Volume 8 | Issue 2 Article 4

1997

Comparison of the Helsinki Rules to the 1994 U.N. Draft Articles: Will the Progression of International Watercourse Law Be Dammed

Michelle R. Sergent

COMPARISON OF THE HELSINKI RULES TO THE 1994 U.N. DRAFT ARTICLES: WILL THE PROGRESSION OF INTERNATIONAL WATERCOURSE LAW BE DAMMED?

I. INTRODUCTION

Waters of the world do not respect manmade boundaries. Although many bodies of water rest solely within a single nation, over 200 rivers, lakes and aquifers defy man's order and cross his boundaries.[1] These surface waters that cross national boundaries are commonly known as international watercourses.[2]

1. *See* Pamela LeRoy, *Troubled Waters: Population and Water Scarcity*, 6 COLO. J. INT'L ENVTL. L. & POL'Y 299, 317 (1995) (citing WORLD RESOURCES INSTITUTE, WORLD RESOURCES 1992-93 at 171 (1992) [hereinafter RESOURCES 1992-93]). The Nile River is a prime example of a waterway that crosses national boundaries. The Nile, the second longest river in the world, traverses nine countries: Egypt, Sudan, Ethiopia, Zaire, Uganda, Kenya, Tanzania, Rwanda and Burundi. *See* Charles O. Okidi, *Legal and Policy Regime of Lake Victoria and Nile Basins*, 20 INDIAN J. INT'L L. 395, 395 (1980).

2. *See Report of the International Law Commission on the work of its Forty-Ninth Session*, UN GAOR, 49th Sess., Supp. No. 10, at 199, at art. 2, U.N. Doc. A/49/10 (1994) [hereinafter *1994 ILC Report*]. Article 2(a) of the 1994 U.N. Draft Articles defines international watercourse as "a watercourse, parts of which are situated in different States . . . ." *Id.* at art. 2(a). A watercourse is "a system of surface and underground waters constituting by virtue of their physical relationship a unitary whole and flowing into a common terminus." *Id.* at art. 2(b); *see also* J.G. LAMMERS, POLLUTION OF INTERNATIONAL WATERCOURSES 18-19 (1984). Lammers defines an international watercourse as "any river - including the eventual estuary up to the baseline from which the territorial sea is measured - lake or canal which separates or passes through the territories of two or more States." *Id.* This definition is similar to the definition in Article 1 of the 1974 Draft European Convention and the 1980 Draft European Convention. *See id.* at 19 n.1.

The system of waters crossing national boundaries are known as international drainage basins. *See The Helsinki Rules on the Uses of Waters of International Rivers*, art. II, Int'l L. Assoc., Rep. of the 52d Conf., adopted at Helsinki, Aug. 20, 1966 [hereinafter *Helsinki Rules*]. An international drainage basin is "a geographical area extending over two or more States determined by the watershed limits of the system of waters, including surface and underground waters, flowing into a common terminus." *Id.* Lammers defines the waters of an international drainage basin as "the interconnected system of rivers, lakes, canals or marshes, etc., the waters of which tend to flow into a common terminus and which extends over two or more States." LAMMERS, *supra*, at 19. The drainage basin concept includes "the diffused surface water and groundwater which flows into the common terminus." *Id.* Lammers based this definition on the following three sources: (1) Helsinki Rules, art. II; LUDWIK A. TECLAFF, THE RIVER BASIN IN HISTORY AND LAW 7-14 (The Hague: Nijhoff, 1967); (2) Fresh Water Pollution Control in Europe 26-28, Council of Europe Doc. 1965 (1966); and (3) Encyclopedia Britannica. *See id.* at 20 n.1.

The concepts of international watercourses and international drainage basins are similar but not identical. For example, the concept of the international water-

The use of an international watercourse is a declaration of State sovereignty under customary international law.[3] Under principles of customary international law, a State has the power to regulate its own natural resources through domestic legislation.[4] A State can regulate water within its territory to provide optimum distribution for human, environmental and technological needs.[5]

---

course would not cover pollution resulting from the discharge of pollutants in many States that were not riparian to the same international watercourse. *See id.* at 20-21. A State is riparian if water flows through it or across it. *See* Joseph W. Dellepenna, *Treaties as Instruments for Managing Internationally-Shared Water Resources: Restricted Sovereignty vs. Community of Property*, 26 CASE W. RES. J. INT'L L. 27, 35 (1994) [hereinafter Dellapenna, *Treaties as Instruments*]. The concept of the international drainage basin would cover this situation because it applies to the pollution of the whole interconnected water system and not just to a single river. *See* LAMMERS, *supra*, at 19.

3. *See* Indus Waters Treaty, Sept. 19, 1960, Pak.-India, art. XI(2), 419 U.N.T.S. 125 (1962). Sovereignty is defined as "freedom from external control." WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 2179 (16th ed. 1971). State sovereignty means that every State is entitled to exercise exclusive jurisdiction within its own territory. *See* ALEXANDRE KISS & DINAH SHELTON, INTERNATIONAL ENVIRONMENTAL LAW 119 (1991). A State is free to regulate its own natural resources without associating another State. *See* Lake Lanoux Arbitration (France v. Spain), 12 R.I.A.A. 281 (1957). When a State uses an international watercourse, it essentially claims its right to use its territory independent of other States. *See id.*

4. The United Nations Charter and principles of international law give States "the sovereign right to exploit their own resources pursuant to their own environmental policies. . . ." Xue Hanqin, *Relativity in International Water Law*, 3 COLO. J. INT'L ENVTL. L. & POL'Y 45, 51 (1992) (citing Stockholm Declaration on the Human Environment, Principle 21, U.N. Doc. A/CONF.48/14 (1972), *reprinted in* 11 I.L.M. 1416 (1972) [hereinafter Stockholm Declaration]). *See* Lake Lanoux Arbitration, *supra* note 3, at 281 (holding that State has right to initiate development of its own natural resources).

In the United States, the federal government has the ability to regulate the nation's waters through its Commerce Clause powers. *See* U.S. CONST. art. I, § 8, cl. 3. Because the Constitution grants Congress the power to regulate interstate commerce, Congress can regulate all waters that are susceptible to use in interstate or foreign commerce. *See* 33 C.F.R. § 328.3(a) (1996). For example, in 1972, the United States Congress enacted the Clean Water Act (CWA). *See* Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816 (1972) (codified as amended at 33 U.S.C. §§ 1251-1376 (1994)). The CWA was designed to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." 33 U.S.C. § 1251.

5. *See generally* Kevin P. Scanlan, Note, *The International Law Commission's First Ten Draft Articles on the Law of the Non-Navigational Uses of International Watercourses: Do They Adequately Address All the Major Issues of Water Usage in the Middle East?*, 19 FORDHAM INT'L L.J. 2180, 2180-87 (1996) (describing uses and importance of water). Generally worldwide, agricultural use accounts for 69% of withdrawal from renewable freshwater supplies, while industry and energy production account for 23% and household use only accounts for 8%. *See* LeRoy, *supra* note 1, at 303 (citing RESOURCES 1992-93, *supra* note 1, at 328-29). However, water use varies according to a State's economic development, climate and population size. *See id.* For example, industry and energy production claim less than 5% of the freshwater use in many developing countries but claim 85% of freshwater use in developed

Although States have the sovereign right to exploit their natural resources, they also have the responsibility to ensure that actions taken within their national boundaries do not injure the environment of other States.[6] Because the use of international waters in one State affects the quality and quantity of water in another, regulation of the use of water is essential to minimize injury to all States sharing a water supply.[7]

States regulate international watercourses through bilateral and multilateral agreements.[8] Because all watercourses have their

---

countries such as Belgium and France. *See id.* (citing RESOURCES 1992-93, *supra* note 1, at 328-29).

6. *See* Hanqin, *supra* note 4, at 51 (citing Stockholm Declaration, *supra* note 4, at Principle 21). Principle 21 of the Stockholm Declaration declares that:

> [s]tates have, in accordance with the Charter of the United Nations and the principle of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Stockholm Declaration, *supra* note 4, at 1420. The right of a sovereign State to use its natural resources must be balanced with man's right to live in an environment of a "quality that permits a life of dignity and well-being . . . ." *Id.* at 1417. States should not enact environmental policies that "hamper the attainment of better living conditions for all . . . ." *Id.* at 1419.

7. *See* Hanqin, *supra* note 4, at 47; Ludwik A. Teclaff, *Fiat or Custom: The Checkered Development of International Water Law*, 31 NAT. RESOURCES J. 45, 45-46 (1991) [hereinafter CHECKERED DEVELOPMENT]. In an interdependent water system, damage done to water at one point is naturally carried to other points. *See* Teclaff, *supra*, at 45. An example of this is the Rhine River "where 'waste salts from the Alsatian region in France, industrial pollution from around Basel in Switzerland, and German industry in the various tributaries of the Rhine . . .' all have become a critical problem of the Netherlands and Belgium." Charles O. Okidi, *"Preservation and Protection" Under the 1991 ILC Draft Articles on the Law of International Watercourses*, 3 COLO. J. INT'L ENVTL. L. & POL'Y 143, 147 (1992) (citing Robert E. Stein, *The Potential of Regional Organizations in Managing Man's Environment, in* LAW, INSTITUTIONS, AND THE GLOBAL ENVIRONMENT 253, 265 (John Lawrence Hargrove ed., 1972)).

A State that builds a dam within its own territory can cause damage to the environment of other States. *See id.* A dam constructed in a downstream State can cause a backwater effect resulting in the flooding of an upstream State. *See id.* For example, the Aswan High Dam in Egypt created a backwater effect which flooded Wadi Halfa in Sudan. *See id.* Moreover, the increased use of water at one point of an interdependent water system necessarily decreases the possible use of water at other locations. *See* U.N. DEP'T OF INT'L ECONOMICS & SOCIAL AFFAIRS, MANAGEMENT OF INTERNATIONAL WATER RESOURCES: INSTITUTIONAL AND LEGAL ASPECTS at 12, U.N. Doc. ST/ESA/5, U.N. Sales No. E.75.II.A.2 (1975).

8. *See* LAMMERS, *supra* note 2, at 362-63. States are:

> expected to negotiate with one another agreements - sometimes on the basis of certain general concepts such as, e.g., "sovereign equality", "mutual interest", "respect for the interests of the other riparian State" or "the coherence of the waters" - thereby laying down the rights and duties of the riparian States while taking into account the circumstances of each particular case.

own unique attributes, a universal set of mandatory watercourse rules could not encompass the needs of all of the States sharing such watercourses.[9] Thus, states require the freedom to craft their own agreements which can be tailored to individual watercourses.[10] To provide States with guidelines for forming their own agree-

---

Id.

States have developed more than 300 treaties which specifically regulate international water uses and 2,000 treaties which have some provisions related to water use. *See* LeRoy, *supra* note 1, at 319. States have also formed commissions to manage international watercourses. *See id.* at 320-21. For example, the United States formed joint commissions to settle water disputes with its neighboring States. *See id.* Specifically, the United States and Canada formed the International Joint Commission (IJC) in 1909, and the United States and Mexico formed the International Boundary and Water Commission (IBWC) in 1945. *See id.* at 320-21 & n.77. For a full discussion of the IBWC, see Stephen P. Mumme & Scott T. Moore, *Agency Autonomy in Transboundary Resource Management: The United States Section of the International Boundary and Water Commission, United States and Mexico*, 30 NAT. RESOURCES J. 661 (1990).

9. *See* BONAYA ADHI GODANA, AFRICA'S SHARED WATER RESOURCES 66 (1985). International watercourses have characters of their own. *See id.* Each international watercourse crosses different forms of land in different nations and vary in shape, length, width and depth. *See id.* The Danube River represents a unique international watercourse. *See id.* The Danube is over 2,850 kilometers in length and constitutes the second largest river in Europe. *See* Joanne Linnerooth, *The Danube River Basin: Negotiating Settlements to Transboundary Environmental Issues*, 30 NAT. RESOURCES J. 629, 631 (1990). The Danube crosses through many States including West Germany, Austria, former Czechoslovakia, Hungary, former Yugoslavia, Rumania, Bulgaria and the former Soviet Union. *See id.* The following description of the Danube River clearly displays the intricacies of international watercourses:

> [n]ear its source, the Danube has the character of a mountain river flowing through West Germany and Austria (passing Regensburg and Vienna) into [former] Czechoslovakia, where at Bratislava it forms the border between [former] Czechoslovakia and Hungary. Flowing south through the Great Hungarian Plain (passing Budapest), it turns eastward into [former] Yugoslavia, (passing Belgrade) and later forms the border between [former] Yugoslavia and Rumania with the famous narrows at the Iron Gate. The lower, marshy section of the river serves again as a geographic boundary on the long stretch between Rumania and Bulgaria, where shortly before the Black Sea it separates Rumania and the former Soviet Union, and empties into a spectacular delta.

Id.

10. *See* Godana, *supra* note 9, at 66. In forming international agreements, States need leeway to utilize different concepts to adapt to the different factual contexts that watercourses present. *See* Hanqin, *supra* note 4, at 49. A spokesperson from Austria commented on the importance of individually tailoring agreements by stating that:

> the treaties on water management concluded by Austria with the neighboring States are drafted in terms of border watercourses rather than geographical or hydrological drainage areas. Similarly, the Draft European convention for the protection of international watercourses against pollution . . . has to be restricted to "international watercourses" because of legal, practical and political difficulties.

Id. at 49 (quoting [1976] 2(1) Y.B. Int'l L. Comm'n at 152, 158, 159, U.N. Doc. A/CN.4/294). For additional examples of varying concepts of watercourses, see *id.* at n.12 and *supra* note 2.

ments, the International Law Association (ILA) and the International Law Commission (ILC) studied the aspects of international watercourse law.[11]

The ILA, a non-governmental association, produced the Helsinki Rules on the Uses of the Waters of International Rivers (Helsinki Rules or Rules) in 1966.[12] These Rules provide comprehensive guidelines for the regulation of watercourses; however, the Rules lack enforcement power, because the ILA is a non-governmental agency.[13] The ILC, an organ of the United Nations, developed the 1994 U.N. Draft Articles on the Law of the Non-Navigational Uses of International Watercourses (1994 U.N. Draft Articles or Articles).[14] These Articles provide a potential framework for all States to follow when regulating international watercourses, but the Articles' fate is undetermined because the United Nations has yet to act on them.[15]

This Note highlights the strengths and weaknesses of the Helsinki Rules and the 1994 U.N. Draft Articles. Part II of this Note sets forth the principles of customary international law of shared watercourses.[16] Part III gives a brief background on the ILA's con-

---

11. *See* Stephen McCaffrey, *International Organizations and the Holistic Approach to Water Problems*, 31 NAT. RESOURCES J. 139, 141 (1991) [hereinafter McCaffrey *Holistic Approach to Water Problems*]; Stephen C. McCaffrey, *Introduction* to *International Law Commission Report on the Draft Articles*, 30 I.L.M. 1554, 1555 (1991) [hereinafter McCaffrey, *Report on the Draft Articles*].

