.S. concerns to Mexico City. Jo Jo White, Chairman of the Water Treaty Committee of the Lower Rio Grande Valley Water District Managers Association, unhappy with Commissioner Bernal's efforts, sent a letter to U.S. Secretary of State Albright directly criticizing Mr. Bernal's "inability to adequately address" the treaty dilemma with Mexico. This resulted in Mr. Bernal arranging a meeting with the Valley water officials but his claim that "negotiations were ongoing" was characterized by Mr. White, Chairman of Water Treaty Committee of the Lower Rio Grande Valley Water District Managers Association, as "the same old bull."

Letter from Jo Jo White, Water Treaty Committee of the Lower Rio Grande Valley Water District Managers Ass'n, to U.S. Secretary of State Madeline Albright.

96. *Id.* (referring to IBWC, MINUTE 307, *supra* note 65).



commitment by both countries to allocate and use the valuable water resources of the Rio Grande in a responsible manner.<sup>97</sup> Yet, as early as July 2001, it was apparent that Mexico would not be able to meet its commitment to begin repayment.<sup>98</sup> The principal engineer of the U.S. section of the IBWC, Carlos Marin, conceded that Mexico would not meet the required delivery terms.<sup>99</sup> The IBWC voiced its "extreme concern" that Mexico's continued problems with recovery from drought would prevent Mexico from meeting the recently negotiated repayment schedule.<sup>100</sup> Furthermore, IBWC officials stated that they did not know how to resolve the issue.<sup>101</sup> Exacerbating an already raw situation, Mexican farmers in the states of Tamaulipas and Coahuila filed lawsuits to stop delivery of water by Mexico to the United States.<sup>102</sup> A Mexican federal judge ruled in the farmers' favor.<sup>103</sup> The mood of farmers in the Texas Rio Grande River Valley rose from a level of frustration to anger and then to fear over the failed efforts to enforce the 1944 Treaty.

In September 2001, the dire predictions proved to be accurate. Mexico failed to meet the scheduled 20 percent repayment of its water debt that it had promised in March of that year.<sup>104</sup> Officials in Mexico attributed the failure to both the drought and to local politics. Indeed, it was becoming evident that the issue was fraught with internal political conflict.<sup>105</sup> Mexican President Vicente Fox supported repayment, while local officials in northeastern Mexico were reluctant to implement the plan.<sup>106</sup> Exemplifying Mexico's internal political conflict, the governor of the Mexican state of Chihuahua announced that a pipeline was under development to divert water from a Rio Grande tributary to northern Mexican factories, in direct conflict with President Fox's repayment

---

97. Steven H. Lee, *Mexico to Pay Part of Water Debt Owed to U.S.*, DALLAS MORNING NEWS, Mar. 20, 2001, at 1D. At the same time, reports circulated that disgruntled farmers in northeastern Mexico were going to sue the Mexican National Water Commission for having agreed to release the water. However, when a lawsuit did not immediately materialize, observers noted that possibly Mexican farmers were beginning to rethink their role, recognizing that their inefficient use of water was hurting both sides of the border.

98. Steven H. Lee, *Mexico Likely to Miss Quota, Drought Blamed in Failure to Repay Water to Valley*, DALLAS MORNING NEWS, July 27, 2001, at 2D.

99. *Id.*

100. *Id.*

101. *Id.*

102. Sattley, *supra* note 68, at 3.

103. See also Bob Richter, *Mexican Ruling on Water Debt a "Nightmare" for Valley*, SAN ANTONIO EXPRESS-NEWS, Aug. 14, 2001, at 8A.

104. *Id.*

105. See also Sattley, *supra* note 68, at 2-3.

106. *Id.* at 3.

plan.<sup>107</sup> The governor of Chihuahua claimed that his state had already given its share of the Mexican effort to repay the water debt. Further, he blamed expanded farm operations due to NAFTA, in addition to the drought, for the water scarcity.<sup>108</sup> The proposed Chihuahua aqueduct became a symbol for U.S. farmers, representing Mexico's intransigence regarding the repayment of the water debt. While Mexican officials spoke of the aqueduct as part of a vision for the future, U.S. observers interpreted it as a blatant sign that Mexico did not intend to adhere to its obligations under the 1944 Treaty.<sup>109</sup> The Rio Grande water crisis also fostered competing viewpoints *within* the United States. In a letter to the editor titled *Share with Mexico*, one concerned citizen expressed support for Mexico's plight: "This is what I cannot understand. This water treaty was written 57 years ago. And we still 'regulate' water to a country much in need...we want to deny them the basic needs...White America, wake up. It is time to share the wealth."<sup>110</sup> This letter incited biting criticism from other readers. One response read, "the letter '*Share with Mexico*' shows the writer's ignorance about the water treaty with Mexico and how Mexico's noncompliance has devastated Valley interests....[T]he most important basic need is water...this need is being unlawfully withheld from U.S. citizens."<sup>111</sup>

In early 2002, while Texas farmers and politicians debated how to respond to Mexico's failure to deliver its scheduled allotment of water, the Mexican Foreign Relations Secretariat announced a new rationing and recycling program along the northern Mexican border. At the same time, the Undersecretary of Foreign Relations, Enrique Berruga, stated that no bilateral negotiations were currently in progress to alleviate Mexico of its water debt obligation.<sup>112</sup> Mr. Berruga also indicated that Mexico was trying to have the drought declared "extreme" so as to initiate a redistribution of water from the Rio Grande.<sup>113</sup> The U.S. Ambassador to Mexico, Jeffrey Davidow, countered that Mexico's failure to comply with the terms of the Treaty had caused serious problems in

---

107. James Pinkerton, *Mexico Has No Water Left to Repay Texas Farmers*, HOUSTON CHRON., Nov. 15, 2001, at 40A.

108. *Id.*

109. *Id.*

110. Ples D. Walker, *Share with Mexico*, SAN ANTONIO EXPRESS-NEWS, Dec. 5, 2001 (letter to the editor).

111. Jimmie Steidinger, *Mexico Isn't Sharing*, SAN ANTONIO EXPRESS-NEWS, Jan. 9, 2002 (letter to the editor).

112. *Mexico to Repay Water Debt to U.S.*, THE NEWS (Mexico), Feb 26, 2002.

113. *U.S. Ambassador: Mexico Has Not Fulfilled Obligations Under Water Treaty*, EL UNIVERSAL (Mexico), Apr. 15, 2002.

the United States.<sup>114</sup> Water woes were whipping up a war of words.<sup>115</sup> While tensions rose, the IBWC became increasingly bound to its narrow focus on allocation schedules and progressively more removed from the everyday plight of farmers along the Rio Grande.

As mentioned previously, the IBWC has the mandate, under articles II and III of the 1944 Treaty, to settle water disputes along the Rio Grande. Article III provides an express list of priorities for the IBWC to follow when providing for the joint use of the international waters of the Rio Grande: domestic, agricultural, electrical, industrial, navigational, and recreational use.<sup>116</sup> In addition, Articles IV through XXV require the IBWC to construct and maintain works along the Rio Grande and to deliver water according to specific schedules necessary to carry out the terms of the Treaty.<sup>117</sup> In order to carry out these mandates, the IBWC must necessarily rely upon its scientific and engineering expertise. Nevertheless, the IBWC is simultaneously charged with applying the terms of the Treaty; exercising the rights and obligations of the United States and Mexico; settling disputes; and producing reports, studies, and opinions to the two governments.<sup>118</sup> This mandate provides the IBWC with the opportunity to develop updated policy arguments and to interpret Treaty language taking into consideration new theories and lines of legal reasoning. Consequently, the 1944 Treaty contains a policy dimension as well as a technical, empirical dimension.

Yet, throughout the 1990s and the early years of the twenty-first century, the IBWC issued Minutes that were technical documents, focusing on allocation formulae, moving due dates, and changing scheduled amounts due in an attempt to set the overall "balance sheet" right.<sup>119</sup> The IBWC is a key participant in the current dilemma and, yet, in the midst of the barrage of accusations and counter-accusations, it seems to have been relegated to a distant role of number crunching. Placing primary focus upon allocation schemes and moving due dates and adjustments of amounts due are inadequate measures to address individual farmers' plights in periods of prolonged drought. In agricultural fields on both sides of the Rio Grande, the abstract focus on

---

114. *Id.*

115. Conrad Fox, *Water Woes Whipping Up War of Words*, THE NEWS (Mexico), Apr. 16, 2002.

116. 1944 Treaty, *supra* note 4, art. 3.

117. *Id.* arts. 4-25.

118. *Id.* arts. 4, 6, 7, 8, 13, 20, 22, 23, 24, 25.

119. IBWC, MINUTE 293, Oct. 4, 1995; IBWC, MINUTE 299, Dec. 3, 1998; IBWC, MINUTE 304, Oct. 26, 2000; IBWC, Minute 306, Dec. 12, 2000; IBWC, Minute 304, Oct. 26, 2000; IBWC MINUTE 306, Dec. 12, 2000; IBWC MINUTE 307, Mar. 16, 2001; IBWC MINUTE 308, June 28, 2002; IBWC MINUTE 309, July 3, 2003.

schedules and numbers seem detached from the day-to-day consequences resulting from water scarcity. An anecdote illustrates the point: In early 2001 a Texas farmer looked across the Rio Grande and watched as a Mexican farmer illegally pumped water from the river. The Texas farmer was at once both infuriated and sympathetic. Yet, the Texan could easily imagine that he would do the same if it were a matter of survival.<sup>120</sup> The IBWC must adopt new, flexible language in its Minutes, language that includes a policy dimension responding to the current highly interconnected Rio Grande border region and to the individuals aligned on either side of this international watercourse.

### C. The IBWC's Role in Water Dispute Resolution in the Twenty-First Century

The literature on the IBWC's United States Section suggests that the Agency has historically been an insular organization that has not been open to public participation....What we need at this time is an organization that anticipates problems, develops social expertise, and that [accents] an open and participatory process.<sup>121</sup>

Key scholars have recently criticized the IBWC.<sup>122</sup> A common criticism is that the two sections of the IBWC are pitted against one another. Because the Mexican and American commissioners defend their respective interests, the division sets up an adversarial relationship. Consequently, deliberations often result in each side rigidly protecting their own nation's interests. The IBWC has therefore survived by capitalizing on its weaknesses: it has transformed its narrow range of jurisdiction, the border region, through its tight focus upon water delivery schedules, into an institutional strength.<sup>123</sup> As a result, the IBWC has cultivated staunch supporters on both sides of the border. The IBWC has built up its reputation as an authoritative forum for dispute resolution in the Rio Grande border region by developing close ties to the elite tier of water managers and defending the core values of its

---

120. Steven H. Lee, *Streams of Contentiousness; Border Drought Tests Complex System for Defending Texans' Water Rights*, DALLAS MORNING NEWS, July 2, 1995, at 1A.

121. Helen Ingram & David R. White, *International Boundary and Water Commission: An Institutional Mismatch for Resolving Transboundary Water Problems*, 33 NAT. RESOURCES J. 153, 169, 174 (1993).

122. *Id.*; Mumme, *supra* note 54, 33 NAT. RESOURCES J. 93, at 100.