12. *See* McCaffrey, *Holistic Approach to Water Problems*, *supra* note 11, at 141; *see (generally)* Helsinki Rules, *supra* note 2. For a discussion of the development of the Helsinki Rules, see *infra* notes 53-62 and accompanying text.

13. *See* Joseph W. Dellapenna, *Designing the Legal Structures of Water Management Needed to Fulfill the Israeli-Palestinian Declaration of Principles*, 7 PALESTINE Y.B. OF INT'L L. 63, 80 (1992/1994) [hereinafter Dellapenna, *Designing the Legal Structures*].

14. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 38; *see also 1994 ILC Report*, *supra* note 2. For a discussion of the development of the 1994 U.N. Draft Articles, see *infra* notes 63-77 and accompanying text.

15. *See* Draft Articles on the Law of the Non-Navigational Uses of International Watercourses, U.N. Doc. A/RES/49/52 (1994). The General Assembly intended that:

> at the beginning of its fifty-first session of the General Assembly, the Sixth Committee shall convene as a working group of the whole, open to States Members of the United Nations or members of specialized agencies, for three weeks from 7 to 25 October, 1996 to elaborate a framework convention on the law of the non-navigational uses of international watercourses on the basis of the draft articles adopted by the International Law Commission in the light of the written comments and observations of States and views expressed in the debate at the forty-ninth session . . . .

Id.

16. For a discussion of the principles of customary international law of shared watercourses, see *infra* notes 21-52 and accompanying text.

tributions to international watercourse law.[17] Next, Part IV outlines the ILC's progress on international watercourse law.[18] Part V provides a comparison between the Helsinki Rules and the 1994 U.N. Draft Articles, and Part VI engages in critical analysis of their underlying provisions.[19] Finally, Part VII concludes with an analysis of the Helsinki Rules and the 1994 U.N. Draft Articles and the potential impact that the 1994 U.N. Draft Articles could have on the international community.[20]

II. CUSTOMARY INTERNATIONAL LAW OF SHARED WATERCOURSES

A. Claims Regarding International Watercourses

Since ancient times, civilizations have struggled to control water supplies and overcome disputes regarding shared watercourses.[21] Throughout the centuries, civilizations have claimed the right to use watercourses which are found entirely within their territory or which traverse their national boundaries.[22] Unfortunately, the ideal use of a watercourse by one State often clashes with an-

17. For a discussion of the ILA's contributions to international watercourse law, see *infra* notes 53-62 and accompanying text.

18. For a discussion of the ILC's progress on international watercourse law, see *infra* notes 63-77 and accompanying text.

19. For a comparison of the Helsinki Rules and the 1994 U.N. Draft Articles, see *infra* notes 78-157 and accompanying text. For a critical analysis of their provisions, see *infra* notes 158-208 and accompanying text.

20. For the final analysis and the impact that the 1994 U.N. Draft Articles could potentially have on the international community, see *infra* notes 209-24 and accompanying text.

21. *See* Eyal Benvenisti, *Collective Action in the Utilization of Shared Freshwater: The Challenges of International Water Resources Law*, 90 AM. J. INT'L L. 384, 385 (1996). Civilizations have recognized that water is an essential element for the advancement of society. *See* LUIS V. CUNHA ET AL., MANAGEMENT AND LAW FOR WATER RESOURCES 10 (1977). "In all great ancient societies, Sumer and Assyria in Mesopotamia, pharaonic Egypt, the Inca Empire of Peru, and China and India, the taming of rivers was the catalyst of their evolution." Benvenisti, *supra*, at 385. "[T]he harnessing of rivers for large-scale irrigation" brought about "the emergence of highly developed, centrally controlled communites." *Id.* (citing KARL A. WITTFOGEL, ORIENTAL DESPOTISM: A COMPARATIVE STUDY OF TOTAL POWER 8 (1957)). Other examples of early civilizations utilizing rivers include the ancient societies of the Nile, Tigris-Euphrates and Yellow Rivers who manipulated water flow for agricultural purposes. *See* TECLAFF, *supra* note 2, at 15-23.

22. *See* LeRoy, *supra* note 1, at 300. States have engaged in both regional and international disputes involving water sources. *See id.* For example, domestic tension has arisen in the United States between urban and agricultural water users. *See id.* at 316. Furthermore, international conflicts over water sources have occurred frequently in the Middle East. *See generally* Sharif S. Elmusa, *Dividing Common Water Resources According to International Water Law: The Case of the Palestinian-Israeli Waters*, 35 NAT. RESOURCES J. 223 (1995) (describing Palestinian-Israeli conflict over reallocation of water rights).

other State's ideal use of that same watercourse.[23] These clashes of ideals have brought about conflict between States in their struggle for the use of water supplies.[24]

States have relied on various principles to claim their rights to a water supply.[25] Over the years, these principles have formed the customary international law of watercourses.[26] Customary international law develops from consistent state practice performed out of a sense of legal obligation (*opinio juris*).[27] States operate through a

23. *See* Scanlan, *supra* note 5, at 2194-2201 (discussing tension arising from shared watercourses in the Middle East). For example, Turkey, Syria and Iraq have all developed ambitious plans for the use of the Euphrates River. *See id.* at 2198 (citing Johnathan E. Cohen, Note, *International Law and the Water Politics of the Euphrates*, 24 N.Y.U.J. INT'L L. & POL. 502, 507 (1991); John Kolars, *Problems of International River Management: The Case of the Euphrates*, *in* INTERNATIONAL WATERS OF THE MIDDLE EAST 48, 83-84 (Asit K. Biswas ed., 1994)). The initiation of all of these plans would require 1.4 times the average flow of the river. *See id.* (citing American Society of International Law, Water Resources in the Middle East: Impact on Economics and Politics, Proceedings of the 80th Annual Meeting 249, 255 (1986)).

In 1973, Turkey built the Keban Dam while Syria built the Tabqa Dam. *See id.* (citing Aaron T. Wolf, *A Hydropolitical History of the Nile, Jordan and Euphrates River Basins*, *in* INTERNATIONAL WATERS OF THE MIDDLE EAST: FROM EUPHRATES-TIGRIS TO NILE 20, 29 (Asit K. Biswas ed., 1994)). These two dams reduced the flow of the river into Iraq by 80%. *See id.* at 2199 (citing WATER IN THE MIDDLE EAST: CONFLICT OR COOPERATION? 83, 93-94 (Thomas Naff & Ruth C. Matson eds., 1984) [hereinafter WATER IN THE MIDDLE EAST]).

24. For example, Israel, Jordan, Lebanon, Palestine and Syria have been in constant conflict over their rights to the Jordan River Valley. *See* Dellapenna, *supra* note 13, at 63-64. Controversy also reigns between France, the Netherlands, Switzerland and Germany who continuously argue over pollution in the Rhine River. *See* LeRoy, *supra* note 1, at 317.

25. *See generally* Teclaff, CHECKERED DEVELOPMENT, *supra* note 7 (describing development of principles of international watercourse law). For a discussion of the principles of international watercourse law, see *infra* notes 29-41 and accompanying text.

26. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 33-34. For a discussion of the acceptance or rejection of watercourse principles by the international community, see *infra* notes 42-47 and accompanying text.

27. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 33. Article 38 of the Statute of the International Court of Justice recognizes "international custom, as evidence of a general practice accepted as law . . . ." Statute of the International Court of Justice, June 26, 1945, 59 Stat. 1055, T.S. No. 993 3 Bevans 1179. For State practice to become international law, States must follow the practice out of a sense of legal obligation. *See* BARRY E. CARTER & PHILLIP R. TRIMBLE, INTERNATIONAL LAW 146 (2d ed. 1995) (citing RESTATEMENT (THIRD) OF FOREIGN RELATIONS LAW OF THE UNITED STATES § 102 cmt. c (1987) [hereinafter RESTATEMENT]).

In other words, the "[r]ecurrence of the usage or practice tends to develop an expectation that, in similar future situations, the same conduct or the abstention therefrom will be repeated." *Id.* at 144. When the expectation becomes both a right and an obligation acknowledged by States, it has achieved the status of international law. *See id.* If States follow a practice but feel legally free to disregard the practice, the practice does not constitute international law. *See id.* at 146 (citing RESTATEMENT § 102 cmt. c). For a discussion of the concept of *opinio juris*, see Jo Lynn Slama, *Opinio Juris in Customary International Law*, 15 OKLA. CITY U. L. REV. 603 (1990).

process of claim and counterclaim.[28] The only unanimously accepted claim of States regarding shared watercourses is that riparian States alone enjoy the legal right to use the water of a watercourse.[29]

Other claims and counterclaims that States assert often depend upon the geographical position of the riparian State along the watercourse.[30] Upper riparian States can assert a claim of "absolute territorial sovereignty."[31] These upper States claim they can use a watercourse in any manner regardless of the effect that their conduct has on other riparian States.[32] In response, lower riparian

28. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 33-34. Customary international law "is a constantly evolving process created by claim and counterclaim." William L. Schachte, Jr., *National Security: Customary International Law and the Convention on Law of the Sea*, 7 GEO. INT'L ENVTL. L. REV. 709, 711 (1995). For example, competing desires of claim and counterclaim developed the law of the sea. *See* William J. Aceves, *The Freedom of Navigation Program: A Study of the Relationship Between Law and Politics*, 19 HASTINGS INT'L & COMP. L. REV. 259, 262 (1996). The concept of State exercise of authority over the seas clashed with the competing concept of freedom of the seas. *See id.* These two concepts evolved into international principles that govern the law of the sea. *See id.*

29. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 35. If all of the affected riparian States consent, a non-riparian State may also use the water of a watercourse. *See id.* For a discussion of the conflicting claims of States regarding international watercourses, see *infra* notes 30-34 and accompanying text.

30. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 35. Neighboring riparian States have conflicting interests based on their geographical position. *See* Hanqin, *supra* note 4, at 47. Upstream riparian States will claim that they can use the river however they chose, and downstream riparian States will claim that upstream States cannot alter the quantity or quality of the water. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 35-36. Because neither State will accept the position of the other, the interests of the geographically advantaged upstream States must be balanced against the interests of the disadvantaged downstream States. *See* Hanqin, *supra* note 4, at 47.

31. *See* Hanqin, *supra* note 4, at 48. This concept is also known as the Harmon Doctrine. *See* KISS & SHELTON, *supra* note 3, at 119. In 1895, then U.S. Attorney General J. Harmon introduced the Harmon Doctrine during a dispute between the United States and Mexico over the diversion of water from the Rio Grande River. *See* 21 Op. Att'y Gen. 274-83 (1898). Harmon argued that as an upper riparian State, the United States had no obligation to Mexico under international law. *See id.* However, subsequent action by Attorneys General "reflects greater considerations for the Mexican side of this controversy." DAVID R. DEENER, THE UNITED STATES ATTORNEYS GENERAL AND INTERNATIONAL LAW 257 (1957).

32. *See* LAMMERS, *supra* note 2, at 361. Riparian States always try to utilize great amounts of water from a watercourse to exercise autonomy over its management. *See* J. BRUHACS, THE LAW OF NON-NAVIGATIONAL USES OF INTERNATIONAL WATERCOURSES 42 (1993). For example, in 1965, the Arab States commenced construction of a water project which would divert the flow of water to Israel by 35% because they wished to seize control of the Jordan River. *See* Wolf, *supra* note 23, at 20. Israel regarded this as an intrusion of its sovereignty and attacked the Arab States' waterworks. *See id.* at 25-26. Tension between Israel and the Arab States eventually escalated to war in 1967 which resulted in Israel obtaining control of the West Bank. *See id.* at 26, 31.

States may assert a claim of "absolute territorial integrity."[33] These lower States claim that a riparian State may not develop a portion of a watercourse if that development will alter the quality or quantity of the water available to other riparian States.[34]

The concept of "restricted sovereignty" represents the equilibrium between these two adverse claims.[35] This concept encompasses the theory of *sic utere tuo ut alienum non laedas* which permits a State to use a resource within its territory so long as the use does not injure another State.[36] "Restricted sovereignty" attempts "to avoid conflict by allocating available water among the several riparian states . . . ."[37]

---

33. *See* Hanqin, *supra* note 4, at 48. This theory is also known as "absolute integrity of the river." *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 35. This Note will refer to the theory as "absolute territorial integrity." "Absolute territorial integrity" supports the view that a State does not have to accept any detrimental change to its water regime, no matter how small the alteration. *See* LAMMERS, *supra* note 2, at 361.

34. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 35-36. States do not generally accept this theory. *See* LAMMERS, *supra* note 2, at 361. The 1933 Montevideo Declaration utilized the concept of "absolute territorial integrity" by requiring the prior consent of riparian States when injurious alterations to water sources were involved. *See id.* at 361-62. *See* Seventh International Conference of American States, Plenary Sessions, Minutes and Antecedents, Montevideo, 1933, at 114. However, this Declaration was based on doctrinal views and not on State practice. *See id.* at 362.

Two additional examples of the concept of "absolute territorial integrity" are Bolivia and Austria's claims made during disputes with neighboring States. *See id.* at 228, 289. In 1939, a dispute arose between Chile and Bolivia over the use of water of the Rio Lauca which flowed from Chile to Bolivia. *See id.* at 289. Chile, an upper riparian state, planned to divert water from the Rio Lauca to irrigate the Valley of Azapa. *See id.* Bolivia, a lower riparian State claimed that Chile could not do this, because the action would diminish Bolivia's water supply. *See id.*

In 1907, Austria wanted to divert the waters of several watercourses flowing into Bavaria for power production purposes. *See id.* at 228. Austria claimed that it could use the water in its territory in any manner. *See id.* Conversely, Bavaria claimed that Austria had to refrain from doing anything that would affect the quality or quantity of water available to it. *See id.*

35. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 36. The terms "restricted territorial sovereignty" and "restricted territorial integrity" are hybrids of the concepts of "absolute territorial sovereignty" and "absolute territorial integrity." *See* GODANA, *supra* note 9, at 40.

36. *See* Chapman v. Bennett, 169 N.E.2d 212, 214 (Ind. 1960) (defining term as common law maxim meaning "use your own property as not to injure others"). Some scholars believe that a State is allowed to use a watercourse which causes some harm to other States as long as the harm is not substantial. *See* LAMMERS, *supra* note 2, at 571. Substantial harm is something more than minor and insignificant harm. *See id.* at 363.

37. Dellapenna, *Treaties as Instruments*, *supra* note 2, at 37-38. River water must be allocated between riparian States to balance the conflicting interests of maintaining the river, maintaining and expanding the navigable waterway, assuring an adequate supply of water, protecting the water quality, preventing floods and preserving the river and its surroundings. *See* Linnerooth, *supra* note 9, at 633. One

In addition to claims based on geographical position, States sometimes claim that they have the right to use a watercourse in a particular way in light of the time at which they commenced a particular use.[38] This principle, known as "prior appropriation," ignores the status of States on the watercourse and focuses on which State first initiated its use of the watercourse.[39] "Prior appropriation" protects "*fully* the use which existed *prior in time*."[40] However, the principle only regulates the quantity of water *actually* used by a State and does not refer to the harm that a State may cause by diverting water from the watercourse.[41]

B. Internationally Accepted Principles

The concepts of "absolute territorial sovereignty" and "absolute territorial integrity" are not generally accepted norms of customary international law.[42] Rather, the international community as

---

way of balancing State interests is through the process of equitable utilization. *See* GODANA, *supra* note 9, at 50-51. Equitable utilization requires States to consider and evaluate the interests of the users of a watercourse to produce an equitable solution for all. *See id.* at 50, 55. For further discussion of equitable utilization, see *infra* notes 91-94 and accompanying text.

38. *See* LAMMERS, *supra* note 2, at 364. States justify their claims on the proposition that "the water in the rivers is not sufficient to meet the needs of all the riparians." GODANA, supra note 9, at 53. Because there is not enough water for all States to use as they please, riparian States argue that "he who first invests labor in a stream deserves its benefits." *Id.* at 53 (quoting S.C. Agrawal, *Legal Aspects of the Indo-Pakistan Water Dispute*, 21 SUP. CT. OF INDIA J. 157, 167 (1958)).

39. *See* GODANA, *supra* note 9, at 52. This concept is also known as "the principle of prior use." *See* LAMMERS, *supra* note 2, at 364. This Note will refer to the principle as "prior appropriation." "Prior appropriation" holds that "no *type* of use is inherently superior to any other *type* of use in case of a conflict between water uses." LAMMERS, *supra* note 2, at 364. Whoever first uses a watercourse acquires a vested right of use. *See* GODANA, *supra* note 9, at 52. This is often "highly inequitable for a riparian State in which the exploitation of the water resources has, for reasons beyond its power, lagged behind." LAMMERS, *supra* note 2, at 364.

40. LAMMERS, *supra* note 2, at 364. If a State develops different uses of a watercourse at different periods of time, some of the uses may be protected by "prior appropriation" and some may not, depending on their places on the time scale. *See id.*

41. *See id.* For example, the principle of "prior appropriation" does not answer the question of what happens when a State's water diversion harms the natural vegetation of another State by lowering the water level, because there exists no "*actual use* of a certain quantity of water which has started at a given point of time." *Id.*

42. *See id.* at 362; Hanqin, *supra* note 4, at 48. The two extreme positions of "absolute territorial sovereignty" and "absolute territorial integrity" never received general recognition in the international community. *See* Hanqin, *supra* note 4, at 48. "Absolute territorial integrity" did not receive support in the international community, because practice of the theory unfairly burdens upper riparian States without placing a similar burden on downstream riparian States. *See* GODANA, *supra* note 9, at 38-39. According to Godana, the principle is acceptable only when

a whole has moved away from reinforcing the absolute interests of States and towards the balancing of interests.[43] "Restricted sovereignty" is a generally accepted norm of customary international law which aims at striking a balance between conflicting State interests.[44]

Furthermore, State practice reveals that the concept of "restricted sovereignty" usually trumps the principle of "prior appropriation."[45] Thus, used alone, "prior appropriation" is not a generally accepted principle of international law.[46] However, a

---

the lower riparian State depends on the continued flow of water for its survival. *See id.* at 39.

Furthermore, the United States Supreme Court has rejected the principle of "absolute territorial integrity," because it would allow downstream States to exercise complete control over water sources. *See* Scanlan, *supra* note 5, at n.246 (citing Colorado v. Kansas, 320 U.S. 383 (1943); New Jersey v. New York, 283 U.S. 336, 342 (1931); Connecticut v. Massachusetts, 282 U.S. 660, 669-70 (1931)). Additionally, the United States also withdrew support from the principle of "absolute territorial sovereignty" when it reanalyzed the Harmon Doctrine. *See* DEENER, *supra* note 31, at 257. For a discussion of the Harmon Doctrine, see *supra* note 31. This absolute principle was generally rejected because it offers no legal solutions capable of resolving disputes between two States who maintain opposing views. *See* KISS & SHELTON, *supra* note 3, at 120.

Although some States used the concepts of "absolute territorial sovereignty" and "absolute territorial integrity" in forming international watercourse agreements, the States do not claim that they are following accepted principles of customary international law. *See* LAMMERS, *supra* note 2, at 362. For example, "absolute territorial integrity" was used in the 1929 Nile Waters Agreement between Egypt and the United Kingdom on behalf of Sudan. *See id.* at 362. However, the drafters of the Agreement did not claim that the concepts within the Agreement were based on accepted principles of international law. *See id.* Moreover, the concept was excluded from the 1959 Nile Waters Agreement between Egypt and Sudan. *See id.*

43. *See* Hanqin, *supra* note 4, at 47. The utter incompatibility of the claims of "absolute territorial sovereignty" and "absolute territorial integrity" ensures that these claims will never receive wide acceptance and suggests that the balancing of interests is an acceptable equitable solution. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 36. The balancing of interests and the general cooperation between States has successfully allowed States to conclude hundreds of international conventions on water use. *See* Hanqin, *supra* note 4, at 47.

44. *See* LAMMERS, *supra* note 2, at 371; Dellapenna, *Treaties as Instruments*, *supra* note 2, at 37-38. Dellapenna states that restricted sovereignty has become the customary international law of international watercourses. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 36-37.

45. *See* LAMMERS, *supra* note 2, at 366-67. Although a few countries support the theory of "prior appropriation," "States in general have . . . expressed themselves in favour of an approach which stipulates the equitable utilization of the waters of an international watercourse." *Id.* at 367.

46. *See id.* at 366. Although the principle of "prior appropriation" was used in the 1929 Nile Water Agreement between Egypt and the United Kingdom, the drafters of the Agreement did not claim that such reliance was based on generally recognized principles of international law. *See id.*

State may use "prior appropriation" in conjunction with "restricted sovereignty" as an alternative application of these two theories.[47]

C. Codification of Customary International Law of Shared Watercourses

Several legal organizations have attempted to codify the customary international law of watercourses.[48] In 1966, the ILA developed the Helsinki Rules.[49] The Helsinki Rules illustrate the first attempt to codify the entire law of international watercourses.[50] Following the path of the ILA, the ILC completed a set of Draft Articles on the Non-Navigational Uses of International Water-

47. *See id.* at 303-04 (describing how Iran "adhered to the principle of 'prior appropriation' as far as existing water uses were concerned and to the principle of equitable apportionment in respect of the surplus waters" remaining after States received their traditional quantity of water); Helsinki Rules, *supra* note 2, at arts. V, VIII (describing priority given to existing reasonable uses when balancing the interests of States); Benvenisti, *supra* note 21, at 408-09 (describing priority of existing reasonable uses in Helsinki Rules). For a discussion of the coupling of the theory of "restricted sovereignty" with the theory of "prior appropriation," see *infra* notes 104-09 and accompanying text.

48. Early efforts included the Resolution on Principles of Law Governing the Uses of International Rivers and Lakes created by the Inter-American Bar Association in 1957. *See* Inter-American Bar Ass'n, Resolution on Principles of Law Governing the Uses of International Rivers and Lakes (1957). The Institute of International Law adopted the 1961 Salzburg Resolution on the Use of International Non-Maritime Waters. *See* Institut de Droit International, Salzburg Session, adopted at Basel, Sept. 1961, 49 Annuaire Inst. Droit Int'l 381. The Institute of International Law also adopted the 1979 Athens Resolution on the Pollution of Rivers and Lakes and International Law. *See* Institut de Droit International, Resolution on Pollution of Rivers and Lakes, 59th Sess., adopted at Athens, 1979, 58 Annuaire Inst. Droit Int'l 196.

The U.N. Economic Commission for Europe (ECE) adopted the "Declaration of Policy on Prevention and Control of Water Pollution, Including Transboundary Pollution." *See* Decision B (XXXV), adopted at the 35th Sess. (1980), in Economic Comm'n for Europe, Two Decades of Co-Operation on Water, U.N. Doc. ECE/ENVWA/2, at 1, 3 (1988). This document only "indicates that 'rational utilization of water resources' is a basic element of long-term water management." Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81. The ECE also adopted the "Declaration of Policy on the Rational Use of Water." *See* Decision C (XXXIX), adopted at the 35th Sess. (1980), in Economic Comm'n for Europe, Two Decades of Co-Operation on Water, U.N. Doc. ECE/ENVWA/2, at 12, 15 (1988). The document "recommends a 'unified strategy' and 'coordinated utilization.'" *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81. In addition, the ECE also adopted "Recommendations to ECE Governments on Long Term Planning of Water Management." *See* Economic Comm'n for Europe, Two Decades of Co-Operation on Water, U.N. Doc. ECE/ENVWA/2, at 39, 41 (1988). The recommendations "endorse basin-wide, cooperative management of shared water resources." Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81.

49. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 80; *see generally Helsinki Rules*, *supra* note 2.

50. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 80.

courses in 1991 (1991 U.N. Draft Articles).[51] Because the 1991 U.N. Draft Articles provoked significant controversy in the international community, the ILC revised them in July 1994, thus producing the 1994 U.N. Draft Articles.[52]

III. INTERNATIONAL LAW ASSOCIATION'S DEVELOPMENT OF THE LAW OF INTERNATIONAL WATERCOURSES

The ILA is a highly respected organization of legal experts that was established in 1873.[53] The ILA initiated the development of the law of international water resources almost forty years ago.[54] In 1954, the ILA established the Committee on the Uses of Waters of International Rivers (Rivers Committee).[55] The Rivers Committee performed "the best-known study of the customary international law of transboundary water resources" which resulted in the 1966 adoption of the Helsinki Rules.[56]

Nevertheless, the adoption of the Helsinki Rules did not terminate the work of the ILA on the law of international water resources.[57] Before the Helsinki Conference concluded, the Rivers

51. *See id.* at 81; *Report of the International Law Commission on the Work of Its Forty-Third Session*, UN GAOR, 46th Sess., Supp. No. 10, at 161, U.N. Doc. A/46/10 (1991), *available in* [1991] 2 Y.B. Int'l L. Comm'n 66 [hereinafter *1991 ILC Report*]. For the text of the Draft Articles, see 3 COLO. J. INT'L ENVTL. L. & POL'Y 1 (1992).

52. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 84; *1994 ILC Report*, *supra* note 2. The 1991 U.N. Draft Articles "provoked considerable controversy both among the foreign ministries of member states of the United Nations and among the 'well-qualified publicists' who had worked on this topic." Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 84. The ILC thus "considerably revised" the 1991 U.N. Draft Articles in developing the 1994 U.N. Draft Articles. *See id.* For a discussion of the controversy and the changes made to the 1991 U.N. Draft Articles, see *infra* notes 116-37 and accompanying text.

53. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 80.

54. *See* THE WORK OF THE INTERNATIONAL LAW ASSOCIATION ON THE LAW OF INTERNATIONAL WATER RESOURCES 13 (E. J. Manner & Veli-Martii Metsalampi eds., Helsinki 1988) [hereinafter WORK OF THE ILA]. When the ILA began to develop the law, it was responding to concerns over serious international river disputes, especially the ones "between India and Pakistan over the Indus, between Egypt and the Sudan over the Nile, between Israel and its neighbors over the Jordan, and between Canada and the United States over the Columbia." Charles B. Bourne, *The International Law Association's Contribution to International Water Resources Law*, 36 NAT. RESOURCES J. 155, 156 (1996).

55. *See* WORK OF THE ILA, *supra* note 54, at 13; Bourne, *ILA's Contribution*, *supra* note 54, at 156.

56. Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 80.

57. *See* WORK OF THE ILA, *supra* note 54, at 13. The Rivers Committee was aware of "numerous theoretical and practical problems still awaiting international legal codification" and thus recommended that a new Committee continue the study of international water resources. *See id.*

Committee recommended that the ILA appoint a subsequent Committee:

> to carry on a programme of codification and study of certain selected aspects of water resources law, of which the following topics are illustrative: underground waters, the relationship of water to other natural resources, domestic uses of water, hydraulic uses of water including the generation of power and irrigation, flood control and siltation, regulation of water flow, detailed rules on the navigation of rivers, and further consideration of the subject of pollution of coastal areas and enclosed seas.[58]

As a result of the Rivers' Committee's recommendation, the ILC established a new Committee on International Water Resources Law (Manner Committee) in November 1966.[59] The works crafted and adopted by the Manner Committee follow the spirit of the Helsinki Rules.[60] States should regard these works "as corollaries to and clarifications of [the] completions of those Rules."[61] The current ILA committee, the Committee on International Water Resources (WRC), continues to draft rules to supplement the ILA's work on international watercourse law.[62]

---

58. *Id.*

59. *See id.*; Bourne, *ILA's Contribution*, *supra* note 54, at 177-78. The Committee is referred to as the Manner Committee, because Dr. E. J. Manner of Finland urged the establishment of the new committee to consider all of the unfinished work of the Rivers Committee and then proceeded to chair the committee. *See* Bourne, *supra* note 54, at 177-78.

60. *See* WORK OF THE ILA, *supra* note 54, at 17.

61. *Id.* Such works include rules on "flood control (1972), pollution (1972 and 1982), navigability (1974), the protection of water installations during armed conflicts (1976), joint administration (1976 and 1986), flowage regulation (1980), general environmental management concerns (1980), and groundwater (1986)." Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 80-81. For the texts of these works, see WORK OF ILA, *supra* note 54, at 33-293.

62. *See generally* Bourne, *ILA's Contribution supra* note 54, at 208-13. In 1986, the Manner Committee concluded its study of the law of international water resources at the 62nd Conference of the International Law Association in Seoul, South Korea. *See* WORK OF THE ILA, *supra* note 54, at 9. In November 1990, the ILC formed the WRC to consider the "remaining significant problems in the international water resources field . . . ." Bourne, *ILA's Contribution*, *supra* note 54, at 208. The WRC continues to draft additional rules regarding international watercourses. *See id.* at 208-13. The WRC's latest rules encompass Cross-Media Pollution and Remedies. *See id.* at 209-12.