123. Ingram & White, *supra* note 121; Mumme, *supra* note 54, 33 NAT. RESOURCES J. 93, at 100.

constituents in both countries.<sup>124</sup> Yet, while the narrow, physical limits of its jurisdiction have not changed, the social dynamics within that jurisdiction are rapidly expanding. Increased population, new technologies, and heightened commercial exchange now challenge the IBWC to expand its thinking and to develop integrative patterns of decision making.

It is time for the IBWC to change. The parallel national tracks of the U.S. and Mexico IBWC sections, designed in 1944 to act as a "check and balance" and to preserve national sovereignty, are not adequate to solve twenty-first century problems.<sup>125</sup> The 1944 Treaty is an outdated formula in desperate need of an adjustment: the addition of a new policy-oriented factor. Recurring drought, coupled with changing social forces, puts enormous stress on the dispute resolution system. The binational management regime is currently undergoing the most serious pressure for transformation since the present treaty-based regime was consolidated in 1944.

This pressure for transformation is a product of two basic trends: (1) urbanization and industrialization and (2) the accelerating pace of economic integration.<sup>126</sup> American companies invest in *maquiladoras*,<sup>127</sup> Mexican workers cross the border and have become a key component of the U.S. labor force, and commercial truck traffic carries a wide variety of goods across the border. The IBWC should function like a secure international shoelace connecting and tying together communities of interest on both sides of the Rio Grande.

A river that serves as a shared natural resource and a border has a physical dimension that suggests permanence; nevertheless, as populations along both sides of the border increase, agricultural and manufacturing practices advance, and transboundary commercial contacts multiply, that same river must be viewed in its dynamic context. As noted earlier, the IBWC is an international body, its commissioners have diplomatic status, and they answer respectively to the State Department in the United States and to the Foreign Ministry in Mexico. Yet, the IBWC has traditionally deferred to local authorities and to

---

124. Stephen P. Mumme, *New Challenges for US-Mexico Water Resources Management*, in *THE PEACEFUL MANAGEMENT OF TRANSBOUNDARY RESOURCES* 261 (Gerald H. Blake et al. eds., Int'l Env'tl. L. & Pol'y Series, 1995).

125. Ingram & White, *supra* note 121, at 174.

126. Mumme, *supra* note 124, at 261.

127. A *maquiladora* is "an assembly plant in Mexico, especially one found along the border between the United States and Mexico, to which foreign materials and parts are shipped and from which the finished product is returned to the original market." *AMERICAN HERITAGE DICTIONARY* 1097 (3rd ed. 1992).

domestic agencies for regulatory and enforcement matters.<sup>128</sup> The IBWC has historically played down its authority to independently influence public policy. The IBWC is vested with jurisdiction over the shared Rio Grande border region.<sup>129</sup> Its decisions are subject only to the review of the Department of State in the United States and the Ministry of Foreign Relations in Mexico.<sup>130</sup> When water allocation problems predominated in the 1940s–1960s, the original template, with each section defending their sovereign interests, worked satisfactorily. Once amounts of water were distributed, the IBWC would leave the day-to-day regulation to local authorities.<sup>131</sup> However, the 1970s began to usher in environmental concerns (such as water quality and pollution) that did not respond well to emphasis upon territorial limits. The IBWC began to adjust to the changed circumstances in an ad hoc fashion, issuing Minutes that addressed problems on a case-by-case basis.<sup>132</sup> The border region has undergone significant change since 1944; it is now necessary to start rethinking the structure of the IBWC.<sup>133</sup>

New technologies enabling high-speed economic exchange and communication and modern network approaches to regional governance characterize twenty-first century transnational relations. International actors like the IBWC must emphasize and implement overarching policies reflecting these new circumstances. There needs to be a rearticulation of the *international* dimension of the IBWC and an assertion of a new international framework that more actively implements modern cooperative policies. Any forfeiture of this opportunity to revitalize the IBWC probably will ensure that the 1944 Treaty will increasingly stifle optimal solutions to water allocation problems along the Rio Grande.

---

128. Mumme, *supra* note 54, 33 NAT. RESOURCES J. 93, at 96.

129. 1944 Treaty, *supra* note 4, arts. 2, 8, 24(b), (c), (d) (referring to jurisdiction of the IBWC specifying physical land, river boundaries, and all constructions built to carry out provisions of the 1944 Treaty).

Jurisdiction of the Commission covers all powers and duties entrusted to the IBWC by the 1944 Treaty and other treaties in force between the United States and Mexico, and to carry into execution and prevent the violation of the provisions of those treaties and agreements. The authorities of each country shall aid and support the exercise and discharge of these powers and duties...and the Commissioners shall invoke when necessary the jurisdiction of the courts or other appropriate agencies of his country to aid in the execution and enforcement of these powers and duties.

*Id.* art. 24(c), (d).

130. *Id.* arts. 2, 6, 8, 18, 20, 23, 24, 25.

131. Mumme, *supra* note 124, at 296.

132. *Id.* at 265–67.

133. *Id.* at 265.

The effectiveness of the 1944 Treaty has been repeatedly questioned; it suffers heightened criticism with each drought and with each water delivery deadline that goes unmet. In Texas, farmers have voiced support for scrapping the Treaty altogether.<sup>134</sup> This sentiment has been fueled by proposed plans to actually divert water so that it never reaches Mexico.<sup>135</sup> However, at the same time that Texas officials refer to the Treaty as a "toothless wonder,"<sup>136</sup> a growing number of Texans, including agricultural producers, are beginning to question whether the longstanding Texas "rule of capture" continues to be the best guide.<sup>137</sup>

Criticism and questioning of the Treaty is not confined to Texas. Adding to the complexity of the matter are various interpretations of the Treaty and opinions about its vitality by farmers and officials in Mexico.<sup>138</sup> Mexican farmers in the State of Chihuahua claim that the Treaty is outdated and unfair.<sup>139</sup> Mexican President Fox has himself called for an overhaul of the "old Treaty" because it never contemplated the explosive growth of population and industry and because of increasing evidence of climatic change.<sup>140</sup> It is true that the area has undergone extreme change. The population in the U.S.-Mexico border area has increased 400 percent since 1945 and has shifted from an agricultural employment base to an urban and industrialized economy.<sup>141</sup> "Currently, 6.9 million people live in 'sister cities' along the international boundary."<sup>142</sup>

134. Steve Taylor, *Farm Bureau Set to Kill Water Treaty If Valley Farmers Approve*, MCALEN MONITOR, June 4, 2002.

135. Chuck Lindell, *Texans: U.S. Being Too Soft on Mexico, State Department Must Take Action to Get Country to Pay Its Water Debt, Some Say*, AUSTIN AM. STATESMAN, Oct. 3, 2002, at B1. For example, an Irrigation District's General Manager proposed a plan in May 2002 to build a 400-mile gravity flow pipeline to divert Mexico-bound water from water of the Colorado River flowing into the Rio Grande in Texas.

136. *Id.*

137. John R. Pitts & Janet L. Hamilton, *Texas Water Law for the New Millennium*, 14 NAT. RESOURCES & ENV'T 35, 39 (1999).

The rule of capture, also known as...the absolute ownership rule, allows a landowner to withdraw as much water as necessary from beneath the owner's land so long as the water is put to a beneficial use. The landowner is not liable to an adjacent landowner for harm to a neighbor's well except in limited circumstances.

*Id.*

138. Brenda Rodriguez, *Water Dispute: A Dry Hate; Drought-Weary Farmers, U.S. Officials Say Mexico Hoarding Supply*, DALLAS MORNING NEWS, Apr. 25, 2002, at 1A.

139. Watson, *supra* note 71 (stating that the farmers call it "an old Treaty").

140. Ricardo Sandoval, *Despite Deal Water Fight Flows*, DALLAS MORNING NEWS, Jan. 11, 2003, at 33A.

141. Patricia A. Jones, *U.S. Mexico Boundary Waters Treaty and North American Environmental Agreements: What Lessons for International Water Agreements' Compliance*

Yet, despite this vigorous criticism from both sides of the Rio Grande, the solution to what ails the 1944 Treaty should come from within its existing structure. Scholars believe that amending the 1944 Treaty would be very difficult and that substantive changes in the rules would face a long deliberative process by both the U.S. and Mexican governments.<sup>143</sup> Recently a scholar noted,

Treaties, however, are political documents that reflect the diplomatic possibilities of the past as reinforced by the cumulative record of institutional practices in their service, and, as such, are often difficult to change...[and] it is highly unlikely that the present binding treaties...will be reopened for revision given the enormity of the political stakes involved."<sup>144</sup>

A January 2003 Report on Rio Grande transboundary water management emphasized a fundamental tenet of treaty law: the parties must in good faith respect their obligations arising under existing treaties.<sup>145</sup> What's more, "disputes concerning [the] treaty should be settled in conformity with the treaty's terms and with principles of international law."<sup>146</sup> Through the reinterpretation of treaty provisions, the readjustment of current institutional practices, or other international mechanisms that do not impair treaty based commitments,<sup>147</sup> a degree of flexibility can be added to the existing Treaty that accents its international dimension.

---

*Mechanisms?*, University of Dundee Draft Working Paper. Jones points out that the border population has grown from 1,055,798 in 1945 to a current 4,162,210. *Id.* at 2.

142. *Id.*

143. Mumme, *supra* note 54, 33 NAT. RESOURCES J. 93, at 101.

144. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 156.

145. CTR. FOR STRATEGIC & INT'L STUDIES ET AL., U.S.-MEXICO TRANSBOUNDARY WATER MANAGEMENT: THE CASE OF THE RIO GRANDE/RIO BRAVO, RECOMMENDATIONS FOR POLICY MAKERS FOR THE MEDIUM AND LONG-TERM. Report of the U.S.-Mex. Binational Council (Jan. 2003) [hereinafter Binational Council Report]. The fundamental tenet is *pacta sunt servanda*, stated in the Vienna Convention on the Law of Treaties, May 23, 1969, art. 26, 8 I.L.M. 679 (1969). *Pacta sunt servanda* states that a party to a treaty has the obligation to apply the terms of the treaty in good faith.

146. *Id.*

147. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 156.



#### IV. THE OPPORTUNITY PRESENTED BY THE CURRENT WATER CRISIS ALONG THE RIO GRANDE: THE DEVELOPMENT OF A TWENTY-FIRST CENTURY MINUTE STATING A COMMITMENT TO MODERN PRINCIPLES AND UNDERSTANDINGS OF INTERNATIONAL WATERCOURSE LAW

##### A. Working with the Language of the 1944 Treaty

As a threshold matter, the 1944 Treaty's language must be aligned and brought into congruence with current canons of customary international watercourse law.<sup>148</sup> While the Treaty is a political document reflecting the diplomatic possibilities of the past and will be difficult to change,<sup>149</sup> it can nevertheless be strengthened.<sup>150</sup> Its survival over the last half century is evidence of a certain level of public support;<sup>151</sup> by expanding the language of implementation in the Treaty's articles, its reputation could grow as an exemplar for effective, adaptable, twenty-first century transboundary water resource management. Radical reform is not necessary to achieve this goal. Rather, it may be as simple as adding text to the Treaty's existing language to describe support for modern internationally recognized principles. These principles would then serve as guideposts for the solution of twenty-first century problems along the Rio Grande.<sup>152</sup>

Using the original provisions of the Treaty, the IBWC could develop and extend the Commission's truly international obligations and practice.<sup>153</sup> In particular, articles 2, 24, and 25 of the Treaty allow the IBWC, with the concurrence of the U.S. and Mexican governments, to interpret the Treaty and to apply or to extend its provisions in order to deal with specific problems.<sup>154</sup> For example, there are critical exceptions

---

148. Alberto Szekely, *Emerging Boundary Environmental Challenges and Institutional Issues: Mexico and the United States*, 33 NAT. RESOURCES J. 33, 38 (1993).

149. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 156

150. Mumme, *supra* note 124, at 272.

151. *Id.* at 156.

152. Alberto Szekely, *How to Accommodate an Uncertain Future into Institutional Responsiveness and Planning: The Case of Mexico and the United States*, 33 NAT. RESOURCES J. 397, 401 (1993).

153. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 161.

154. 1944 Treaty, *supra* note 4, arts. 2, 24(d), 25. Article 2 states that the IBWC shall be entrusted to apply the Treaty toward "the settlement of all disputes." Article 24(d) states that the IBWC shall have the power and duty "[t]o settle all differences that may arise between the two governments with respect to the interpretation or application of this Treaty, subject to the approval of the two Governments." Article 25 states, "Unless one of the two governments objects to the terms of an IBWC opinion [Minute] within 30 days after it has been issued, the Opinion shall be considered to be approved by the governments."

in the 1944 Treaty that pertain to "extraordinary drought" scenarios.<sup>155</sup> Regrettably, the Treaty fails to define the term "extraordinary drought" and neglects to address other modern concerns such as the effects of climatic change.<sup>156</sup>

The IBWC has relied upon the language of the Treaty to justify exercises of discretion in rendering its decisions. Confronting an ongoing dispute involving the Colorado River, the IBWC used Article 25 to justify their decision and to add regulations.<sup>157</sup> The IBWC responded to a problem where the drafters of the Treaty originally had allocated only approximately ten percent of the Colorado River flow to Mexico but also "contemplated and authorized" expanded notions of water use in article 3.<sup>158</sup> In 1973, Mexico responded to a 1960s practice of the U.S. section that involved draining saline ground water into the Colorado River as it flowed through Arizona and then deducting this quantity of saline water from Mexico's allotted share of fresh water.<sup>159</sup> Mexico, in reaction, "began a 'crash program' of groundwater development in the border region, to make up for the losses."<sup>160</sup> Addressing the ongoing crisis, the IBWC, after a prolonged period of negotiations, used the Treaty's permissive language in article 25 as justification to add regulations and to define procedures in the form of a Minute.<sup>161</sup> The IBWC limited groundwater withdrawals on both sides of the border and required future consultations regarding groundwater development in the border region.<sup>162</sup>

More recently, the IBWC exercised similar discretion. For example, in Minutes 307 and 308, the IBWC issued a call to adopt principles and understandings enabling both the United States and

---

155. 1944 Treaty, *supra* note 4, arts. 4, 9(f), 15 Schedule II(D) (in "years of limited supply"). See also Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 154.

156. 1944 Treaty, *supra* note 4, arts. 4, 9(f), 15 Schedule II(D). See also Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 150-51. The Treaty, however, does have language that allows the IBWC flexibility to add new staff members to consider these and other issues and make recommendations.

157. IBWC, MINUTE 242, Aug. 30, 1973 (seeking a "permanent and definitive solution of the international problem of the salinity of the Colorado River").

158. William J. Snape III, *Adding an Environmental Minute to the 1944 Water Treaty: Impossible or Inevitable?*, Appendix D in Workshop Proceedings, Water and Environmental Issues of the Colorado River Border Region Roundtable Workshop, San Luis Rio Colorado, Sonora, Mexico, Apr. 30, 1988, available at <http://www.sci.sdsu.edu/salton/Snape1998/EnvironMinute.html> (last visited Mar. 12, 2004).

159. Transboundary Freshwater Dispute Database, *U.S./Mexico Shared Aquifers* (Oct. 2002), at [http://www.transboundarywaters.orst.edu/projects/casestudies/us\\_mexico.html](http://www.transboundarywaters.orst.edu/projects/casestudies/us_mexico.html) (last visited Mar. 12, 2004).

160. *Id.*

161. IBWC, MINUTE 242, *supra* note 157.

162. *Id.*

Mexico to give highest priority to fulfilling their respective 1944 Treaty obligations.<sup>163</sup> In Minutes 307 and 308, the IBWC sought enhanced cooperation in the areas of drought management and sustainable development by stating the need for an ongoing dialogue between the two countries, the need for the development of a "framework" to address future drought related emergencies (Minute 307), and the need for increased data exchange and the adoption of "principles and understandings" (Minute 308).<sup>164</sup>

## B. Article 25 and the Role of the Minute

Article 25 of the 1944 Treaty calls for the IBWC to develop rules and to issue decisions in the form of Minutes.<sup>165</sup> Minutes become binding unless one of the Parties objects to the substance of the proposed Minute within 30 days.<sup>166</sup> In 1995, Minute 293 provided emergency relief to Mexico during a particularly severe drought by allowing Mexico to use water from the Rio Conchos in Mexico that was scheduled for delivery to the United States and requiring Mexico to later repay the amount of water diverted to its emergency use).<sup>167</sup> In March 2001, Minute 307 established a partial repayment schedule for Mexico's existing water debt.<sup>168</sup> In June 2002, the United States and Mexico, in Minute 308, made another attempt to address the continuing and growing Mexican water debt.<sup>169</sup> Minute 308 also noted the need for a new plan.<sup>170</sup> It called for the convening of a bi-national summit on sustainable water management and for the development of a forum to facilitate the exchange of information between the IBWC commissioners in both countries.<sup>171</sup>

The recent use of Minutes makes clear the need for stronger policy positions. Minute 308, for example, only left open the prospect for

---

163. IBWC, MINUTE 308 D, *supra* note 119.

164. *Id.* art. G (referring to IBWC, MINUTE 307, *supra* note 65).

165. 1944 Treaty, *supra* note 4, art. 25. "Decisions of the Commission shall be recorded in the form of Minutes done in duplicate in the English and Spanish languages, signed by each Commissioner and attested by the Secretaries." *Id.*

166. *Id.*

167. IBWC, MINUTE 293, *supra* note 76. Unfortunately, the structure of this Minute still focused on allocative formulas.

168. IBWC, MINUTE 307, *supra* note 65.

169. IBWC, MINUTE 308, *supra* note 119 (entrenching the focus on the numbers and the deficit).

170. *Id.*

171. *Id.* (seeking to implement MINUTE 307, *supra* note 65, Recommendation No. 3). Mexico and the United States plan to form a Basin Congress, *Consejo de Cuenca*, to provide input to the planning process for the Rio Grande Basin. Instituto Mexicano de Tecnologia de Agua (IMTA) (Mexican Water Technology Institute) is working on a management plan for the Mexican portion of the Rio Grande.

further negotiation while vaguely referring to the need for new "principles and understandings."<sup>172</sup> The time is ripe to add a new Policy Minute to respond to this call for principles and understandings. Although general policy language of cooperation is sometimes laced between the water account statements and repayment schedules of recent Minutes, the IBWC needs to make a more emphatic commitment to an activist policy of cooperation built upon a foundation of mutually recognized international principles and understandings.<sup>173</sup>

Despite the tension, the border regions of the United States and Mexico have shared interests and would benefit greatly from increased cooperation. The United States and Mexico can see reflections of their own individual concerns in each other's plights. Government officials and farmers in Texas and in Mexico speak in terms of a shared destiny. Texas Governor Perry has stated, "Mexico and Texas are always going to be neighbors, and we're always going to have issues that unite us...[a]nd that's where I try to focus."<sup>174</sup> Texas farmers see something other than a line of division in the Rio Grande. As one pointed out, "That river is not a dividing line, it is just a geographic feature because people on both sides depend upon each other to make a living."<sup>175</sup>

A plan is in the works "to bring the governors of New Mexico, Texas and the Mexican States of Chihuahua, Coahuila and Tamaulipas together to draft a water agreement to help future generations on both sides of the border manage the basin."<sup>176</sup> This call for action at the state level exemplifies the impatience with the absence of a clear resolution to the ongoing water crises along the U.S.-Mexico border region.<sup>177</sup> In

---

172. IBWC, MINUTE 307, *supra* note 65, art. D.

173. *Id.* at 3 (calling for both nations to "identify measures of cooperation on drought management and sustainable management of this basin").

174. Dudley Althaus, *Perry in Mexico Defends Execution; Says Death of Suarez Not Racist*, HOUSTON CHRON., Aug. 24, 2002, at B1.

175. Jim Yardley, *A River That United Lives Is Now a Barrier*, N.Y. TIMES, Aug. 1, 2002, at A1.

176. Leslie Hoffman, *Governors to Unite on Rio Grande Issues*, FT. WORTH STAR-TEL., Dec. 30, 2003, at 5.

177. *Id.*

"I'm very concerned by the lack of attention Mexico's federal government and the U.S. government are giving to water issues at the border," said New Mexico Governor, Bill Richardson, who is behind the effort calling for the inter-state conference. Richardson wants the governors to draft an agreement that would cover: water use, water conservation and river management. He hopes to rally the leaders using his influence as Chairman of the U.S.-Mexico Border Governors' Conference. An Agreement could be a breakthrough for the border. The Utton Transboundary Research Center is drafting a comprehensive briefing report on the basin's water issues for the governors to review. Alberto

Mexico, farmers near the border have petitioned Mexican President Fox to resolve the debt.<sup>178</sup> Mexicans recognize that their relationship with the United States is a key relationship that needs to be both broadened and strengthened.<sup>179</sup> As with other water wars, this one has human origins.<sup>180</sup> It is heartening to see, at both official and grass roots levels, a mutual recognition of the need for new solutions.

A Policy Minute dedicated to a clear overarching policy statement would make an important contribution to these calls to action. It would utilize modern and internationally recognized principles as a reference for water allocation dispute resolution. This would also add structure to the groundswell of calls for change to the 1944 Treaty. The Treaty needs to evolve and respond to changed conditions, just as international water law evolves when perceptions of the value of international rivers change. To allow the 1944 Treaty to remain hostage to a solitary regime of debit/credit statements is to relegate the Treaty to the role of an obstacle instead of affirming its role as a facilitator.

A Policy Minute of international principles and understandings would not eliminate the role of specific water allocation entitlements. Firm entitlements are an essential element of any allocation regime but they mask the inevitable uncertainty of such regimes.<sup>181</sup> Instead, a Policy Minute would articulate a plan to make allowances through a "temporal risk factor" for any changed conditions, emphasizing percentages of flow rather than fixed quantities.<sup>182</sup> The Policy Minute would downplay the

---

Szekely, Gov. Richardson's counterpart in Mexico says: "The most critical issue is that we don't have a law of the river. Water has been given on the basis of concessions instead of water law. The IBWC has a limited mandate." Sally Spener, spokeswoman for the U.S. Section of the IBWC argues that the IBWC is increasingly taking a more proactive role on water management, especially given the drought.