IV. WORK OF THE INTERNATIONAL LAW COMMISSION: DEVELOPMENT OF THE 1994 U.N. DRAFT ARTICLES

In 1963, the results of a U.N. study concluded that the world population could feasibly exceed six billion people by the year 2000.[63] Increases in population bring about increased water consumption which in turn depletes States' water supplies.[64] The U.N. was concerned that the increased consumption of water, coupled with industrial and metropolitan demands on water resources, would substantially decrease the world's water supply.[65] To address this concern, in 1970, the U.N. General Assembly gave the ILC[66]

63. *See* Scanlan, *supra* note 5, at 2180 (citing U.N. DEP'T OF INT'L ECONOMIC AND SOCIAL AFFAIRS, WORLD POPULATION PROSPECTS AS ASSESSED IN 1963, U.N. Doc. ST/SOA/SER.A/41, U.N. Sales No. 66.XIII.2 (1963)). The world population totaled 5.3 billion people in 1990 and is expected to rise another billion by the year 2000. *See Review of Sectoral Clusters, First Phase: Health, Human Settlements and Freshwater: Report of the Secretary-General*, U.N. Commission on Sustainable Development, 2d Sess., Agenda Item 6, at para. 3, U.N. Doc. E/CN.17/1994/4 (1994), *available at* <gopher://gopher.un.org/00/esc/cn17/1994/off/1994—4> [hereinafter *Commission on Sustainable Development*]. In 1990, 20 countries with a total population of 131 million people experienced water scarcity. *See id.* Water scarcity is here defined as per capita availability of freshwater resources of 1,000 cubic meters or less. *See id.* By 2010, 26 countries with a population of 416 million people are expected to suffer from water scarcity. *See id.*

64. *See Commission on Sustainable Development*, *supra* note 63, at para. 3 (describing how population increase causes water scarcity).

65. *See* Ved P. Nanda, *Emerging Trends in the Use of International Law and Institutions for the Management of International Water Resources*, 6 DENV. J. INT'L L. & POL'Y 239, 239 (1976) (citing *Resources and Needs: Assessment of the World Water Situation*, U.N. Water Conference, U.N. Doc. E/CONF.70/CBP/1 (1976) [hereinafter *U.N. Assessment of the World Water Situation*].) Although the water supply "may be potentially inexhaustible- the future worldwide accelerating demand is likely to strain water resources not only in several countries but also in several regions of the world." *Id.* The 1976 U.N. study "conclude[d] that there exists a potential world water crisis even though 'globally there may be potentially enough water to meet forthcoming needs. Frustratingly, it tends to be available in the wrong place, at the wrong time, or with the wrong quality.'" *Id.* at 240 (citing *U.N. Assessment of the World Water Situation*, *supra*, at 5). Certain regions suffer from drought while others are heavily flooded; some regions have enough water in winter but lack a sufficient supply in summer; and some regions delight in an abundance of water in some years yet suffer from drought in others. *See* Benvenisti, *supra* note 21, at 384. Thus, the United Nations and many scholars promote the management and redistribution of water in response to water scarcity. *See* Nanda, *supra*, at 240; Benvenisti, *supra* note 21, at 384.

66. The ILC is an organ of the U.N. designed to promote the "progressive codification of customary international law." Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81 (citing THE WORK OF THE INTERNATIONAL LAW COMMISSION (4th ed. 1988); SIR IAN SINCLAIR, THE INTERNATIONAL LAW COMMISSION (1987)). The ILC was established pursuant to General Assembly Resolution 174 (II) of November 21, 1947. *See* International Law Commission Report on the Draft Articles, 43rd Sess., U.N. Doc. A/46/405 (1991), *reprinted in* 30 I.L.M. 1554, 1564 (1991).

the responsibility of creating the Draft Articles on the Law of the Non-Navigational Uses of International Watercourses.[67]

By 1974, the ILC had commenced its preliminary work effort.[68] In 1991, the ILC adopted the 1991 U.N. Draft Articles and forwarded them to member States for comment.[69] After receiving and reviewing the comments of member States and recommendations of the special rapporteur, the ILC revised the 1991 U.N. Draft Articles.[70] The revision resulted in the adoption of the 1994 U.N. Draft

67. *See* G.A. Res. 2669, U.N. GAOR, 25th Sess., Supp. No. 28, at para. 1, U.N. Doc. A/8028 (1970). The General Assembly suggested that the ILC "take up the study of the law of the non-navigational uses of international watercourses with a view to its progressive development and codification." *Id.*

68. *See* Stephen C. McCaffrey, *The International Law Commission Adopts Draft Articles on International Watercourses*, 89 AM. J. INT'L L. 395, 396 (1995) [hereinafter *McCaffrey Commission Adopts Articles*]. The ILC had appointed Ambassador Richard D. Kearney of the United States as the first special rapporteur for the ILC's work on international watercourses. *See id.* (citing [1974] 2 Y.B. Int'l L. Comm'n, pt. 1, at 301, U.N. Doc. A/CN.4/SER A/1974/Add.1 (pt.1)). The Subcommittee established by the ILC sent out a questionnaire to various governments to obtain their view on "the scope of the proposed study, the uses of water to be considered and whether the problem of pollution should be given priority, the need to deal with flood control and erosion problems, and the interrelationship between navigational uses and other uses." *Id.* For the text of the questionnaire, see [1974] 2 Y.B. Int'l L.Comm'n, pt. 1, at 303-04, U.N. Doc. A/CN.4/SER.A/1974/Add.1 (pt.1).

Since 1974, the ILC has appointed four successors to the position of special rapporteur. *See* McCaffrey, *supra*, at 396. In 1977, Professor (now Judge) Stephen M. Schwebel of the United States accepted the position, followed by Ambassador Jens Evensen of Norway in 1982, Professor Stephen C. McCaffrey of the United States in 1985, and Professor Robert Rosenstock of the United States in 1992. *See id.* at 396 n.9. The changes in special rapporteurship "were unavoidable but undoubtedly delayed the completion of the draft." *Id.* at 396.

69. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 397; *1991 ILC Report*, *supra* note 51. The first reading of the Draft Articles contained 32 articles divided into six parts: Part I, Introduction; Part II, General Principles; Part III, Planned Measures; Part IV, Protection and Preservation; Part V, Harmful Conditions and Emergency Situations; and Part VI, Miscellaneous Provisions. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 397; McCaffrey *Report on the Draft Articles*, *supra* note 11, at 1555. The ILC sent the Draft Articles to governments for comments pursuant to articles 16 and 21 of the ILC Statute. *See* McCaffrey *Report on the Draft Articles*, *supra* note 11, at 1555. The ILC requested that the governments reply by January 1, 1993, so that it could commence work on the second reading of the Draft Articles. *See id.* at 1555-56. For the text of the 1991 Draft Articles, see 3 COLO. J. INT'L ENVTL. L. & POL'Y 1 (1992).

70. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 397. For the comments of member States, see *The Law of Non-Navigational Uses of International Watercourses, Comments and Observations Received From States*, U.N. Doc. A/CN/447 and Adds. 1-3 (1993). For the proposals of the special rapporteur, see Robert Rosenstock, *First Report on the Law of the Non-Navigational Uses of International Watercourses*, U.N. Doc. A/CN.4/451 (1993); Robert Rosenstock, *Second Report on the Law of the Non-Navigational Uses of International Watercourses*, U.N. Doc. A/CN.4/462 (1994) [hereinafter Rosenstock *Second Report*].

The role of a special rapporteur is to "mark out and develop the[ ] topic, explain the state of the law and make proposals for draft articles." *International Law Commission Report*, ch. VII, para. 189 (1997) (last visited Jan. 30, 1997) <http://

Articles and a resolution on confined transboundary groundwater.[71]

The ILC has not yet completed its work on international watercourses.[72] Despite the significant effort that has gone into forming the 1994 U.N. Draft Articles, the United Nations has not yet proposed them to the international community.[73] After the ILC adopted the 1994 U.N. Draft Articles, it turned the Articles over to the General Assembly to develop a framework convention based on them.[74] The Sixth Committee (Legal) of the United Nations Gen-

---

www.un.org/plweb-cgi/idoc.p. . .rg. .80ñn+web+web++watercourses> [hereinafter *Commission Report*]. The special rapporteur's responsibilities are:

> i. to produce clear and complete articles, as far as possible accompanied either by commentaries or by notes which could form the basis for commentaries;
>
> ii. to explain, succinctly, the rationale behind the draft articles currently before the Drafting Committee, including any changes that may be indicated;
>
> iii. in the final analysis, to accept the view of the Drafting Committee as a whole, even if it is contrary to the views advanced by the Special Rapporteur, and as necessary to reflect the view of the Drafting Committee in revised articles and/or commentary. In performing this function, the Special Rapporteur should act as servant of the Commission rather than defender of any personal views avant la letter.

Id. at para. 201.

71. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 398.

72. *See Brief Summary of the Activities of the Sixth Committee (Legal) of the United Nations General Assembly at Its Fifty-First Session*, (last modified November 1, 1996) <http://www.un.org/law/olacd2.htm> [hereinafter *Activities of the Sixth Committee*]. The Sixth Committee (Legal) of the United Nations General Assembly has not yet developed a framework convention for States to follow in forming their own international watercourse agreements. *See id.* For a discussion of the activities of the Sixth Committee, see *infra* notes 75-77 and accompanying text.

73. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 395. For a discussion of how the United Nations can propose the 1994 U.N. Draft Articles to the international community, see *infra* notes 214-17 and accompanying text.

74. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 395. The ILC completes its task on a given topic when it presents a set of draft articles to the Sixth Committee. *See Commission Report*, *supra* note 70, at para. 183. The purpose of the ILC is "fully performed if the draft articles and accompanying commentary articulate the relevant principles in a manner generally suitable for adoption by States." *Id.* This determination "is essentially a matter of policy for the Sixth Committee and the member States." *Id.* When confronted with a set of draft articles, the Sixth Committee "can merely note the outcome, can deal with it in a preliminary way through a working group or convene a preparatory conference for a similar purpose, can convene a diplomatic conference forthwith, or . . . can elect to deal with the draft articles itself." *Id.* at para. 184. In the case of the 1994 U.N. Draft Articles, the Sixth Committee chose to deal with the Articles themselves. *See id.* However, under article 23(2) of the Statute, the Sixth Committee can refer the Draft Articles back to the ILC for reconsideration or redrafting. *See id.* The ILC noted that:

> if there are serious doubts about the acceptability of any text on a given subject, it would be helpful if these were made know authoritatively by the General Assembly and Governments at an earlier stage, rather than

eral Assembly (Sixth Committee) reviewed the 1994 U.N. Draft Articles from October 7 to October 25, 1996.[75] However, time constraints did not permit the Sixth Committee to complete a framework convention based on the Articles.[76] Thus, the Sixth Committee will convene again from March 24 to April 4, 1997 to continue its work in progress.[77]

---

being postponed or the difficulties shelved until after the Commission has completed its work and presented it the Sixth Committee.

Id. at para. 185.

75. *See Activities of the Sixth Committee, supra* note 72. By Resolution 49/52 of December 9, 1994, the General Assembly requested States to submit their comments on the Draft Articles. *See* Press Release L/2814, *Sixth Committee Working Group of Whole to Consider Draft Articles on International Watercourses* (Oct. 7, 1996), *available at* <i/idoc.pl?2384+unix+_free_user_+www.un.org.80+un+un+pr+pr++international%23%26adj%26watercourses%23>. By July 30, 1996, Colombia, Ethiopia, Finland, Guatemala, Hungary, Portugal, Spain, Turkey, United States, Venezuela and Switzerland responded. *See id.*

In accordance with G.A. Res. 49/52, the Sixth Committee (Legal) of the United Nations General Assembly "convened as a Working Group to elaborate a framework convention on the non-navigational uses of international watercourses . . . ." *Activities of the Sixth Committee, supra* note 72. During the week of October 7 through October 11, 1996, the Working Group considered articles 1 and 3 through 10. *See id.* During the week of October 14 through October 18, 1996, the Working Group continued framing the convention. *See id.* The main issues discussed during that week were:

> (a) the appropriate balance between rights and obligations of watercourse States in the event that one of them implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States; (b) protection and preservation of ecosystems; (c) the prevention, reduction and control of pollution; (d) the prevention of the introduction of alien or new species; (e) protection and preservation of the marine species; (f) the prevention and mitigation of harmful conditions; (g) measures to be taken in the event of emergency situations; (h) international watercourses and installations in time of armed conflict; (i) contacts between watercourse States in case of serious obstacles; (j) exception of obligation to exchange data in case of information vital to national defense of security; and (k) the means of settlement of disputes concerning a question of fact or the interpretation of the Convention.

Id.

During the week of October 21 through October 25, 1996, the Drafting Committee worked out a set of draft articles for articles 1 through 6. *See id.*; U.N. Doc. A/C.6/51/NUW/WG/L.1 (1996).

76. *See Activities of the Sixth Committee, supra* note 72. The Drafting Committee did not have time to consider article 7 regarding the obligation not to cause significant harm, article 33 regarding the settlement of disputes, the preamble or the final clauses. *See id.* Consequently, the Working Group recommended to the General Assembly that the Group convene at a second session to complete the framework convention. *See id.*

77. *See Convention on the Law of the Non-navigational Uses of International Watercourses*, U.N. GAOR, 51st Sess., Agenda Item 144, U.N. Doc. A/RES/51/206 (1997), *available at* <gopher://gopher.un.org:70/00/ga/recs/51/RES51-EN.206>. [hereinafter *Convention on the Law of International Watercourses*]. The Sixth Commit-

V. COMPARISON OF HELSINKI RULES TO 1994 U.N. DRAFT ARTICLES

A. Scope of Helsinki Rules & 1994 U.N. Draft Articles: Exclusion of Navigation and Confined Groundwater from 1994 U.N. Draft Articles

The scope of the Helsinki Rules is more expansive than that of the 1994 U.N. Draft Articles.[78] The Helsinki Rules apply to "the use of the waters of an international drainage basin except as may be provided otherwise by convention, agreement or binding custom among the basin States."[79] The use of waters regulated by the Helsinki Rules includes navigation.[80] Chapter 4 specifically provides rules for the use of rivers or lakes which cross national boundaries and are currently used for, or are capable of being used for, commercial navigation.[81]

---

tee noted that it had achieved some progress on the elaboration of a framework convention but decided that it needed more time to fulfill its mandate. *See id.*

78. *Compare Helsinki Rules, supra* note 2, at art. I, *and* Rules on International Groundwaters, International Law Association, Report of the Sixty-Second Conference, Seoul 1986, at 21, 231-85 (1986), *reprinted in* WORK OF THE ILA, *supra* note 54, at 257 [hereinafter Rules on International Groundwaters] (including navigation and confined groundwater in scope of Helsinki Rules), *with 1994 ILC Report, supra* note 2, at arts. 1, 2 (excluding navigation and confined groundwater from scope of 1994 U.N. Draft Articles). For a discussion of the scope of the Helsinki Rules and the 1994 U.N. Draft Articles, see *infra* notes 79-90 and accompanying text.