*Id.*

178. Tim Weiner, *Water Crisis Grows Into a Test of U.S.-Mexico Relations*, N.Y. TIMES, May 24, 2000, at A3 (statement of Juan Luis Zapata, Mexican sorghum farmer wearing a New York Yankees cap).

179. Tim Weiner, *Mexican Foreign Minister Quits; Critic of NAFTA Replaces Him*, N.Y. TIMES, Jan. 11, 2003, at A3; *The Senate of Texas, Subcommittee Works to Address Dry Times in Texas*, TEX. SENATE NEWS, Nov. 14, 2002 (referring to the fact that Texas Attorney General John Cornyn sets up Rio Grande Water Rights Task Force).

180. Hugh Dellios, *Sharing the Rio Grande*, CHICAGO TRIB., July 7, 2002, at C1 (quoting Alvaro Rivera Fernandez, head of farmers union in Tamaulipas. Also adding that "[b]oth sides made clear that the issue of water debt defies rapid solutions and (is) likely to remain problematic for years."); Richard Boudreaux, *Mexico U.S. Agree to Be Patient in Talks*, L.A. TIMES, Nov. 27, 2002, at 1; Patty Reinert, *Bush, Fox Spell Out Plan for Prosperity*, HOUSTON CHRON., Mar. 23, 2002, at 1.

181. *Id.*

182. The author thanks Prof. Stephen C. McCaffrey for this observation.

enforcement of an entitlement and instead evaluate deficits within an historical context of changed demographics, environmental conditions, and commercial interdependence.<sup>183</sup> Modifying the 1944 Treaty with the addition of a Policy Minute is preferable to an attempt to totally overhaul the Treaty. Working within the existing structure of the Treaty provides a sense of continuity and, at the same time, demonstrates that it can effectively adapt to the new circumstances of a highly interconnected region of shared responsibilities.<sup>184</sup>

### C. The Need for a New Twenty-First Century Minute

The early years of the twenty-first century provide a strategic opportunity to revitalize the 1944 Treaty. The addition of a Policy Minute will move attention of watercourse managers away from the national sovereignty emphasis by the U.S. and Mexico sections during the last century. With a focus upon pragmatic policy, the new Policy Minute should emphasize the following.

1. *Shared responsibilities*: Drawing renewed emphasis to the Rio Grande border area as an entire network, a system that provides flexibility among the participating states to shoulder extra individual responsibilities in times of crisis.<sup>185</sup> It is vital to move away from "zero sum analysis," which inherently results in nation-to-nation comparisons rather than a more holistic evaluation.<sup>186</sup> The Rio Grande watercourse regime is an international network, a system of contacts and connections at many different levels. A network approach can provide a new way of thinking about familiar problems.<sup>187</sup>

The first focus of a Policy Minute, shared responsibilities, sets out a new overarching theme for the future application of the Treaty. After all, policymakers have much to learn from the trials and errors and successes and failures of the last 60 years under the 1944 Treaty. Recent droughts have created unprecedented degrees of water stress and have

---

183. *Id.*

184. Robert E. Goodin, *International Ethics and the Environmental Crisis*, 4 ETHICS & INT'L AFF. 91, 104 (1990). See also Mumme *supra* note 54, 39 NAT. RESOURCES J. 149, at 156-57.

185. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 156-57.

186. A "zero-sum game" is one in which any gain by one party entails a corresponding loss by the other. "Zero-sum" in this context refers to fixed allocations of water, where every drop of water is characterized as belonging to some party by terms of a fixed formula, *i.e.*, a formula without flexibility. Zero-sum would require every past deficit to be paid in full without extenuating considerations before the parties could move on in any future negotiations. See also *supra* note 179.

187. Duncan J. Watts, *Unraveling the Mysteries of the Connected Age*, CHRON. OF HIGHER EDUC., Feb. 14, 2003, at B7.

led to more and more "zero-sum" situations.<sup>188</sup> A new policy-oriented Minute establishing a commitment to modern international watercourse law principles could state a pragmatic policy of shared responsibilities to contribute to the optimal management of one extended Rio Grande network. Within this network, acts and their consequences are not isolated in their effect. They do not just affect a balance sheet of static water allotments but must be reconciled with the total system. The international Rio Grande regime operating under twenty-first century principles would shift analysis away from "zero-sum" games toward maximizing system-wide benefits. The emphasis upon the interconnectedness of the U.S.-Mexico border region would facilitate the development of long-range plans for the region.

2. *Long-term strategies:* Planning that develops intergenerational timelines that take into consideration the protracted well-being of the water supply and the environment, as well as commercial needs. Additionally, a twenty-first century Minute could commit to proactive educational projects in the United States and Mexico.

Secondly, a focus upon long-term strategies is key for a new Policy Minute. A recent binational study suggested that adding a Minute dedicated to long-term strategies would help to clarify treaty definitions and concepts.<sup>189</sup> While there will always be pressures to prioritize "immediate" domestic concerns over international treaty obligations,<sup>190</sup> a Minute of pragmatic long-term policy would prove to be a refuge where conflicting voices could gather to place localized crises into a long-term, system-wide perspective. The same arguments supporting a new long-term Policy Minute have relevance to arguments supporting the addition of an ecological Minute that would make the Treaty more compatible with contemporary domestic and international law governing the protection of endangered species.<sup>191</sup> Professor Mumme's persuasive argument for an ecological Minute points to expected controversies that would likely surround any conceptual expansion of the 1944 Treaty.<sup>192</sup> William J. Snape III, Legal Director of Defenders of Wildlife, argues that

---

188. Sandra L. Postel & Aaron T. Wolf, *Dehydrating Conflict; Possible Wars over Water*, 126 FOREIGN POL'Y 60 (2001).

189. Binational Council Report, *supra* note 145, at 6.

190. *Id.* at 5.

191. Stephen P. Mumme, Water Use Symposium: *The Case for Adding an Ecology Minute to United States-Mexico Water Treaty*, 15 TUL. ENVTL. L.J. 239, 249 (2002). Mexican scholars also support making the Treaty language more definitive. See Szekely, *supra* note 148; see also Roberto Sanchez, *Public Participation and the IBWC: Challenges and Options*, 33 NAT. RESOURCES J. 283, 284 (1993).

192. Mumme, *supra* note 191, at 255, 256.

it is inevitable that an "environmental minute" will be added to the 1944 Treaty. For support he refers to accepted notions of international law that push for this new comprehensive ecologically oriented Minute and to article 17 of the 1944 Treaty that incorporates the well-recognized *Trail Smelter* principle.<sup>193</sup> By looking to established international law principles, as well as to emerging principles, a long-term strategy will revitalize the Treaty.

3. *Heightened application of international legal principles and norms:* This has been exemplified in recent U.S. Supreme Court decisions.<sup>194</sup> For example, the principle of contemporaneity (the need to continually assess and to update existing treaties and agreements in light of new norms and standards) could provide a built-in adjustment factor to respond to changed conditions, such as extraordinary drought.

Third, by identifying important new principles of international law in addition to emphasizing well-settled international principles, a Policy Minute would provide implementation language for developing the long-term strategies that would inject new flexibility into the Treaty. A recent trend in U.S. courts to cite to and to discuss international conventions and international legal norms provides some evidence of a heightened recognition in the United States of certain global concerns.<sup>195</sup>

---

193. Snape, *supra* note 158, at 3. The *Trail Smelter* principle states a fundamental principle of international law: a sovereign state is supreme within its own territorial domain; the state and its nationals are entitled to use and enjoy their territory and property without interference from an outside source. *United States v. Canada*, 1941, 2 UNRIAA 1905 (1949). Article 17 of the 1944 Treaty states,

Each government agrees to furnish the other Government, as far in advance as practicable, any information it may have in regard to such extraordinary discharges of water from reservoirs and flood flows on its own territory as may produce floods on the territory of the other. Each Government declares its intention to operate its storage dams in such manner, consistent with the normal operations of its hydraulic systems, as to avoid, as far as feasible, material damage in the territory of the other.

1944 Treaty, *supra* note 4, art. 17.

194. In the recent U.S. Supreme Court ruling on affirmative action at the University of Michigan Law School, Justices Ginsburg and Breyer referred specifically to international law. *Gratz v. Bollinger*, 123 S. Ct. 2411, 2445 (2003) (Ginsburg, J., dissenting). Justice Kennedy made specific reference to the European Court of Human Rights in his majority opinion rejecting Texas anti-sodomy law, *Lawrence v. Texas*, 123 S. Ct. 2472, 2481 (2003).

195. In *Gratz*, Justice Ginsburg stated, "Contemporary human rights documents draw a line that in some instances may allow 'racial classifications' where they are not invidious in implication but advanced to 'correct inequalities.' These contemporary documents distinguish between policies of oppression and measures designed to accelerate de facto equality" (citing the U.N. Convention on the Elimination of All Forms of Racial Discrimination and U.N. Convention on the Elimination of All Forms of Discrimination Against Women). In *Lawrence*, Justice Kennedy stated,



By incorporating references to evolving international norms, the IBWC will enhance the relevance of the Treaty and provide it with the potential to transform the IBWC Rio Grande regime into a useful model for other nations in the international community that share watercourses.<sup>196</sup> Failure to inject new vitality into the Treaty will have dire results. Absent the development of a long-range plan and more flexible policies, those living in the Rio Grande basin will eventually "drown in a sea of droughts."<sup>197</sup>

## V. THE U.N. CONVENTION ON THE NON-NAVIGATIONAL USES OF INTERNATIONAL WATERCOURSES—AN EXEMPLARY MODERN FRAMEWORK

Legal responses to water scarcity have a solid foundation in the U.N. Watercourses Convention.<sup>198</sup>

[A] right to water...could be envisaged as part and parcel of...most fundamentally the right to life...defined carefully, so as to take into account all-too-prevalent instances of region-wide water shortages....[A]n argument emphasizing harm to humans is more powerful...than one based on

---

[F]ive years before *Bowers v. Hardwick* (upholding Georgia anti-sodomy law), the European Court of Human Rights considered a case, which involved consensual homosexual conduct. The Court held that a Northern Ireland law that proscribed such conduct was invalid. The ruling was authoritative in all countries that are members of the Council of Europe (now numbering 45) and stands in direct opposition to *Bowers*.

*Lawrence*, 123 S. Ct. at 2481.

196. Ingram & White, *supra* note 121, at 153. A Policy Minute would help to build a consensus among competing interests in supporting a functional expansion of the IBWC. Yet, a Policy Minute will not eliminate every moment of crisis that is acutely felt at a local level. There will continue to be battles of dueling satellite imagery showing an abundant supply of water in reserve in Mexico (U.S. satellite imagery) or depleted reserves (Mexican satellite imagery), and there will continue to be calls for symbolic blockades and punitive sanctions. See also Rennie, *supra* note 89; Lynn Brezosky, *Texas, Mexico Quarrel over Water*, ASSOCIATED PRESS, May 23, 2002, Financial News (describing truck blockade of international bridge at Pharr, Texas, and calling for sanctions against Chihuahuan agricultural products coming into the United States since accusations of hoarding and calls for restitution continue); Southwest Farm Press, *supra* note 134.

197. Octavio E. Chavez, *The 1994-95 Drought, What Did We Learn from It?: The Mexican Perspective*, 39 NAT. RESOURCES J. 35, 45 (1999).

198. Convention on the Law of the Non-Navigational Uses of International Watercourses, May 21, 1997, 36 I.L.M. 700.

traditional notions of transboundary harm to an abstraction, namely, a state.<sup>199</sup>

This modern international perspective places water conflicts into a global context with less emphasis upon historical sovereignty. In the twenty-first century, water will become an increasingly sought-after resource. As the world population increases and as global patterns of climatic change become more evident, careful maintenance and conservation of water resources will be crucial.

The current water crisis on the Rio Grande may at first glance seem a narrowly contained conflict, focused upon allocation dynamics between the United States and Mexico. However, the ultimate solution of the crisis will almost certainly involve the IBWC.<sup>200</sup> The IBWC has jurisdiction over the physical border region of the Rio Grande and over structures within this zone.<sup>201</sup> It would take actions by the respective governments of the United States and Mexico to change the terms of the Treaty. Treaties are "reinforced by the cumulative record of institutional practices in their service...."<sup>202</sup> Any effort to alter the 1944 Treaty would require congressional approval in both countries, potentially creating a "political hornet's nest with no assurances that the current state of affairs would be improved by the effort."<sup>203</sup> The IBWC has exercised its jurisdiction for over 50 years, calling upon the services of the respective governments and courts to help facilitate that exercise.<sup>204</sup> In order to remove the IBWC from playing a key role in future crises, the respective governments would have to wipe the slate clean of the 50 years of decisions and precedents concerning this vital natural resource. In an era of increased economic outreach and public claims of cooperation between the United States and Mexico<sup>205</sup> (*i.e.*, NAFTA<sup>206</sup> facilitating trade between the two countries and current efforts to address illegal immigration),<sup>207</sup> it is unlikely that the two countries would choose to

---

199. Stephen C. McCaffrey, *A Human Right to Water: Domestic and International Implications*, 5 GEO. INT'L ENVTL. L. REV. 1, 1, 18-20 (1992).

200. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 156.

201. 1944 Treaty, *supra* note 4, art. 4.

202. Mumme, *supra* note 54, 39 NAT. RESOURCES J. 149, at 156.

203. Mumme, *supra* note 54, 33 NAT. RESOURCES J. 93, at 101.

204. 1944 Treaty, *supra* note 4, art. 24(c).

205. Concurrent Resolution recognizing the important relationship between the United States and Mexico, H.R. Con. Res. 206, 107th Cong. (2001). See also Vivienne Bennett & Lawrence A. Herzog, *U.S.-Mexico Borderland Water Conflicts and Institutional Change: A Commentary*, 40 NAT. RESOURCES J. 973, 986-87 (2000).

206. NAFTA, *supra* note 59.

207. Norah O'Donnell, *Mexico's President Backs Bush*, MSNBC News, Jan. 12, 2004, available at [www.msnbc.msn.com/id/3936803](http://www.msnbc.msn.com/id/3936803) (last visited Mar. 10, 2004). President Fox of Mexico described President Bush's proposed overhaul of U.S. immigration laws, which

erase the 50 years of cooperative attempts by the IBWC. The resolution by the IBWC of the current and future water crises along the Rio Grande has great potential to provide strong precedent for international watercourse law. The more completely the solution involves an open, transparent, participatory methodology, the greater the potential for a positive international influence. However, if the solution to future Rio Grande water disputes involves only the rigid adherence to empirical templates, then the IBWC will lose its credibility as an effective forum for water dispute resolution within an international context.

The 1944 Treaty does provide the IBWC with a seemingly limited mandate. However, there is room within that mandate for adaptation to change. The addition of a comprehensive Policy Minute would provide flexibility for the IBWC as an international body capable of broadening its potential sphere of influence and widening its interpretive vocabulary. The IBWC must incorporate a framework of modern international law or its legitimacy and credibility will be vastly reduced in the eyes of the international community.

#### A. The Convention as a Framework

In 1997, Mexico introduced the Watercourse Convention into deliberation at the United Nations.<sup>208</sup> The resolution introducing the Convention was co-sponsored by 33 other states, including the United States.<sup>209</sup> The U.N. General Assembly adopted the final text of the Convention on May 21, 1997, with a final vote of 103 to 3 (with 27 abstentions).<sup>210</sup> The United States and Mexico both voted for adoption of the Convention.<sup>211</sup> As of 2003, neither the U.S. nor the Mexican governments have formally ratified the Convention, but it is generally agreed that the final outcome was acceptable to both upstream and

---

would among other provisions give millions of undocumented Mexican workers in the United States legal status for at least three years. See also Norah O'Donnell, *The Warming of U.S.-Mexico Ties*, MSNBC News, Jan. 13, 2004, available at [www.msnbc.msn.com/id/3947169](http://www.msnbc.msn.com/id/3947169) (last visited Mar. 10, 2004).

208. Patricia Wouters, *The Legal Response to Water Scarcity and Water Conflicts: The U.N. Watercourse Convention and Beyond*, n.123, available at [www.thewaterpage.com/pat\\_wouters1.htm](http://www.thewaterpage.com/pat_wouters1.htm) (last visited Mar. 10, 2004) (listing the 33 sponsoring countries and citing UN Docs. A/51/L.72 and A/51/869); see also *Convention on the Law of the Non-Navigational Uses of International Watercourses*, G.A. Res. 51/229, U.N. GAOR, 51st Sess., Annex, Agenda Item 144, at 1 (1997), available at <http://www.un.org/ga/documents/gares51/ga51-229.htm> (last visited Mar. 17, 2004).

209. Wouters, *supra* note 208.

210. Convention is annexed to G.A. Res. 51/229, U.N. GAOR, 51st Sess., Annex (1997), available at [www.un.org/ga/document/gares51/ga51-229.htm](http://www.un.org/ga/document/gares51/ga51-229.htm) (last visited Mar. 17, 2004).

211. *Id.*

downstream states as a pragmatic middle-of-the-road solution.<sup>212</sup> The Convention has already acquired authoritative stature as an important framework outlining the law of international watercourses.<sup>213</sup>

Although neither the United States nor Mexico is signatory to the Convention,<sup>214</sup> both countries stated enthusiasm for the Convention from the outset. The United States actively supported a recommendation to give overall emphasis to the theme of cooperation to the Convention.<sup>215</sup> In fact, the United States wanted to expand the obligation to cooperate (which is embodied in article 8) to serve as an overarching theme for the rest of the articles of the Convention.<sup>216</sup> Additionally, during discussions over the Convention's language, the United States recommended that the articles of the Convention encourage public involvement.<sup>217</sup> The draft resolution of the Convention included Mexico among its sponsors,<sup>218</sup> and both the United States and Mexico voted to approve the resolution.<sup>219</sup> The framework Convention is a forward-looking guide for interpreting and possibly predicting the actions of most states with respect to international watercourses;<sup>220</sup> it codifies the trend in international watercourse law to turn away from absolute

---

212. Tobias Nussbaum, *Report on the Working Group to Elaborate a Convention on International Watercourses*, 6 REV. OF EUR. COMMUNITY & INT'L ENVTL. L., 1, 50 (1997).

213. Wouters, *supra* note 208; see also World Commission for Water-commissioned Green Cross International's *National Sovereignty and International Watercourses Report* (referring favorably to U.N. Convention's positive spirit of cooperation and effective interdependence), *Global Water Partnership, Towards Water Security: A Framework for Action*, (2000), available at [www.gwpforum.org/Library.htm](http://www.gwpforum.org/Library.htm) (last visited Mar. 10, 2004). This was among paper presentations at the 2nd World Water Forum, The Hague, March 17-22, 2000, cited in Patricia Wouters et al., *Commentary: The Legal Response to the World's Water Crisis: What Legacy from the Hague? What Future in Kyoto?*, 4 U. DENV. WATER L. REV. 418, 419 (2001). See also Dinara Kemelova & Gennady Zhalkubaev, *Water, Conflict, and Regional Security in Central Asia Revisited*, 11 N.Y.U. ENVTL. L.J. 479, 482-83 (2003). See also Gilbert M. Bankobeza et al., *International Legal Developments in Review: 2000 Public International Law, Environmental Law*, 35 INT'L L. 659, n.66 (2001).

214. U.N. Treaty Database, available at <http://untreaty.un.org/ENGLISH/bibl> (last visited Mar. 10, 2004) or, alternatively, at [http://www.internationalwaterlaw.org/IntlDocs/Watercourse\\_status.htm](http://www.internationalwaterlaw.org/IntlDocs/Watercourse_status.htm) (last visited Mar. 10, 2004). See also Schwabach, *supra* note 20, at 263.

215. *Report of the International Law Commission on the Work of Its Forty-Fifth Session*, II Y.B. INT'L L. COMM'N 172, 173, U.N. Doc. A/48/10 [hereinafter ILC 45th Session].

216. *Id.*

217. *Id.* at 172.

218. U.N. Press Release, General Assembly Adopts Convention on Law of Non-navigational Uses of International Watercourses, GA/9248 (1997). Manuel Tello of Mexico introduced the draft resolution on the draft Convention on May 21, 1997. *Id.*

219. Nussbaum, *supra* note 212, at 47.

220. Schwabach, *supra* note 20, at 279.

territorial sovereignty and toward the protection of the rights of lower riparian states and of the environment.<sup>221</sup>

Given the merits of the Convention and the initial appearance of support from Mexico and the United States, why have the two nations not ratified the treaty? The answer is a complex one, rooted in history. The United States and Mexico have staunchly defended their own national sovereignty concerns during the last 50 years of water disputes and are likely to be cautious in their approach to new methodologies. Also, the United States and Mexico each play the role of both an upper and lower riparian in the Rio Grande Valley.<sup>222</sup> The United States is the upper riparian to Mexico in its supply of water to Mexico from the upper reaches of the Rio Grande and Colorado rivers but it is a lower riparian in relation to Mexico's distribution of water from the Rio Bravo/Rio Conchos waters. The Convention, with its principles of "equitable utilization" and "no significant harm" could very well prove to be a useful guide to confronting the growing populations, heightened economic exchange, and prolonged droughts of the Rio Grande region.