79. Helsinki Rules, *supra* note 2, at art. I. The rules are not applicable to the navigation of vessels of war, vessels performing police or administrative functions or vessels exercising any other form of public authority. *See id.* at art. XIX. States subject to these navigational rules are permitted to derogate from the rules in time of war, armed conflict or public emergency threatening the life of the State as long as the derogations are consistent with international law. *See id.* at art. XX.

80. *See* Helsinki Rules, *supra* note 2, at art. XII.

81. *See id.* The text of Article XII reads as follows:

> 1. This Chapter refers to those rivers and lakes portions of which are both navigable and separate or traverse the territories of two or more States.
>
> 2. Rivers or lakes are "navigable" if in their natural or canalized state they are currently used for commercial navigation or are capable by reason of their natural condition of being so used.
>
> 3. In this Chapter the term "riparian State" refers to a State through or along which the navigable portion of a river flows or a lake lies.

Id.

The Helsinki Rules provide that "each riparian State is entitled to enjoy rights of free navigation on the entire course of a river or lake." *Id.* at art. XIII. Free navigation includes:

> (a) freedom of movement on the entire navigable course of the river or lake; (b) freedom to enter ports and to make use of plants and docks; and (c) freedom to transport goods and passengers, either directly or through trans-shipment, between the territory of one riparian State and the terrirory of another riparian State and between the territory of a riparian State and the open sea.

While the Helsinki Rules encompass navigational rules, the 1994 U.N. Draft Articles specifically exclude them. The 1994 U.N. Draft Articles apply to "uses of international watercourses and of their waters for purposes other than navigation and to measures of conservation related to the uses of those watercourses and their waters."[82] Article 1 specifically states that navigation falls outside the scope of the Articles.[83]

Furthermore, the Helsinki Rules seek to regulate surface water, and free groundwater related to surface water and confined groundwater.[84] Although the ILC debated whether to include confined or unrelated groundwater within the scope of the 1994 U.N. Draft Articles, the ILC ultimately decided to exclude it.[85] The ILC

Id. at art. XIV. These rights are subject to restrictions set forth in other chapters of the Helsinki Rules. *See id.* at art. XIII. For example, the rules of navigation are still subject to Article X. *See id.* at arts. X, XII-XX. Specifically, a State can police the portion of a river located in its jurisdiction but it cannot do anything to cause substantial injury to other States. *See id.* at arts. X, XV.

82. *1994 ILC Report*, *supra* note 2, at art. 1(1). The ILC explicitly rejected the international drainage basin approach taken by the ILA. *See* Robert D. Hayton, *Observations on the International Law Commission's Draft Rules on the Non-Navigational Uses of International Watercourses: Articles 1-4*, 3 COLO. J. INT'L ENVTL. L. & POL'Y 31, 34-35 (1992). Members of the ILC were disturbed by the "seemingly all-encompassing sweep of the term 'basin.'" *Id.* at 35. For differences in approach between the concepts of international watercourses and international drainage basins, see *supra* note 2.

83. *See 1994 ILC Report*, *supra* note 2, at art. 1(2). This paragraph states: "[t]he use of international watercourses for navigation is not within the scope of the present articles except in so far as other uses affect navigation or are affected by navigation." *Id.*

84. *See* Helsinki Rules, *supra* note 2, at art. I, II; Rules on International Groundwaters, *supra* note 78, at arts. 1, 2. The Helsinki Rules apply to the use of the waters of an international drainage basin which is defined as a "geographical area extending over two or more States determined by the watershed limits of the system of waters, including surface and underground waters, flowing into a common terminus." Helsinki Rules, *supra* note 2, at art. II. The ILA's Rules on International Groundwaters are corollaries to and clarifications of the Helsinki Rules. *See* WORK OF THE ILA, *supra* note 54, at 17. The Rules on International Groundwaters augment the Helsinki Rules and eliminate the requirement that the surface and underground water be connected. *See* McCaffrey, *Holistic Approach to Water Problems*, *supra* note 11, at 149. Thus, the Helsinki Rules apply to confined groundwater as well as to groundwater connected to surface water. *See id.*

Surface waters include such water sources as rivers, lakes, ponds and marshes. *See* LAMMERS, *supra* note 2, at 17. Groundwater is defined as "water within the earth that supplies wells and springs." WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 1004 (16th ed. 1971). Surface water and groundwater are physically interrelated. *See* LAMMERS, *supra* note 2, at 17. Most groundwater will eventually enter inland surface waters or discharge directly into the sea. *See id.* Surface waters seep into the soil and join underground water. *See id.* However, part of the underground water will evaporate into the atmosphere before it ever merges with surface water. *See id.*

85. *See Summary Records of the Meetings of the Forty-Third Session*, [1991] 1 Y.B. Int'l L. Comm'n, 49, para. 69, U.N. Doc. A/CN.4/SER.A/1991 [hereinafter 1991

concluded that the term "watercourse" naturally did not encompass the term groundwater.[86] Thus, the ILC restricted the scope of the Articles to free groundwater that was associated with surface water.[87]

The ILC initially took the stance that it must "merely draw the attention of the international community to the need for an instrument on confined groundwater."[88] After realizing the importance of groundwater, however, the ILC adopted a companion resolution on confined transboundary groundwater in 1994.[89] The resolution suggests that the principles contained in the Articles can be applied to confined transboundary groundwater; however, the resolution still fails to require States to apply them.[90]

ILC Y.B.]. During the second reading of the Draft Articles, Professor Rosenstock proposed that groundwaters be included in the 1994 Draft. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 403. Relying on a survey of state practice, Professor Rosenstock concluded: "The recent trend in the managment of water resources has been to adopt an integrated approach. Inclusion of 'unrelated' confined groundwaters is the bare minimum in the overall scheme of the management of all water resources in an integrated manner." *Id.* (citing Rosenstock, *Second Report*, *supra* note 70, at 4). Furthermore, the inclusion of groundwaters in the Draft was important "in order to encourage their management in a rational manner and prevent their depletion and pollution." *Id.* (citing Rosenstock, *Second Report*, *supra* note 70, at 35). The ILC did not accept this recommendation because "members generally had not had this form of ground water in mind during the elaboration of the draft articles." McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 402-03.

86. *See* 1991 ILC Y.B., *supra* note 85, at 49, para. 69. The ILC reasoned that the Draft Articles could not be applicable to groundwater because they did not take into account the special problems of confined groundwater. *See id.* For a discussion of some of the problems of confined groundwater, see *infra* notes 164-66 and accompanying text.

87. *See* 1991 ILC Y.B., *supra* note 85, at 49, para. 69.

88. *Id.*

89. *See 1994 ILC Report*, *supra* note 2, at 326. The ILC:

> 1. *Commends* States to be guided by the principles contained in the draft articles on the law of the non-navigational uses of international watercourses, where appropriate, in regulating transboundary groundwater;
> 2. *Recommends* States to consider entering into agreements with the other State or States in which the confined transboundary groundwater is located;
> 3. *Recommends* also that, in the event of any dispute involving transboundary confined groundwater, the States concerned should consider resolving such dispute in accordance with the provisions contained in article 33 of the draft articles, or in such other manner as may be agreed upon.

Id.

90. *See generally* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 403.

B. Equitable Utilization or Community of Property?

The Helsinki Rules champion the concept of "restricted sovereignty" through equitable utilization.[91] According to the Rules, "[e]ach basin State is entitled, within its territory, to a reasonable and equitable share in the beneficial uses of the waters of an international drainage basin."[92] In order to determine whether the share is "reasonable and equitable," States must weigh various physical, economic and social factors.[93] States must consider the eleven factors articulated in Article V and reach a conclusion based on the factors as a whole.[94]

The 1994 U.N. Draft Articles also adopt the principle of equitable utilization but lean towards the "community of property" concept.[95] The Articles stipulate that watercourse States "shall in their

91. *See* Hanqin, *supra* note 4, at 51; Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 80 (citing Helsinki Rules, *supra* note 2, at art. IV). For a discussion of the principle of equitable utilization, see *infra* notes 92-94 and accompanying text.

92. Helsinki Rules, *supra* note 2, at art. IV.

93. *See id.* at art. V. The eleven factors to be considered include, but are not limited to the following:

> (a) the geography of the basin, including in particular the extent of the drainage area in the territory of each basin State; (b) the hydrology of the basin, including in particular the contribution of water by each basin State; (c) the climate affecting the basin; (d) the past utilization of the waters of the basin, including in particular existing utilization; (e) the economic and social needs of each basin state; (f) the population dependent on the waters of the basin in each basin State; (g) the comparative costs of alternative means of satisfying the economic and social needs of each basin State; (h) the availability of other resources; (i) the avoidance of unnecessary waste in the utilization of waters of the basin; (j) the practicability of compensation to one or more of the co-basin States as a means of adjusting conflicts among uses; and (k) the degree to which the needs of a basin State may be satisfied, without causing substantial injury to a co-basin State.

Id. For an example of balancing riparian interests, see *supra* note 37.

94. *See* Helsinki Rules, *supra* note 2, at art. V. The States must thus balance their conflicting interests and design an equitable solution. *See* LAMMERS, *supra* note 2, at 364.

95. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 52-53 (stating ILC expressly endorsed concept that "internationally-shared waters create a community of states sharing property in the water"). Although Benvenisti supports the concept of "community of property," he believes that the 1994 U.N. Draft Articles are a hurdle to the international community's acceptance of this concept, because the Articles do not fully implement the concept. *See* Benvenisti, *supra* note 21, at 413. Benvenisti suggests that the Draft Articles send out the wrong signal that litigation is the primary means of obtaining optimal utilization rather than negotiations resulting in the formation of joint management institutions. *See id.* at 414. In his commentary, Benvenisti suggests that the "detailed provision on settlement of disputes" overshadows the "uninspiring draft article on management." *Id.* For a discussion of the Articles on settlement of disputes, see *infra* notes 149-57. For the text of Article 24 (the joint management article), see *infra* note 102.

respective territories utilize an international watercourse in an equitable and reasonable manner."[96] Like the Helsinki Rules, the 1994 U.N. Draft Articles also supply a list of factors to be weighed in determining equitable and reasonable utilization.[97]

The 1994 U.N. Draft Articles further stipulate that an international watercourse "shall be used and developed by watercourse States with a view to attaining optimal utilization thereof and benefits therefrom consistent with adequate protection of the watercourse."[98] However, optimal utilization implies that riparian States must work together to achieve the optimal use of the watercourse as if no State boundaries existed.[99] Optimal utilization, which is the essential element of the "community of property" concept, is not yet accepted as a general principle of international law.[100]

---

96. *1994 ILC Report*, *supra* note 2, at art. 5(1).

97. *See id.* at art. 6. The factors include:

> (a) geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character; (b) the social and economic needs of the watercourse States concerned; (c) the dependency of the population on the watercourse; (d) the effects of the use or uses of the watercourse in one watercourse State on other watercourse States; (e) existing and potential uses of the watercourse; (f) conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect; (g) the availability of alternatives, of corresponding value, to a particular planned or existing use.

Id.

98. *Id.* at art. 5(1). The goal of optimal utilization is also found in Article 8. Article 8, labeled a "General obligation to cooperate," reads: "[w]atercourse States shall cooperate on the basis of sovereign equality, territorial integrity and mutual benefit in order to attain optimal utilization and adequate protection of an international watercourse." *Id.* at art. 8.

99. *See* LAMMERS, *supra* note 2, at 371. Optimal utilization requires a greater sharing of interests than the concept of equitable utilization which only requires an equitable delimitation of rights and duties between riparian States. *See id.*

100. *See id.* "Community of property" treats the whole watercourse as one hydrological unit which States should manage as one integrated whole. *See* David J. Lazerwitz, Article, *The Flow of International Water Law: The International Law Commission's Law of the Non-Navigational Uses of International Watercourses*, 1 IND. J. GLOBAL LEGAL STUD. 247, 252 (1993). "Community of property" is realized by: "(a) developing and managing the water basin as a unit without regard to international borders, ideally through a joint transnational institutional structure; (b) sharing the benefits of that development and management according to an agreed formula or procedure; and (c) establishing a procedure for constructive investigation and peaceful resolution of disputes." Dellapenna, *Treaties as Instruments*, *supra* note 2, at 52. States do not endorse the community of property approach because they are not willing to relinquish their sovereignty over a natural resource to the extent necessary to achieve optimal utilization of a watercourse. *See id.* at 53.

Although the theory of community of property is not yet recognized by States, the United Nations continually promotes this approach. *See id.* at 52. This endorsement was evidenced in the final report of the U.N. Water Conference at Mar del Plata in 1977 which stated: "[i]t is necessary for States to cooperate in the case of shared water resources in recognition of the growing economic, environmental and physical interdependencies across international frontiers. Such cooperation

Although the 1994 U.N. Draft Articles endorse the "community of property" concept, they do not explicitly require States to achieve this level of cooperation.[101] The ILC does not link the goal of optimal utilization to the joint management of international watercourses.[102] Thus, the Draft Articles fail to fully implement the "community of property" concept.[103]

C. Relevance of Existing Uses

Article VIII of the Helsinki Rules provides a conditional priority to existing beneficial uses.[104] Although Article V lists existing uses as one of the relevant factors in determining equitable utilization, Article VIII grants reasonable existing uses a preference over other uses.[105] Article VIII states that "[a]n existing reasonable use may continue in operation unless the factors justifying its continuance are outweighed by other factors leading to the conclusion that it be modified or terminated so as to accommodate a competing incompatible use."[106]

. . . must be exercised on the basis of the equality, sovereignty and territorial integrity of all States." *Id.* (quoting *Report of the United Nations Water Conference, Mar del Plata, Argentina*, General Assembly, at 53, U.N. Doc. E/CONF.70/29 (1977)).

101. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 52-53 (stating "concept that internationally-shared waters create a community of states sharing property in the water was also expressly endorsed in the Draft Articles . . . .").