A twenty-first century Policy Minute pointing to the pragmatic forward-looking language of the Convention would be a useful guidepost for the IBWC's implementation of the 1944 Treaty. The framework Convention provides effective, modern international language that could energize the IBWC. The IBWC has the authority to develop opinions that address the resolution of all disputes along the Rio Grande boundary. While the respective Governments have 30 days to object to these opinions, there is latitude for the IBWC to incorporate by

---

221. *Id.*

222. The U.N. Convention has at its heart a careful balancing between the principle of *equitable utilization* (often associated with upper riparian's use) and the principle of *no significant harm* (associated with the effects of upper riparian's use on a lower riparian). U.N. Convention, *supra* note 6, art. V, VII, 36 I.L.M. at 705; *see infra* Part V.A.2. As the population increases and as agricultural and industrial development with accompanying environmental effects mushroom along the borderland, both the United States and Mexico recognize to a heightened degree their *common stake* in the waters of the Rio Grande. However, prolonged, unpredictable droughts complicate this era of increased interdependence. When the U.N. Convention was introduced, out of historical momentum, the United States may have identified itself primarily as an upper riparian and Mexico would have identified itself primarily as a lower riparian. Consequently, there may have been hesitancy to quickly endorse the U.N. Convention's balancing approach. Additionally, the United States and Mexico may have believed still that the water allocation formula approach was all that was needed, because the implications of the drought that began in 1992 did not begin to significantly impact the IBWC allocations until a few years later. Nevertheless, it is becoming rapidly apparent that the sense of a "community of interest" in the Rio Grande Border region far outweighs a singular focus on sovereignty formulae. *See also* Joachim Blatter & Helen Ingram, *States, Markets and Beyond: Governance of Transboundary Water Resources*, 40 NAT. RESOURCES J. 439, 452, 472 (2000).

reference language of the Convention in its opinions. The IBWC is strategically positioned to demonstrate and to promote the currency of the Convention to twenty-first century watercourse problems. The U.S. and Mexican governments would then have the opportunity to revisit their early support for the draft Convention and evaluate its relevance in terms of their ongoing transboundary disputes.

The Convention attempts to codify relevant principles of the law of international watercourses by providing an "analytical framework for addressing the conflicting water demands of co-riparian nations."<sup>223</sup> It anticipates disputes between co-riparian nations, setting forth a two-prong test to determine when states have a legal entitlement to use international waters.<sup>224</sup> Under this test, legal entitlements exist where they are (1) defined by existing or future agreements and (2) entitlement would be in accordance with reasonable and equitable utilization of the watercourse.<sup>225</sup> The Convention also addresses a number of key principles, including the principles of cooperation,<sup>226</sup> reciprocity,<sup>227</sup> equitable utilization,<sup>228</sup> equitable participation,<sup>229</sup> the intergenerational principle,<sup>230</sup> and "no significant harm."<sup>231</sup> These could be formally absorbed into the 1944 Treaty through specific incorporation by

---

223. McCaffrey, *supra* note 199, at 18.

224. U.N. Convention, *supra* note 6, arts. 3(2)-(5), 36 I.L.M. at 704-05.

225. *Id.*

226. *Id.* Annex I ¶ 6; arts. 5(2), 6(2), 8, 36 I.L.M. at 705-07. The principle of cooperation states a positive duty of each country that shares a natural resource to cooperate in promoting the development of that resource in a manner to "render the greatest possible service to the whole human community that it serves." *Id.* See also MCCAFFREY, *supra* note 18, at 399.

227. U.N. Convention, *supra* note 6, Annex I ¶ 6, 36 I.L.M. at 716. The principle of reciprocity states that Country A will recognize the judicial rights and relations of Country B to the same extent that Country A's rights are recognized in Country B. *Id.*

228. *Id.* art. 5(1), 36 I.L.M. at 705. The principle of equitable utilization states that a country shall use a shared resource in a reasonable manner with a view to attaining "optimal and sustainable utilizations taking into account the interests of other states sharing the resource." *Id.*

229. *Id.* art. 5(2), 36 I.L.M. at 705. The principle of equitable participation is a correlate of equitable utilization and states that states sharing a resource "shall participate in the use and development and protection of a shared resource and cooperate in that development and protection." *Id.*

230. *Id.* Annex I ¶ 5, 36 I.L.M. at 716. The inter-generational principle states that those using a natural resource at a given period in time should utilize the resource taking into account the needs of future generations that will use and rely upon the resource. *Id.*

231. *Id.* art. 7(1), 36 I.L.M. at 706. The principle of no significant harm states an affirmative duty on the part of states sharing and using a natural resource to prevent causing significant harm during their use to other states that share the resource. *Id.*

reference to the Convention.<sup>232</sup> If no more than this happens, the Convention will have made an important contribution by strengthening the rule of law in international relations and by protecting and preserving international watercourses.<sup>233</sup>

It should not be difficult to incorporate the U.N. Convention into the application of the 1944 Treaty. Article III(1) and (2) state the intention that the Convention be harmonized with existing treaties.<sup>234</sup> Indeed, the United States has already voiced its support for the Convention. In June 1975, in reply to an International Law Commission questionnaire regarding the appropriate scope of a future Convention on International Watercourses, the United States emphasized that "an international watercourse is understood as a system divided between two or more States but there is hydrographic coherence to this system irrespective of political borders. Due to this coherence, there exists an interdependence of legal relevance between the various parts of the watercourse belonging to different States."<sup>235</sup> The United States continued, "action taken, or not taken, affecting water in any part of a hydrographic basin may produce consequences in other parts of the basin without regard to the conceptual division of the basin into different political entities...."<sup>236</sup> The United States stated, in summation, "This causal relationship demands that the water system be considered in its entirety for the purpose of attempting to establish international legal rules because it is only in that manner that a workable set of rights and obligations can be established...."<sup>237</sup>

Mexico, too, has supported the principles enunciated by the U.N. Convention. In 1994, Alberto Szekely, a member of the International Law

---

232. Indeed, the U.N. Convention borrows from the *Helsinki Rules on the Uses of the Waters of International Rivers*, 52 INT'L L. ASS'N CONF. REP. 484 (1966) [hereinafter *Helsinki Rules*]. Article V of the *Helsinki Rules* emphasizes that no one factor in the balancing of factors for reallocation of the use of international waters is more important than another factor.

233. Stephen C. McCaffrey, *The International Law Commission Adopts Draft Articles on International Watercourses*, 89 AM. J. INT'L L. 395, 404 (1995).

234. U.N. Convention, *supra* note 6, art 3(1), (2), 36 I.L.M. at 704 ("In the absence of an agreement to the contrary, nothing in the present Convention shall affect the rights or obligations of a watercourse State arising from agreements in force for it on the date on which it became a party to the present Convention....[P]arties to...[existing watercourse] agreements may, where necessary, consider harmonizing such agreements with the basic principles of the present Convention.").

235. *Report of the International Law Commission on the Work of Its Twenty-eighth Session*, II Y.B. INT'L L. COMM'N, at 160, U.N. Doc. A/31/10 (U.S. reply to Commission questionnaire).

236. *Id.*

237. *Id.*

Commission from Mexico, spoke in favor of the Convention.<sup>238</sup> He pointed to the highly interdependent nature of the populations along the Rio Grande where actions taken at one place on the river inevitably affect the total watercourse system. Therefore, during deliberations on the Convention, comments both from U.S. and Mexican officials expressly supported the viewpoint that an international watercourse is an integrated system. Notably, the United States and Mexico both voted in favor of the Convention in 1997, a year when their own water disputes were at the forefront of domestic politics.<sup>239</sup>

The drafters of the Convention focused on defining international watercourses as integrated systems. Integration, therefore, is key to the Convention's definition of an international watercourse.<sup>240</sup> As a means of facilitating an integrated approach, the Convention's drafters decided to adapt a flexible format that could effectively appeal to the widest possible constituency of countries sharing international watercourses.

One of the threshold matters confronted by drafters of the convention was the decision whether the Convention would be a "framework convention" or a convention that provided Model Rules.<sup>241</sup> A framework format provides general principles that may be harmonized<sup>242</sup> and "applied and adjusted"<sup>243</sup> to existing agreements and to the characteristics of a specific shared watercourse.<sup>244</sup> A framework convention is elastic in nature and can assist watercourse states in addressing future changes to the watercourse and to social and political factors.

In contrast, a Model Rules format sets down express markers that define more narrowly the relationship between watercourse states.<sup>245</sup> Model Rules do not have the flexibility of a framework and may

---

238. *Report of the International Law Commission on the Work of Its Forty-sixth Session*, 1 Y.B. INT'L L. COMM'N at 57, 175, 176 (2004), U.N. Doc A/49/10 [hereinafter *ILC 46th Session*].

239. U.N. Convention, *supra* note 6, art. 2(a), 36 I.L.M. at 704. *See also* Schwabach, *supra* note 20, at 263.

240. Stephen C. McCaffrey & Mpazi Sinjela, *The 1997 United Nations Convention on International Watercourses*, 92 AM. J. INT'L. L. 97, 97 (1998). "'Watercourse' means a system of waters and groundwaters constituting by virtue of their physical relationship a unitary whole and normally flowing into a common terminus." U.N. Convention, *supra* note 6, art. 2(1), 36 I.L.M. at 704. "'Watercourse State' means a State Party to the present Convention in whose territory part of an international watercourse is situated, or a Party that is a regional economic integration organization, in the territory of one or more of whose Member States part of an international watercourse is situated." *Id.*, art. 3, 36 I.L.M. at 704-05.

241. *ILC 45th Session*, *supra* note 215, at 180-81.

242. U.N. Convention, *supra* note 6, art. 3(2), 36 I.L.M. at 704.

243. *Id.*, art. 3(3), 36 I.L.M. at 704.

244. *Id.*

245. Examples of framework conventions are *Vienna Convention for the Protection of the Ozone Layer*, Mar. 22, 1985, 26 I.L.M. 1529 (1987) and *United Nations Conference on*



develop into obstacles in the event of changed physical or social circumstances. The drafters believed that a framework convention would be particularly useful because it would be easier to ratify.<sup>246</sup> A convention providing Model Rules, in contrast, would have received endorsement based upon the strength and depth of each individual nation's particular commitment to specific rules.<sup>247</sup> The United States fully supported the decision to draft a "framework" convention as a method of setting forth "general rights and obligations that will guide watercourse States in developing management practices tailored to their circumstances. The emphasis upon cooperation among watercourse States is particularly salutary...."<sup>248</sup>

The framework Convention provides states with general principles and rules governing non-navigational uses of international watercourses. These principles could be specifically incorporated by reference in an IBWC Minute as a summary of twenty-first century principles.<sup>249</sup>

### 1. Guideposts in the Framework

The 1944 Treaty has spanned two centuries. In order to ensure its continued vitality, the Treaty needs a clear statement to affirm support for a network approach<sup>250</sup> and to recognize emerging, modern principles of international water law. The international law regarding non-navigational uses of transboundary watercourses currently requires little more than the application of a rule of limited sovereignty, together with regard for equitable utilization and the duty to do no harm.<sup>251</sup> However, the Convention does provide a modern guide for interpreting and predicting the actions of most states with regard to international

---

*Environment and Development: Framework Convention on Climate Change*, May 9, 1992, 31 I.L.M. 849 (1992). An example of a Model Rules convention is the *Helsinki Rules*, *supra* note 232.

246. ILC 45th Session, *supra* note 215, at 85.

247. *Id.*

248. *Id.* at 172.

249. The framework format and the appeal to guiding principles are key components of the 2003 U.S. Dept. of the Interior Report, *Water 2025: Preventing Crises and Conflict in the West* (setting forth a framework to identify problems and solutions and including "Six Principles: respect for existing compacts; modernization of infrastructure; enhanced conservation; collaborative approaches; research; elimination of institutional barriers while protecting stakeholders"), available at [www.doi.gov/water/2025/Water2025.pdf](http://www.doi.gov/water/2025/Water2025.pdf) (last visited Mar. 10, 2004). See also ILC 45th Session, *supra* note 215.

250. See *supra* notes 171, 174, 188, and 189. See also IBWC, MINUTE 307, MINUTE 308, *supra* note 119.

251. Schwabach, *supra* note 20, at 278.

watercourses<sup>252</sup> and for the further development of international watercourse law. The Convention is not law and does not create legal obligations on states that have not ratified it or acceded to it.<sup>253</sup> Nevertheless, it does provide a guide for interpreting and possibly predicting the actions of most states with respect to international watercourses.<sup>254</sup>

While some of the Convention's substantive rules remain grounded in the mutual limitation of sovereign rights, "perpetuating the old paradigm with its core rules focusing upon demarcating individual, separate entitlements," it also allows for process-based approaches that seek common ground among the states within a watercourse regime.<sup>255</sup> At its heart, the Convention juxtaposes and seeks to balance the principle of "equitable utilization" with the principle of causing "no significant harm."<sup>256</sup>

The equitable utilization principle, embodied in article 5, is typically advanced by upper riparian states that might seek to increase or alter their use of an international watercourse.<sup>257</sup> Lower riparian states argue that the principle of equitable utilization is limited by the duty to not cause significant transboundary harm, which is articulated in article 7.<sup>258</sup> Attempting to balance these principles, the Convention rejects attempts to characterize them as irreconcilable.<sup>259</sup> The Convention erases any contradiction between its two main principles, equitable utilization and no significant harm, and instead develops a normative framework of cooperation, which in the twenty-first century has greater legitimacy than rules still tethered to sovereignty.<sup>260</sup>

Key articles in the Convention exemplify the modern, flexible language of international watercourse law that would energize future IBWC analysis. Article 3(1) states that the Convention does not affect the rights or obligations of a watercourse state arising from agreements that

---

252. *Id.* at 279.

253. *Id.* at 278-79.

254. *Id.*

255. Jutta Brunee & Stephen J. Toopes, *The Changing Nile Basin Regime*, 43 HARV. INT'L L.J. 105, 151 (2002).

256. U.N. Convention, *supra* note 6, arts. 5, 7.

257. *Id.* art. 5.

258. Brunee & Toopes, *supra* note 255, at 149.

259. *Id.* at 153. Article 7 states, "where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm *shall*, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of Article 5...to mitigate the harm and...discuss the question of compensation." U.N. Convention, *supra* note 6, art. 7.

260. Brunee & Toopes, *supra* note 255, at 159.

may already be in force.<sup>261</sup> Article 3 also provides that, "[n]otwithstanding the provisions of paragraph 1, parties to agreements referred to in paragraph 1, may where necessary, consider harmonizing such agreements with the basic principles of the present Convention"<sup>262</sup> and "Watercourse states may enter into one or more agreements hereinafter referred to as 'watercourse agreements,' which apply and adjust the provisions of the present Convention to the characteristics and uses of a particular international watercourse or part thereof."<sup>263</sup>

Article 3 also encourages state parties to consider harmonizing existing agreements with the basic principles of the Convention.<sup>264</sup> Scholars observe that a Convention has only a limited ability to change entrenched behavior, but the language of harmonization will be a potential catalyst for nations under social, environmental, and political pressures resulting from scarce resources.<sup>265</sup>

The U.N. Convention's call in article 3 for harmonization could align nicely with the language of intent in the 1944 Treaty. The first sentence of the Treaty's Preamble states that the U.S. and Mexican governments, "animated by the sincere spirit of cordiality and friendly cooperation which happily governs relations between them[, establish this Treaty]."<sup>266</sup> Article 2 of the Treaty articulates the intention to avoid difficulties resulting from physical changes and acknowledges the international dimension of the IBWC.<sup>267</sup> Article 24 addresses procedures for dispute resolution, discussion, and adjustment of differences, and application, where proper, of general or special agreements concluded for the settlement of controversies.<sup>268</sup> Last, but not least, article 25 of the Treaty provides the procedural mechanism by which the IBWC can incorporate new material by issuing Minutes.<sup>269</sup>

Some scholars have criticized the Convention's harmonization language in Article 3. The permissive language of "may harmonize" suggests to some observers that there is no firm obligation to harmonize.<sup>270</sup> Furthermore, the same critics point to the "apply and

---

261. U.N. Convention, *supra* note 6, art. 3(1).

262. *Id.* art. 3(2).

263. *Id.* art. 3(3).

264. McCaffrey & Sinjela, *supra* note 240, at 98.

265. Nussbaum, *supra* note 212, at 48.

266. 1944 Treaty, *supra* note 4, pmbl.

267. *Id.* art. 2.

268. *Id.* art. 24.

269. *Id.* art. 25.

270. Ellen Hey, *The Watercourse Convention: To What Extent Does It Provide a Basis for Regulating Uses of International Watercourses?*, 7 REV. OF EUR. COMMUNITY & INT'L ENVTL. LAW 291, 292 (Nov. 1998); see also Press Release, General Assembly Adopts Convention on

adjust" language in article 3(3), which arguably allows parties to change the language of the Convention without adhering to minimum standards.<sup>271</sup> Nevertheless, it seems just as feasible that the "apply and adjust" provision allows states to adapt their application of the Convention to the particularities of their unique watercourse regime. Working cooperatively to apply the Convention's modern international principles to the 1944 Treaty would be a constructive means for the United States and Mexico to energize the Treaty and to give it a proactive, prospective policy dimension.

## 2. *The Framework's Focal Point: Balancing Articles 5 and 7*

A central debate in the protracted deliberations of the [International Law] Commission [on the Convention] was whether to give precedence to the doctrine of equitable utilization with its long established roots in water quantity allocation or the rule of 'no significant harm' with its transboundary pollution origins.<sup>272</sup>

Article 5 of the Convention, which calls for equitable and reasonable utilization of a watercourse, and article 7, which requires states to take all appropriate measures to prevent causing of significant harm, were closely linked throughout the negotiations.<sup>273</sup> During deliberations, the United States stated that all articles subsequent to article 5 should be subordinated to the rule of equitable and reasonable utilization articulated in 5(1).<sup>274</sup> In contrast, after the United Nations adopted the Convention, key participants concluded that the no-harm rule of article 7 would not automatically override the principle of equitable utilization if they should come into conflict.<sup>275</sup> The drafters,

---

Law of Non-Navigational Uses of International Watercourses: Comments of Ethiopia Delegation, GA/9248, U.N. General Assembly Plenary (May 21, 1997).

271. Hey, *supra* note 270, at 293.

272. Albert E. Utton, *Which Rule Should Prevail in International Water Disputes: That of Reasonableness or That of No Harm*, 36 NAT. RESOURCES J. 635, 635 (1996).

273. McCaffrey & Sinjela, *supra* note 240, at 100.

274. ILC 45th Session, *supra* note 215, at 172. Interestingly, in 1982, prior to the introduction of the U.N. Convention, the U.S. Supreme Court noted the "reciprocal nature" of the relationship existing between individual states within the United States sharing transboundary water. The Court rejected giving priority to the place of origin of the waters. *Colorado v. New Mexico*, 459 U.S. 176, 188 (1982). The *Colorado v. New Mexico* Court stated, "equitable utilization is a flexible doctrine which calls for the exercise of an informed judgment on a consideration of many factors." *Id.* at 183. Later, in 1995, the U.S. Supreme Court, in *Kansas v. Colorado*, 514 U.S. 673 (1995), a case where upper riparian Colorado was being harmed by lower riparian Kansas's increased water use, affirmed the flexibility of the principle of equitable utilization.

275. McCaffrey & Sinjela, *supra* note 240, at 101.

recognizing the potential tension, were able to change the language somewhat.<sup>276</sup> The duty in article 7 to "exercise due diligence" was replaced with a duty to "take all appropriate measures." Ultimately, the Convention does not expressly resolve these ambiguities. It is silent with respect to which article will trump the other in the event of a conflict.<sup>277</sup>

Despite these ambiguities, the IBWC should consider incorporating articles 5 and 7 of the Convention into the conceptual network of the 1944 Treaty. Doing so would provide quick reference points for more efficient decision making during times of crisis in the Rio Grande network. The Convention's articles 5 and 7 eliminate the possibility that one article would be prioritized over the other.<sup>278</sup> Read together, the articles require that equitable utilization by one watercourse state be modified by efforts to prevent significant harm to another state. The Convention, therefore, provides a starting place for twenty-first century watercourse dispute resolution. This modern balancing requires that watercourse states "come to the table" realizing that adjustment and compromise will play a significant role in the settlement of disputes.

Article 5's equitable utilization principle, in particular, would be an instructive guiding principle when viewing the Rio Grande river basin as an integrated network. Because the principle of equitable utilization de-emphasizes sovereign borders, it would help policy makers focus on the best use of an asset given the priorities of need throughout the entire network. A twenty-first century Minute could emphatically state overarching principles without resorting to formulas or balance sheets. For example, in periods of "extraordinary drought" affecting one section of the watercourse network, allocations could be prioritized on a system-wide basis.

Such dependence upon equitable utilization as a governing principle must be accompanied by a heightened ability of all parts of the network to coordinate widespread data. Equitable utilization places high value on open access to all water storage facilities throughout the Rio Grande network and a free flow of information throughout the network's levels.<sup>279</sup> Article 7's principle of no significant harm,

---

276. *Id.* at 100, 102.

277. Hey, *supra* note 270, at 294. Professor Hey's criticism betrays preference for a firm set of obligatory rules (model rules) as opposed to a framework. This criticism loses sight of the opportunity that the framework Convention presents to states such as the United States and Mexico that have an existing Treaty and that would almost certainly not adopt a new set of structured rules without undergoing a period of transition and adjustment.

278. Bruneel & Toopes, *supra* note 255, at 151.

279. Citizen fora would be instrumental in this process as well. Recent U.S. IBWC Commissioner Carlos M. Ramirez (2001-2003) moved the U.S. section of the IBWC toward

meanwhile, would be an added refinement upon the network approach, forcing continual balancing of the system's reserves and deficits in the context of current conditions. Under this approach, *any harm*, no matter how small, would trigger an equitable utilization analysis by the IBWC.