102. *See* Benvenisti, *supra* note 21, at 413-14. The Draft Articles provide a general obligation to cooperate and to share information but do not require cooperation to the extent endorsed in the theory of "community of property." *See id.*; *1994 ILC Report*, *supra* note 2, at arts. 8, 9, 11-19. For a discussion of the requirements for the achievement of "community of property," see *supra* note 100.

Article 24 of the 1994 U.N. Draft Articles encompasses management of international watercourses. *See 1994 ILC Report*, *supra* note 2, at art. 24(1). Article 24(1) reads: "[w]atercourse States shall, at the request of any of them, enter into consultations concerning the management of an international watercourse, which may include the establishment of a joint management mechanism." *Id.* The Draft Articles fail to link the joint management proposal in Article 24 to the goal of optimal utilization found in Articles 5(1) and 8. *See* Benvenisti, *supra* note 21, at 413.

103. *See* Benvenisti, *supra* note 21, at 413-14.

104. *See* Helsinki Rules, *supra* note 2, at art. VIII; *Compare* LAMMERS, *supra* note 2, at 364 (describing how theory of "prior appropriation" gives absolute preference to existing water uses). For a discussion of "prior appropriation," see *supra* notes 38-41, 45-47 and accompanying text.

105. *See* Helsinki Rules, *supra* note 2, at art. VI, VIII. Article V(2)(d) provides that "the past utilization of the waters of the basin, including in particular existing utilization" should be weighed with the other relevant factors to determine a reasonable and equitable share. *Id.* at art. VI. The Helsinki Rules provide additional support for present reasonable uses in Article VII which states that "[a] basin State may not be denied the present reasonable use of the waters of an international drainage basin to reserve for a co-basin State a future use of such waters." *Id.* at art. VII.

106. *Id.* at art. VIII(1).

The priority does not presume that the existing use can continue indefinitely, but it does provide a starting point for determining how the resource should be allocated.[107] The State can continue an existing use so long as the use is reasonable.[108] If a State does claim that the use should be terminated or reallocated, the State claiming the change would be required to justify its position.[109]

The 1994 U.N. Draft Articles reject the concept of conditional priority for reasonable existing uses.[110] Specifically, Article 6 stipulates that existing and potential uses of the watercourses shall be considered equally along with all of the other relevant factors set forth in Article 6 in determining equitable and reasonable utilization.[111] Moreover, the ILC announced that this scheme was created purposefully "in order to emphasize that neither [use] is given priority."[112]

D. Substantial Harm v. Significant Harm

The Helsinki Rules require that States not cause "substantial injury" to the territory of co-basin States.[113] Some scholars accept this point as a second governing principle which complements the

107. *See* Benvenisti, *supra* note 21, at 408. For example, if an upper riparian State builds a dam which only minimally reduces the flow of water to a lower riparian State, the lower riparian State would not have a strong claim for redistribution. *See id.* at 409 (stating that "[a] strong claim for redistribution can be made when the existing allocation is grossly unequal"). The upper riparian State could continue to use the dam provided that no State could claim and then prove its unreasonableness. *See id.* at 408-09.

108. *See id.*

109. *See id.* If the use ceases to be reasonable, then the State claiming the unreasonableness would have to show that other factors outweigh the continuance of the use in an Article VIII balancing test. *See id.*; Helsinki Rules, *supra* note 2, at art. VIII.

110. *See* Benvenisti, *supra* note 21, at 409.

111. *See 1994 ILC Report*, *supra* note 2, at art. 6; *see also* Benvenisti, *supra* note 21, at 409 (discussing Article 6).

112. *1994 ILC Report*, *supra* note 2, at 233.

113. *See* Helsinki Rules, *supra* note 2, at art. X. Article X reads as follows:

1. Consistent with the principle of equitable utilization of the waters of an international drainage basin, a State (a) must prevent any new form of water pollution or any increase in the degree of existing water pollution in an international drainage basin which would cause substantial injury in the territory of a co-basin State, and (b) should take all reasonable measures to abate existing water pollution in an international drainage basin to such an extent that no substantial damage is caused in the territory of a co-basin State.
2. The rule stated in paragraph 1 of this Article applies to water pollution originating: (a) within a territory of the State, or (b) outside the territory of the State, if it is caused by the State's conduct.

Id.

equitable utilization rule.[114] The Helsinki Rules do not resolve, however, the issue of which principle prevails if the two come into conflict.[115]

The 1991 U.N. Draft Articles prohibit States from causing "appreciable harm" to other watercourse states.[116] The quantitative term "appreciable" "has been deliberately chosen as being less than 'substantial' (as in the ILA rules) and more than 'perceptible.'"[117] The 1994 U.N. Draft Articles changed the threshold of "appreciable

114. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81. Article X of the Helsinki Rules supports this position. For the pertinent text of Article X, see *supra* note 113.

115. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81. Article X provides that States should both follow the equitable utilization rule and prevent substantial injury to other States but stops short of stating which concept trumps the other in case of a conflict between the two rules. *See* Helsinki Rules, *supra* note 2, at art. X(1). For the text of Article X(1), see *supra* note 113. However, Article V of the Helsinki Rules addresses "the degree to which the needs of a basin State may be satisfied, without causing substantial injury to a co-basin State" as one of the balancing factors. *See* Helsinki Rules, *supra* note 2, at art. V. One commentator suggests that the inclusion of this phrase in Article V implies that substantial injury is just one factor to be weighed in an Article V balancing test. *See* Patricia K. Wouters, *An Assessment of Recent Developments in International Watercourse Law Through the Prism of the Substantive Rules Governing Use Allocation*, 36 NAT. RESOURCES J. 417, 422 & n.27 (1996). Thus, in her commentary, she suggests that equitable utilization is the "overarching principle." *Id.* at 420 (citing *Report of the Fifty-Second Conference*, ILA, Helsinki Rules on the Uses of the Waters of International Rivers, at 484, 496-97, arts. IV, X (1966); Report of the Sixtieth Conference ILA, Montreal Rules on Pollution, at 531, 535, art. 1 (1982); Report of the Sixty-Second Conference, ILA, Seoul Complementary Rules, at 232, art. 1 (1986)).

116. *See 1991 ILC Report*, *supra* note 51, at art. 7. Article 7 previously read: "[w]atercourse States shall utilize an international watercourse in such a way as not to cause appreciable harm to other watercourse States." *Id.* Appreciable harm "refers to costs that can be objectively measured as a result of denial of water rights." Elmusa, *supra* note 22, at 239. The result of State action amounts to appreciable harm if it causes "a real impairment of use, i.e., a detrimental impact of some consequence upon, for example, public health, industry, property, agriculture or the environment." *Id.* (citing *1988 ILC Report*).

117. *See* Hayton, *supra* note 82, at 41. Robert D. Hayton was a rapporteur for the International Law Association Water Resources Committee. *See id.* at 31 n.d.

harm" to that of "significant harm."[118] The significance of this change in phraseology is debated in the scholarly community.[119]

The main focus of the debate is the relationship between Article 5 and Article 7 of the Draft Articles.[120] To determine whether equitable and reasonable utilization exists, Article 5 requires an analysis of all factors enumerated in Article 6.[121] Article 7 prohibits States from causing significant harm to other riparian States.[122] At issue is which concept should prevail when the two come into conflict.[123] If the no-harm rule prevails, a State would not be able to

---

118. The new Article 7 reads:

Obligation not to cause significant harm

1. Watercourse States shall exercise due diligence to utilize an international watercourse in such a way as not to cause significant harm to other watercourse States.
2. Where, despite the exercise of due diligence, significant harm is caused to another watercourse State, the State whose use causes the harm shall, in the absence of agreement to such use, consult with the State suffering such harm over:
   (a) the extent to which such use has proved equitable and reasonable taking into account the factors listed in article 6;
   (b) the question of ad hoc adjustments to its utilization, designed to eliminate or mitgate any such harm caused and, where appropriate, the question of compensation.

1994 ILC Report, *supra* note 2, at art. 7.

119. *Compare* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399-400 *with* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 84-85.

120. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399.

121. *See 1994 ILC Report*, *supra* note 2, at arts. 5, 6. For the seven factors of equitable and reasonable utilization, see *supra* note 97. Article 6 does not include harm or injury as factors to be weighed in the balancing test. *See 1994 ILC Report*, *supra* note 2, at art. 5. However, Article V of the Helsinki Rules arguably includes substantial injury in its balancing test. *See* Helsinki Rules, *supra* note 2, at art. V. For a discussion of this argument, see *supra* note 115. Wouters implies that the omission of the terms "harm" and "injury" from the factors of Article 6, especially in light of their inclusion in the Helsinki Rules balancing test, supports the primacy of the no-harm rule. *See* Wouters, *supra* note 115, at 422 & n.27.

122. *See 1994 ILC Report*, *supra* note 2, at art. 7. For the text of Article 7, see *supra* note 118.

123. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399. For example, Hungary and Slovakia's proposal to develop the Gabcikovo-Nagymaros Project (the Project) creates both positive and negative effects on the environment of the Danube River. *See* Paul R. Willliams, *International Environmental Dispute Resolution: The Dispute Between Slovakia and Hungary Concerning Construction of the Gabcikovo and Nagymaros Dams*, 19 COLUM. J. ENVTL. L. 1, 3-20 (1994). The Project seeks to divert the flow of the Danube River for various purposes which potentially could be beneficial to the environment and the citizens of the Danube Basin. *See id.* at 3, 6-9. Among other things, the Project "would provide needed electricity to its participants at relatively low environmental cost," "would provide necessary flood protection for the Danube plain," "would substantially enhance the navigability of the Danube River," and would "improve the ability of the Soviet Fleet to manoeuver within the waterways of Eastern Europe and reduce the shipping costs of Soviet goods." *Id.* at 7-8. However, the Project could cause "substantial environmental

engage in an activity that significantly harms another State.[124] If the equitable utilization doctrine prevails, however, the harm would be just one factor to be weighed against the other factors contained in Article 6.[125]

The 1991 U.N. Draft Articles found that the no-harm rule prevailed because the use of an international watercourse that causes appreciable harm to another State is not equitable.[126] One commentator, Stephen C. McCaffrey, suggests that the new Article 7 does not eliminate the primacy of the no-harm rule, "but softens the regime by making two important changes in Article 7."[127] The first change is the addition of the requirement that States use "due

---

degradation of the Danube River region." *Id.* at 3. Negative impacts on the Danube River include:

> disruption of forests and river banks in immediate areas of construction; disruption of filtration for and the amount of drinking water supplies; drying out of the river bed and innundation of new reservoir areas with attendant alteration of ecosystems; disappearance of fish from the river due to their inability to adjust to the new canal and altered river bed; reduction in the water table with corresponding loss of nearby crops; increased susceptibility to flooding and earthquakes; and the stranding of significant human populations . . . in the area between the canal and river bed.

Neil A. F. Popovic, *In Pursuit of Environmental Human Rights: Commentary of the Draft Declaration of Principles of Human Rights and the Environment*, COLUM. HUM. RTS. L. REV. 487, 529 (1996).

Slovakia claims that the Project will only create minimal environmental dangers which environmental benefits will outweigh. *See* Williams, *supra*, at 18. Hungary asserts that the Project will harm the environment and thus should be terminated. *See id.* at 14. In an equitable utilization/no-harm analysis, the issue would be whether Slovakia would be allowed to cause significant harm to the environment by continuing the creation of the Project if an Article 6 balancing test weighed in favor of continuing the Project.

The Hungary and Slovakia dispute over the creation of the Project is currently before the International Court of Justice. *See* Case Concerning the Gabcikovo-Nagymaros Project (Hung. v. Slovk.), 1994 I.C.J. 151 (Dec. 20). For a description of the characteristics of the Danube River, see *supra* note 9.

124. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399. Continuing with the Danube River analysis introduced in note 123, if the no-harm rule prevailed, Slovakia would be unable to continue the Project even if the balancing test weighed in its favor, because the prevention of substantial harm is the primary concern.

125. *See id.* Continuing with the Danube River analysis, if the equitable utilization rule prevailed, Slovakia would be allowed to continue the Project if after weighing all of the factors, the use was deemed to be reasonable.

126. *See id.* The Commission's commentary to Article 7 (numbered Article 8 as initially adopted in 1988) stated that "prima facia, at least- utilization of an international watercourse . . . is not equitable if it causes other watercourse States appreciable harm." *Id.* at 399 n.28 (quoting 2 Y.B. Int'l L. Comm'n, pt. 2 at 36 (1988)).

127. McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399. McCaffrey states that an absolute no-harm rule does not coincide with State practice and could cause more problems than it could solve. *See id.* at 401.

diligence" not to cause significant harm to other States.[128] This clarifies the standard of responsibility that States owe to one another.[129]

The second change in Article 7 is the addition of paragraph 2, which requires states that cause significant harm, in spite of due diligence, to consult the injured State.[130] This addition suggests that the causation of significant harm "is not per se a breach of the state's international obligations."[131] Although the new Article 7 does not reverse the priority of the no-harm rule, it "mitigates the absolute priority given the no-harm rule under the 1991 articles . . . ."[132]

Another commentator, Professor Joseph W. Dellapenna, supports the position that this change in Article 7 "signals a greater recognition of the need for balancing the interests of the competing states in order to determine whether the infliction of harm violates the norms of customary international law."[133] Professor Dellapenna reasons that the addition of the due diligence standard reduces the absolute command of the no-harm rule and that the

128. *See id.* at 399. Due diligence is defined as: "[s]uch a measure of prudence, activity, or assiduity, as is properly to be expected from, and ordinarily exercised by, a reasonable and prudent man under the particular circumstances; not measured by any absolute standard, but depending on the relative facts of the special case." BLACK'S LAW DICTIONARY 457 (6th ed. 1990).

The Commentary to Article 7 explained that "[a] watercourse State can be deemed to have violated its due diligence obligation only if it knew or ought to have known that the particular use of an international watercourse would cause substantial harm to other watercourse States." Wouters, *supra* note 115, at 423 (citing 1994 U.N. Draft Articles, at commentary to art. 7, para. 5). Wouters interprets the Commentary to mean that a State can only initiate a use if the State knows or should know that the use will not cause significant harm to other States. *See id.* Thus, Wouters suggests that the Commentary supports the proposition that the no-harm rule preempts the equitable utilization principle. *See id.*

129. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399-400. The addition of the phrase "due diligence" settled a debate in the ILC over the responsibilty of States. *Id.* For a discussion of the debate, see Stephen C. McCaffrey, *The Law of International Watercourses: Some Recent Developments and Unanswered Questions*, 17 DENV. J. INT'L L. & POL'Y 505, 519-25 (1989) [hereinafter McCaffrey, *Recent Developments*]. McCaffrey argues that the addition of "due diligence" just makes explicit what was already implicit because State practice does not require that States achieve absolute results. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 399.

130. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 400.

131. *Id.*

132. *Id.* at 401. The commentary suggests that some kinds of serious harm could never be both equitable and reasonable. *See id.* at 400. "A use which causes significant harm to human health and safety is understood to be inherently inequitable and unreasonable." *Id.* (citing *1994 ILC Report*, *supra* note 2, at 242).

133. Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 84-85. Dellapenna states that McCaffrey's conclusion "ignores the express provisions of the Drafts Articles." Dellapenna, *Treaties as Instruments*, *supra* note 2, at 39.

compensation provision makes explicit the responsibility of States to compensate for unequitable and unreasonable uses.[134] Thus, he suggests that "the rewritten Article 7 is explicitly subordinated to the now clearly primary rule of equitable utilization in [A]rticle 5."[135]

Neither the text of Article 7 nor the Commission's commentary clearly indicate whether the no-harm rule preempts the rule of equitable utilization.[136] The interpretations of both Professor McCaffrey and Professor Dellapenna regarding the relationship between Article 5 and Article 7 receive support in the international community.[137] Unfortunately, the issue of which principle trumps the other when the two come into conflict remains unresolved.

E. Dispute Prevention & Dispute Resolution

The Helsinki Rules recommend mechanisms for dispute prevention and dispute resolution while the 1994 U.N. Draft Articles provide extensive mandatory rules.[138] The Helsinki Rules highlight the obligation of States to settle disputes by peaceful means so as not to endanger international peace, security and justice.[139] In an

134. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 85.

135. *Id.* Dellapenna asserts that the absolute primacy of the no-appreciable harm rule does not reflect the reality of water usage. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 39. It prohibits any meaningful use that an upper riparian State could implicate. *See id.*

136. *See* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 400. The ILC's effort to clarify which rule takes preference in its Commentary to Article 7 only made the matter more confusing. *See* Wouters, *supra* note 115, at 423. The Commentary stated that Article 7 "is setting forth a process aimed at avoiding significant harm as far as possible while reaching an equitable result in concrete cases." *Id.* (citing *1994 ILC Report*, *supra* note 2, at commentary to art. 7, para. 1). The Commentary goes on to say that in some cases, the "'equitable and reasonable utilization' of an international watercourse may still involve significant harm to another watercourse State." *Id.* (citing *1994 ILC Report*, *supra* note 2, at commentary to art. 7, para. 2). The Commentary further states that "the principle of equitable utilization remains the guiding criterion in balancing the interests at stake." *Id.* (citing *1994 ILC Report*, *supra* note 2, at commentary to art. 7, para. 2). However, the Commentary further states that the obligation in Article 7 "sets the threshold for lawful States activity." *Id.* (citing *1994 ILC Report*, *supra* note 2, at commentary to art. 7, para. 4). Thus, the paradoxical statements contained in the Commentary do not resolve the debate. *See id.*

137. *See* Wouters, *supra* note 115, at 420 (acknowledging primacy of no-harm rule); Benvenisti, *supra* note 21, at 404 (stating "ILC should be commended for the finally adopted formula, which gives priority to the equitable utilization standard over the no appreciable harm rule").

138. For a discussion of the recommendations of the Helsinki Rules, see *infra* notes 139-48 and accompanying text. For a discussion of the mandatory rules of the 1994 U.N. Draft Articles, see *infra* notes 149-57 and accompanying text.

139. *See* Helsinki Rules, *supra* note 2, at art. XXVII. These obligations are consistent with States' obligations under the U.N. Charter. *See id.*

effort to prevent disputes, the Rules recommend that States furnish information on the waters of a drainage basin to other States whose interests may be substantially affected, yet the Rules do not require such communication.[140] According to the Rules, States should provide notice of any construction which will alter the shared basin and should include facts of the alteration to allow the other States to assess the situation.[141] Further, the State providing notice should give the States receiving notice reasonable time to submit their views on the alteration.[142] If the State fails to provide notice, the alteration will not be given the temporal priority usually given to construction projects.[143]

The Helsinki Rules also recommend that States enter into negotiations if a dispute arises.[144] The Rules further recommend that States refer their disputes over international drainage basins to a joint agency to make recommendations for efficient use of the drainage basin.[145] If it appears that a dispute cannot be resolved

---

140. *See id.* at art. XXIX. Article XXIX states:

1. With a view to preventing disputes from arising between States as to their legal rights or other interest, it is *recommended* that each basin State furnish relevant and reasonably available information to the other basin States concerning the waters of a drainage basin within its territory and its use of, and activities with respect to such waters.

2. A State, regardless of its location in a drainage basin, *should* in particular furnish to any other basin State, the interests of which may be substantially affected, notice of any proposed construction or installation which would alter the regime of the basin in a way which might give rise to a dispute as defined in Article XXVI. The notice *should* include such essential facts as will permit the recipient to make an assessment of the probable effects of the proposed alteration.

3. A State providing the notice referred to in paragraph 2 of this Article *should* afford to the recipient a reasonable period of time to make an assessment of the probable effect of the proposed construction or installation and to submit its views thereon to the State furnishing the notice.

4. If a State has failed to give the notice referred to in paragraph 2 of this Article, the alteration by the State in the regime of the drainage basin shall not be given the weight normally accorded to temporal priority in use in the event of a determination of what is a reasonable and equitable share of the waters of the basin.

Id. (emphasis added).

141. *See id.* at art. XXIX(1), (2).

142. *See id.* at XXIX(3).

143. *See id.* at art. XXIX(4); *see also id.* at art. VIII(2) (stating "[a] use that is in fact operational is deemed to have been an existing use from the time of the initiation of construction"). For a discussion of the priority of existing uses, see *supra* notes 104-09 and accompanying text.

144. *See* Helsinki Rules, *supra* note 2, at art. XXX.

145. *See id.* at art. XXXI. The States should request the agency to survey the international drainage basin and to make recommendations for the most efficient use of the basin in the interests of all the States. *See id.* at art. XXXI(1). In appropriate cases, non-basin States who are parties to a treaty of the international drain-

through the efforts of a joint agency, States may seek mediation by a third State, a qualified international organization, or a qualified person.[146] If States cannot agree to measures recommended by any of the third parties mentioned above, the Helsinki Rules next recommend that the States form a conciliation commission dedicated to resolving the dispute.[147] If the commission does not solve the dispute, the Rules then recommend that States submit their disputes to an ad hoc arbitral tribunal, a permanent arbitral tribunal or the International Court of Justice.[148]

Unlike the Helsinki Rules, the 1994 U.N. Draft Articles require States planning measures which could have an "appreciable adverse effect" upon other watercourse States to provide mandatory notice to the affected States.[149] Further, the State must include available technical data and information with the notice to allow States to assess the effects of the planned measures.[150] Absent an agreement and urgent circumstances, the State giving notice must allow the States receiving notice a six-month period in which to evaluate the effects of the measures and respond to the State giving notice.[151] The Articles go further to require the State giving notice to furnish additional information upon request and to prohibit the imple-

---

age basin should be invited to associate themselves with the work of the joint agency or be allowed to appear before it. *See id.* at art. XXXI(3).

146. *See id.* at art. XXXII.

147. *See id.* at art. XXXIII. The States should form a commission of inquiry or an ad hoc conciliation commission in accordance with the manner set forth in the Annex. *See id.*

148. *See id.* at XXXIV. If a commission has not been formed as provided for in Article XXXIII, or the commission has not found an appropriate solution to recommend, or the commission's recommended solution has been rejected by the States, then the States should turn to the tribunals or the International Court of Justice. *See id.* The Helsinki Rules recommend the use of the Model Rules on Arbitral Procedure prepared by the U.N. ILC at its tenth session in 1958 if the States choose arbitration. *See id.* at XXXV. If the States resort to arbitration, the award given is final and should be executed in good faith. *See id.* at XXXVI.

149. *1994 I.L.C. Report, supra* note 2, at art. 12. Article 12 reads:

> [b]efore a watercourse State implements or permits the implementation of planned measures which may have an appreciable adverse effect upon other watercourse States, it shall provide those States within timely notification thereof. Such notification shall be accompanied by available technical data and information in order to enable the notified States to evaluate the possible effects of the planned measures.

Id.

150. *See id.*

151. *See id.* at art. 13(a). Upon request, the State receiving notice can extend the evaluation period for no more than six months. *See id.* at 13(b). However, Article 19 allows immediate implementation of planned measures if they are "of the utmost urgency in order to protect public health, public safety or other equally important interests." *Id.* at art. 19(1). In such case, the implementing State must send a formal declaration of the urgency to the affected States. *See id.* at art. 19(2).

mentation of the measures without the consent of the notified States.[152] Moreover, the Articles also require the States giving and receiving notice to enter into consultations and negotiations "with a view to arriving at an equitable resolution of the situation."[153]

If the State fails to give notice, affected States may request the State to send notification and available information.[154] If the notifying State believes that it is under no obligation to notify the requesting State, it must then send the requesting State a documented explanation of why it owes no obligation.[155] Further, if the requesting State wishes to enter into negotiations, then the States must promptly do so.[156] In addition, the notifying State must suspend implementation of its planned measures for no more than six months if the other State requests such delay.[157]

VI. Critical Analysis of Underlying Provisions of the Helsinki Rules and the 1994 U.N. Draft Articles

A. Significance of Excluding Navigation and Confined Groundwater From the 1994 U.N. Draft Articles

The exclusion of rules for navigation and confined groundwater from the 1994 U.N. Draft Articles renders the Articles incomplete.[158] If the United Nations endorse the 1994 Draft Articles, States must still look to the Helsinki Rules for guidance of which navigational rules to follow.[159] Some scholars believe that the ILC

152. *See id.* at art. 16(1). If the notifying State does not receive a response within the six-month period, it can proceed with the implementation of its planned measures in accordance with the notification. *See id.* Additionally, the notifying State can offset any claim to compensation by the State that failed to reply within the six-month period with expenses incurred for the action that would not have been taken if the State had properly responded within the six-month period. *See id.* at 16(2).

153. *Id.* at art. 17(1). In consulting and negotiating, each State shall "in good faith pay reasonable regard to the rights and legitimate interests of the other State." *Id.* at 17(2).

154. *See 1994 ILC Report*, *supra* note 2, at art. 18(1). The watercourse State must have serious reason to believe that the measures will have an appreciable adverse effect upon it and must send a documented explanation of the reasons for making the request. *See id.*

155. *See id.* at art. 18(2).

156. *See id.*

157. *See id.* at art. 18(3).

158. *See generally* Scanlan, *supra* note 5 (discussing problems of excluding confined groundwater from scope of U.N. Draft Articles).

159. *See* Hayton, *supra* note 82, at 34 (stating some scholars believe Helsinki Rules fully address navigational issues). Some States rely heavily on navigational regulation. *See* Linnerooth, *supra* note 9, at 634. For instance, navigation is an important issue for forming agreements regarding the Danube River. *See id.* The geography of the Danube presents burdensome obstacles to navigation. *See id.*

purposely omitted rules for navigation from the 1994 U.N. Draft Articles, because the Helsinki Rules fully addressed this issue.[160] Although the Helsinki Rules provide adequate rules for navigation, States still disagree on fine points of the rules, including the extent of the right of "free navigation."[161] Therefore, the ILC should have taken the opportunity to clarify these points and drafted articles for navigational uses of water.[162]

In addition, the ILC should have taken the opportunity to develop international groundwater law.[163] The international community has a heightened interest in regulating groundwater because States have been increasingly raiding their own groundwater supplies.[164] Further, the regulation of groundwater is extremely important because some of these water sources have very little

Large shallow stretches, dangerous rapids, tremendous amounts of ice in winter, and heavy spring floods call for navigational rules to follow in using the Danube river. *See id.*

160. *See* Hayton, *supra* note 82, at 34.

161. *See id.* States are unclear as to the extent of Articles XIII and XIV. *See id.* at n.10.

162. *See id.* at 34 (describing problems of not including navigation rules in 1994 U.N. Draft Articles).

163. *See* Rosenstock, *Second Report*, *supra* note 70 (recommending inclusion of groundwater to Draft Articles); McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 403 (stating "[o]ne hopes . . . [the] omission [of groundwater] will be corrected in further work on the draft by governments.").

164. *See* LeRoy, *supra* note 1, at 299. Water covers 70% of the earth, but only a small percentage constitutes renewable freshwater. *See id.* The earth contains the same amount of water today as it did 2,000 year ago, but the world population has increased from 300 million people to 5.7 billion people with a projected increase to 10 billion by the year 2050. *See id.* The increased demand for water by the growing population has caused States to rely on nonrenewable freshwater to temporarily fulfill the demand. *See id.* at 311. For example, in 1990, nine countries raided nonrenewable water sources which in total exceeded 100% of renewable water supplies. *See id.* at 311.

Libya, Qatar, Jordan, Israel and Saudi Arabia all rely on unrenewable water supplies. *See id.* at 312. Libya withdraws almost four times the amount of its renewable water supply. *See id.* Libya's water usage could potentially surpass its groundwater supply in the next few decades. *See id.* In addition, China's groundwater use has caused the water tables of wells serving 10 cities to drop one meter per year. *See* Scanlan, *supra* note 5, at 2191 (citing WORLD BANK, WORLD DEVELOPMENT REPORT 1992: DEVELOPMENT AND THE ENVIRONMENT, at 50 (1992)). Moreover, the overpumping of groundwater in Bangkok caused the sewage and water pipes to collapse which in turn flooded parts of the city and allowed seawater to infiltrate the city's water system. *See id.* at 2191-92 (citing WORLD BANK, at 98 (1992)).

Even the U.S. relies on groundwater to support the population's increased demand for water. *See* WENDY GORDON, NATURAL RESOURCES DEFENSE COUNCIL, INC., A CITIZEN'S HANDBOOK ON GROUNDWATER PROTECTION 11 (1984). Groundwater "provides an abundant, reliable, and economical water supply that can be used in a variety of activities for which surface water, due to its greater seasonal variations in volume and temperature, would be uneconomical or infeasible." *Id.* The U.S. increased its groundwater use from 21 billion gallons per day in 1945 to 88 billion gallons per day in 1980. *See id.*

recharge capability.[165] Consequently, if water is taken from these sources faster than it is replenished, the continued withdrawal could extinguish States' water supplies.[166]

States thus need to regulate their use of non-renewable groundwater to avoid exhausting their water supply. However, international law regulating groundwater is extremely sparse, which makes it difficult for States to form agreements and settle disputes on shared groundwater.[167] The ILC recognized this problem; however, it has chosen to defer the issue to the international community for resolution.[168] Unfortunately, the problem with this deferment is that no other institution has the influence of a U.N. organ nor the benefit of consulting States on their views.[169] Because the ILC has the opportunity to aid the development of international law, the ILC should have taken it upon itself to resolve this problem and develop rules for international groundwater law.[170]

B. 1994 U.N. Draft Articles as an Innovative Approach Towards "Community of Property"

The theory of equitable utilization as set forth in the Helsinki Rules has already been accepted by many States and has been incorporated into their State practice.[171] In addition, equitable utiliza-

165. *See* LeRoy, *supra* note 1, at 304 n.24. For example, "water[s] in deep aquifers . . . take hundreds of years to replenish themselves through the natural hydrologic cycle." *Id.* at 311.