### 3. Equitable Participation: Article 5(2)

The Convention also calls for equitable *participation* in addition to equitable *utilization*. The principle of equitable participation is articulated in the second paragraph of article 5, which provides, "Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner."<sup>280</sup> The affirmative nature of equitable participation is viewed as a duty to actively protect and develop a watercourse. Equitable participation is necessary in an international watercourse regime in order to produce maximum benefits while maintaining an equitable allocation of uses and also affording protection to the watercourse itself.<sup>281</sup> The concept of equitable participation in international watercourse law recognizes that some adjustments or accommodations are required in order to preserve each watercourse state's equality of right.<sup>282</sup> The doctrine has received indirect support from the International Court of Justice.<sup>283</sup> Equitable participation requires a proactive contribution from all parties to a dispute.<sup>284</sup>

---

greater public participation. "He expanded the number of Citizen Forum Boards from one to five. These Boards conduct regular public meetings in various border cities to promote the exchange of information between the U.S. Section of the IBWC and the public, greatly increasing the visibility of the IBWC." *IBWC Salutes Commissioner Ramirez*, BOUNDARY MARKER (U.S. Section of the IBWC, El Paso, Tex.), Winter 2003/2004. Citizen fora would ideally be extended cross-border, connecting Mexican communities to U.S. communities along the Rio Grande. The IBWC website identifies a singular characteristic of the Rio Grande boundary region: it has 15 pairs of sister cities sustained by agricultural import/export service and tourism and, in recent years, by a growing manufacturing sector. The "borderlands population was approximately 10.6 million in 1995. *The International Boundary and Water Commission, Its Mission, Organization and Procedures for Solution of Boundary and Water Problems*, at [http://www.ibwc.state.gov/html/about\\_us.html](http://www.ibwc.state.gov/html/about_us.html) (last visited Mar. 30, 2004).

280. McCaffrey & Sinjela, *supra* note 240, at 99.

281. ILC 46th Session, *supra* note 238, at 97.

282. Report of the International Law Commission on the Work of Its Thirty-Fourth Session, II Y.B. INT'L L. COMM'N 75, U.N. Doc. A/37/10.

283. *Id.*; see also *Judgment in Case Concerning the Gabčíkovo-Nagymaros Project*, 37 I.L.M. 162, 240 (1998) [hereinafter *Gabčíkovo-Nagymaros Judgment*].

284. Taylor, *supra* note 134. See also *Water Shortages Cause Problems*, LATIN AMERICAN NEWSLETTERS, LATIN AMERICA REGIONAL REPORTS: MEXICO & NAFTA, THE WATER DISPUTE, June 4, 2002, at 2 (on file with author).

## B. A Specific Example of the Application of the Framework Convention to a Modern International Watercourse Dispute

The International Court of Justice (I.C.J.) recently had the opportunity to employ the Convention's framework in a transboundary water dispute. In 1998, the I.C.J. issued a decision in the *Case Concerning the Gabčíkovo-Nagymaros Project*.<sup>285</sup> In its decision, the I.C.J. "creatively reinterpreted the Convention to emphasize the parties' binding obligations to make joint management decisions and" as a result "strictly limited their 'exit options.'"<sup>286</sup> The case involved a dispute between Hungary and then-Czechoslovakia over the construction and the operation of a system of locks on the Danube River. Emphasizing how treaties create long-term obligations between parties, the Court noted that, especially in recent times, international law is built layer-by-layer, always looking to past experiences, and using an interdisciplinary approach.

In *Gabčíkovo*, the I.C.J. held that (1) Hungary should not have suspended its construction of a dam thus interrupting a joint construction project with Czechoslovakia,<sup>287</sup> (2) Czechoslovakia was wrong to have responded to Hungary's suspension by building a new project that diverted the Danube's waters onto their property,<sup>288</sup> and (3) there had been "new peremptory norms of environmental law that had emerged since the two countries had signed their original Treaty: *Treaty Concerning the Construction and Operation of the Gabčíkovo-Nagymaros System of Locks* in 1977"<sup>289</sup> and that these "new principles should be taken into consideration in any future application of their Treaty."<sup>290</sup> The *Gabčíkovo-Nagymaros* case demonstrates an application of the developing principles of environmental law, especially the law relating to transboundary watercourses.<sup>291</sup>

The *Gabčíkovo-Nagymaros* court specifically referred to the Convention as an authoritative statement of the contemporary law of

---

285. *Gabčíkovo-Nagymaros Judgment*, *supra* note 283.

286. Bradley C. Karkkainen, *Sharing Transboundary Resources: International Law & Optimal Resource Use*, 18 CONN. J. INT'L L. 389, 392 (2002) (book review); *Gabčíkovo-Nagymaros Judgment*, *supra* note 283, at 187-96.

287. *Gabčíkovo-Nagymaros Judgment*, *supra* note 283, at 187 ¶ 59.

288. *Id.* at 190 ¶ 78.

289. *Id.* at 221. *Treaty Concerning the Construction and Operation of the Gabčíkovo-Nagymaros System of Locks*, Sept. 16, 1977, Hung.-Czech. Rep. 1109, U.N.T.S. 236, 32 I.L.M. 1247 (1993) [hereinafter *Gabčíkovo-Nagymaros Treaty*].

290. *Gabčíkovo-Nagymaros Judgment*, *supra* note 283, at 195-96 ¶¶ 104, 107.

291. *Id.*

international watercourses.<sup>292</sup> The court then adapted the framework language of the Convention to the existing Treaty.<sup>293</sup> The I.C.J. first focused on the continuing obligations of the parties and how those obligations are by nature always evolving to take into consideration current standards.<sup>294</sup> Secondly, while upholding the binding nature of treaties, the court then interpreted and applied a number of other principles of international watercourse law.<sup>295</sup>

In particular, the court relied on the key principles of equitable utilization and of no significant harm from the Convention (articles 5 and 7) and also pointed to the principle requiring ongoing monitoring and information exchange (article 14).<sup>296</sup> The court described the principle of equitable participation (article 5(2)) as a "cardinal value" in international water law.<sup>297</sup> The court specifically noted the Convention's article 20 (which addresses ecological concerns) as having potential applicability to international watercourse relations.<sup>298</sup>

The *Gabcikovo-Nagymaros* decision demonstrates that the Convention has established currency as a codification of international watercourse law at the turn of the twenty-first century and is a useful reference in international watercourse dispute resolution. The Convention gathers under its umbrella an updated restatement of long-standing principles and incorporates new concepts that emphasize long-term strategies and interconnectedness. The IBWC, through reference to the Convention, could directly benefit from this condensed version of the modern principles of international watercourse law. A twenty-first

---

292. Wouters, *supra* note 208, at 12; *Gabcikovo-Nagymaros* Judgment, *supra* note 283, at 195-96.

293. *Gabcikovo-Nagymaros* Judgment, *supra* note 283; *Gabcikovo-Nagymaros* Treaty, *supra* note 289.

294. *Gabcikovo-Nagymaros* Judgment, *supra* note 283, at 200.

295. *Id.* at 221.

296. *Id.* at 213-14, 220, 241.

297. *Id.* at 241.

298. *Id.* at 249-53. The court also reviewed a variety of other international watercourse principles, such as the principles of good faith and cooperation and the principles of intergenerational equity and contemporaneity. *Id.* at 213-15. Intergenerational equity was developed fully by EDITH BROWN WEISS, FAIRNESS TO FUTURE GENERATIONS, INTERNATIONAL LAW, COMMON PATRIMONY AND INTERGENERATIONAL EQUITY 127 (1989). Intergenerational equity has evolved from Principle 2 of the Stockholm Declaration, from the Brundtland Commission Report, and from Principle 3 of the Rio Declaration, as discussed in Allen L. Springer, *International Environmental Law After Rio: The Continuing Search for Equity*, 7 ETHICS & INT'L AFF. 115, 121 (1993). The intergenerational equity principle states that each generation must handle natural resources with an eye to the needs of and the consequences to future generations. The principle of contemporaneity provides the standard that addresses the growing, continuing need for awareness of the risks that mankind faces and that coerce the development of new norms and standards.



century Minute that referred to the Convention would enrich future discussions between the United States and Mexico with proactive language as an alternative to the past practice of using Minutes reactively to deal with unanticipated and ongoing problems.

## VI. CONCLUSION

In a new policy-oriented Minute, the IBWC should focus upon harmonizing the 1944 Treaty structure and language with the Convention's principles.<sup>299</sup> Specifically, the principles of cooperation and of equitable and reasonable utilization and no significant harm should be emphasized equally. The positive effect of restating guiding principles of international watercourse law would prove strategic in that it would allow the IBWC to give a new dimension to its international status.

While in the past the IBWC's international status has been viewed solely through the lens of the U.S. and Mexican sovereign interests, in 2004 the IBWC's international status necessitates its participation in a globally integrative decision-making arena. The IBWC has been characterized as an institutional dinosaur.<sup>300</sup> This criticism points to the IBWC as an agent of central governments in a time of decentralized solutions.<sup>301</sup> A new Minute will effectively move the IBWC into the twenty-first century.

The IBWC seems to recognize its need for an updated context for its decision making. IBWC Minute 304 identified the Border Environmental Cooperation Commission as a valuable forum for gauging public needs and demands related to border water management.<sup>302</sup> The IBWC has also referred to a "new strategic plan."<sup>303</sup> This "plan" emphasizes a need to provide environmentally sensitive, timely, and fiscally responsible boundary and water services while addressing issues of sustainable development.<sup>304</sup> While the IBWC's heightened acuity to issues of modern concern is notable, the organization currently lacks a structural policy commitment to the integration and balancing of the wide variety of issues that affect an international watercourse in the twenty-first century. The historical practice of focusing upon centralized sovereignty looms dangerously. Yet, that danger must now be placed in a sharpened,

---

299. The Convention's article 3 encourages harmonization: "Parties to existing water-course agreements may consider, where necessary, harmonizing such agreements with the basic principles of the present Convention." (U.N. Convention, *supra* note 6, art. 3(2)).

300. Mumme, *supra* note 56.

301. *Id.*

302. IBWC, MINUTE 304, *supra* note 119.

303. Mumme, *supra* note 56, at 7.

304. *Id.*

modern perspective. There have been attempts to address this new variety of emerging concerns by simply mentioning orbital organizations, such as the Commission for Environmental Cooperation,<sup>305</sup> the Border Environmental Cooperation Commission,<sup>306</sup> and the North American Development Bank.<sup>307</sup> The IBWC should effectively bridge its tradition with its future by referring to and incorporating the available modern language of the Convention, thereby adding the necessary link to connect to a variety of orbital organizations. The Convention's framework provides scaffolding that can effectively facilitate the modernization of the IBWC.

In the context of the Rio Grande water crisis in 2003 and 2004, the United States and Mexico each play roles of both an upstream and a downstream state within an international watercourse system. Both countries have existing obligations to provide water to the other. Conduct in both the United States and Mexico has implications for each country on the water supply and water quality of both. The physical integration of the Rio Grande river basin needs to be formally recognized in the decisions of the IBWC. Through an institutional commitment to the international language and principles of the Convention, the IBWC could take a proactive step to problem solving in the future. Referring to and incorporating the Convention's principles would be consistent with U.S. and Mexican support for the Convention. The addition of a new policy-oriented twenty-first century Minute would exemplify institutional imagination and would serve as an important example to the international community.

---

305. Established through the North American Agreement on Environmental Cooperation (Environmental Side Agreement), Sept. 13, 1993, U.S.-Can.-Mex., 32 I.L.M. 1480, to address regional environmental concerns.

306. Agreement Concerning the Establishment of a Border Environment Cooperation Commission (BECC) and a North American Development Bank (NADBANK Agreement), Nov. 16, 1993, U.S.-Mex., 32 I.L.M. 1545.

307. *Id.*