166. *See id.* at 304 n.24. Once non-renewable water sources are exhausted, States will be forced to rely solely on renewable freshwater which will not support the demand for water. *See* Robert Engelman, Editorial, *But Not a Drop to Drink*, THE BALTIMORE SUN, Jan. 7, 1994, at 15A. "[T]he danger is that now-abundant non-renewable water resources eventually will be sucked dry. Much more modest renewable resources would then be pressed to support populations that could not have grown so numerous in the absence of non-renewable water." *Id.*

167. *See* Melissa Crane, *Diminishing Water Resources and International Law: U.S.-Mexico, A Case*, 24 CORNELL INT'L L.J. 299, 299 (1991). States can assert a wide variety of claims over shared groundwater because they have no principles to guide them. *See id.* Further, international principles regarding groundwater that do exist are too weak to be legally binding, because States do not yet accept them as law. *See id.* Moreover, it is difficult to form legal principles regarding the allocation of groundwater, because the nature of groundwater is scientifically uncertain. *See id.*

168. For a discussion of this deferment, see *supra* notes 85-87 and accompanying text.

169. For a discussion of the questionnaires distributed by the ILC, see *supra* notes 68-70 and accompanying text.

170. *See* Rosenstock, *Second Report*, *supra* note 70 (recommending inclusion of groundwater to Draft Articles); McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 403 (stating "[o]ne hopes . . . [the] omission [of groundwater] will be corrected in further work on the draft by governments.").

171. *See* LeRoy, *supra* note 1, at 319. Most agreements between States are based on the principle of equitable utilization. *See id.* States in the Sengal, Lake

tion has also been supported by international tribunals.[172] Thus, it is already evident that the majority of States will accept this principle in forming their own international watercourse agreements.[173]

The 1994 U.N. Draft Articles require equitable utilization but also endorse the concept of "community of property."[174] The ILC acted both cautiously and innovatively when it endorsed the "community of property" approach but did not require that States achieve this goal.[175] States may be reluctant to compromise their State sovereignty to achieve such a level of cooperation.[176] The ILC attempted to balance this fear of non-compliance with the pressing need to develop the law of international watercourses, however, the "community of property" approach in the 1994 U.N. Draft Articles "remains an imperfect obligation as there is no procedure to compel the parties to succeed in the negotiations."[177]

Chad, Kagera, Gambia and the Lower Mekong Basins have incorporated the Helsinki Rules into various international watercourse agreements. *See* Michael D. Hodges, Report, *The Rights and Responsibilities of Using an International Waterway*, 4 J. INT'L L. & PRAC. 375, n.36 (1995). The equitable and reasonable utilization theory also appears in such agreements as the Indus River Treaty and the Agreement on Sharing of the Ganges Waters. *See* Indus Waters Treaty, Sept. 19, 1960, Pak.-India, 419 U.N.T.S. 125 (1962).

172. *See* Territorial Jurisdiction of the International Commission of the Oder (Czech., Den., Fr., Ger., Swed., U.K., Pol.) 1929 P.C.I.J. (Ser. A) No. 23; Diversion of Water from the Meuse (Neth. v. Belg.), 1937 P.C.I.J. (Ser. A/B) No. 70, (June 28); Lake Lanoux Arbitration, *supra* note 3, at 281.

173. *See* LeRoy, *supra* note 1, at 319 (stating most agreements between States are based on equitable utilization theory); Bourne, *supra* note 54, at 216. In the Commentary to Article 5 of the 1994 U.N. Draft Articles, the ILC stated that "a survey of all available evidence of the general practice of States accepted as law, in respect of the non-navigational uses of international watercourses . . . reveals that there is overwhelming support for the doctrine of equitable utilization as a general rule of law for the determination of the rights and obligations of states in this field." Bourne, *supra* note 54, at 216 (citing *1994 ILC Report*, *supra* note 2, at 222).

174. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 52-53. For a discussion of the ILC's endorsement of the concept of "community of property," see *supra* notes 95-103 and accompanying text.

175. *See* Okidi, *supra* note 7, at 172 (stating intergovernmental institutions tend to act cautiously and try to avoid potentially controversial formulations).

176. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 54. Dellapenna suggests that international organizations, such as the United Nations and the International Bank for Reconstruction and Development (the World Bank), provide material incentives to States to pursue communal management projects. *See id.* States find it difficult to negotiate international water projects if they see no benefit in curbing their use or pollution of an international watercourse. *See* LeRoy, *supra* note 1, at 320. Thus, if organizations provide States with benefits, the States will be more willing to cooperate. *See id.*

177. Dellapenna, *Treaties as Instruments*, *supra* note 2, at 53; *see 1994 ILC Report*, *supra* note 2, at arts. 8, 11-18. Dellapenna explains that "[t]he customary legal obligation can only be expressed as an obligation to negotiate in good faith for the creation of the necessary institutions." Dellapenna, *Treaties as Instruments*, *supra*

C. Benefits of Having a Conditional Priority for Existing Uses

The Helsinki Rules assert the stronger position with respect to conditional priority for existing uses of international watercourses. Reasonable existing uses should be given conditional priority because communities rely on the status quo.[178] Communities that expect a certain supply of water should not be deprived of their water unless their use is unreasonable.[179] Moreover, this proposition promotes stability and efficiency because it allows States the opportunity to invest in reasonable, long-term planning.[180] As long as the initial use continues to be reasonable, the State can continue to use its resources in the same manner.[181]

Additionally, the priority given to existing uses provides incentives to States that have relied on the existing uses to enter into agreements regarding international watercourses.[182] If States relying on existing uses were not granted initial priority, they would be reluctant to negotiate agreements out of fear of redistribution of their resources.[183] A State that does not have the benefit of an existing use, however, would be reluctant to negotiate for fear of continuation of the existing use.[184]

The opposing State always has the option to claim an unreasonable use and the opportunity to prove its unreasonableness because the continuance of the use is only conditional.[185] If the use is truly unreasonable, it will not be permitted to continue.[186] If it is reasonable, the State should be allowed to continue its conduct because the community relies on the existing use.[187] Thus, the opposing State has nothing to lose in entering the agreement, because

---

note 2, at 53. For a discussion of how the ILC fails to implement the theory of "community of property," see *supra* notes 101-03 and accompanying text.

178. *See* Benvenisti, *supra* note 21, at 408-09.

179. *See id.*

180. *See id.* at 408. The commentary on the Helsinki Rules explained that "[a] State is unlikely to invest large sums of money in the construction of a dam if it has no assurances of being afforded some legal protection for the use over an extended period of time." *Id.* at 409 n.142 (citing commentary on the Helsinki Rules, 52 ILA, Conference Report 484, 493 (1966)).

181. *See* Helsinki Rules, *supra* note 2, at art. VIII. For the text of Article VIII, see *supra* text accompanying note 106.

182. *See* Benvenisti, *supra* note 21, at 409.

183. *See id.*

184. *See* LeRoy, *supra* note 1, at 320 (stating negotiations are difficult when users see no benefit in curbing their use or pollution or when they perceive negotiation as hindrance to development).

185. *See* Helsinki Rules, *supra* note 2, at art. VIII.

186. *See* Benvenisti, *supra* note 21, at 409.

187. *See id.* at 408-09.

the use would continue even without an agreement.[188] However, the use might be terminated for unreasonableness with the conclusion of an agreement.[189]

D. Uncertainty about the Relationship Between Equitable Utilization and the No-Harm Rule

The Helsinki Rules are insufficient in that they do not provide an answer for what happens when the rule of equitable utilization conflicts with the no-harm rule.[190] Presently, the 1994 U.N. Draft Articles also do not provide an answer because scholars cannot agree on how to interpret the new language of Article 7 and its relation to Article 5.[191] Until one of the interpretations prevail, it is impossible to determine the actual significance of these two Articles to the international community.[192] However, even if the no-harm rule prevails as the governing rule of the 1994 U.N. Draft Articles, there is no guarantee that States will embrace the no-harm approach in settling international watercourse disputes.[193]

---

188. *See id.* at 408.

189. *See id.*

190. *See* Dellapenna, *Designing the Legal Structures*, *supra* note 13, at 81 (stating ILA did not attempt "to work out the relation between the 'no harm' rule and the 'equitable utilization' rule"). Even though the Helsinki Rules do not explicitly state whether the equitable utilization theory trumps the no-harm rule, some commentators believe that equitable utilization is the "overarching principle." Wouters, *supra* note 115, at 420 (citing *Report of the Fifty-Second Conference*, ILA, Helsinki Rules on the Uses of the Waters of International Rivers, at 484, 496-97, arts. IV, X (1966); *Report of the Sixtieth Conference*, ILA, Montreal Rules on Pollution, at 531, 535, art. 1 (1982); *Report of the Sixty-Second Conference*, ILA, Seoul Complementary Rules, at 232, art. 1 (1986)). For a discussion of Wouters' views, see *supra* note 115.

191. For a discussion of the conflicting interpretations of the relationship between Article 5 and Article 7, see *supra* notes 120-37 and accompanying text.

192. *See Convention on the Law of the Non-Navigational Uses of International Watercourses: Report of the Secretary-General*, U.N. GAOR, 51st Sess., Agenda Item 146, at 40-46, U.N. Doc. A/51/275 (1996), *reprinted at* <gopher://gopher.un.org/00/ga/docs/51/plenary/A51-275.EN> (last visited Jan. 30, 1997) (discussing varying State views on current interpretations of and proposed changes to Articles 5 and 7 of the 1994 U.N. Draft Articles) [hereinafter *1996 Report of the Secretary-General*].

193. *See* Wouters, *supra* note 115, at 437. A recent survey of watercourse agreements indicated that "[i]t is unlikely that states will embrace a no significant harm approach to watercourse development, except in special cases where existing uses are to be protected." *Id.* at 437. The only agreement surveyed that contained the no-harm rule was the Israeli-Jordani Agreement which incorporates the rule to protect existing uses. *See id.* at 436. By contrast, the United States commented that "[t]he balance struck between equitable and reasonable utilization and participation (article 5) and the obligation not to cause significant harm (article 7) is a good one, and worthy of widespread endorsement and application." *1996 Report of the Secretary-General*, *supra* note 192, at *35.

E. Negotiation as a Beneficial Tool

The Helsinki Rules recommend negotiation to settle water disputes between States, but they do not require it.[194] The requirement of negotiation as a mechanism for dispute prevention as well as for dispute settlement as set forth in the 1994 U.N. Draft Articles provides a better approach to solving international water disputes between States.[195] The requirement to negotiate "prod[s] the riparians to establish direct and 'thick' interaction."[196] Thus, it promotes the idea of cooperation in the management of international watercourses.[197] However, there is no mechanism to compel States to succeed in negotiations.[198] Therefore, the requirement to negotiate does not automatically produce full cooperation between riparian States.[199]

Although the 1994 U.N. Draft Articles' requirement to negotiate is beneficial, it contains several inadequacies.[200] First, the requirement to negotiate only applies to "planned measures."[201] It

194. For a discussion of the Helsinki Rules' recommendations for dispute prevention and resolution, see *supra* notes 138-48 and accompanying text.

195. *See* Lazerwitz, *supra* note 100, at 266. For a discussion of the 1994 U.N. Draft Articles dispute prevention and resolution requirements, see *supra* notes 149-57 and accompanying text.

196. Benvenisti, *supra* note 21, at 400.

197. *See id.* at 400. States resolve the majority of water disputes by negotiation and not by litigation. *See id.* Negotiations "are the key to initiating cooperation, promoting confidence among riparians, and increasing the range of spheres of communication and cooperation, even in spheres unrelated to the resource." *Id.*

198. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 53.

199. *See* Benvenisti, *supra* note 21, at 400-03. Prescribing the requirement to negotiate "is not enough." *Id.* at 402. Benvenisti suggests that "to promote cooperation, international law should provide states with ample incentives to negotiate." *Id.* at 400. Benvenisti also suggests that the law should incorporate a flexible standard of negotiation which would "include scientists from various disciplines who could suggest alternative ways of reaching optimal solutions, and whose contributions could defuse the potentially adversarial dimension of the negotiations." *Id.* at 402.

200. *See* Charles B. Bourne, *The International Law Commission's Draft Articles on the Law of International Watercourses: Principles and Planned Measures*, 3 COLO. J. INT'L ENVTL. L. & POL'Y 65, 68-71 (1992); Lazerwitz, *supra* note 100, at 266-67. These two articles refer to the 1991 U.N. Draft Articles. *See* Bourne, *supra*, at 65 & n.2; Lazerwitz, *supra* note 100, at 247 & n.5. Part Three of the 1991 U.N. Draft Articles is almost identical to Part Three of the 1994 U.N. Articles except for the addition of Articles 13(b) and 16(2) to the 1994 U.N. Draft Articles and the deletion of Article 19(3) from the 1994 U.N. Draft Articles. *Compare 1991 ILC Report supra* note 51, at arts. 11-19 *with 1994 ILC Report*, *supra* note 2, at arts. 11-19.

201. *See* Lazerwitz, *supra* note 100, at 266; *1994 ILC Report*, *supra* note 2, at arts. 15, 17. The requirement to negotiate only applies to the implementation of planned measures which "would be inconsistent with the provisions of articles 5 or 7." *1994 ILC Report*, *supra* note 2, at arts. 15, 17. For a discussion of Articles 5 and 7, see *supra* notes 120-37 and accompanying text.

thus limits the negotiation requirement to future water uses and fails to require negotiation to settle disputes regarding already existing water uses.[202]

Second, the 1994 U.N. Draft Articles exhibit preferential treatment to notified States.[203] If a notified State does not respond within the six-month period, the notifying State "must either delay implementation of its planned measures, or proceed to implement them and run the risk of incurring uncertain legal liability if harm results."[204] The notifying State can deduct actual expenses incurred in implementing plans that would not have been incurred if the notified State timely responded from compensation claimed by the notified States that did not timely respond.[205] However, the notifying State is still subject to the remaining liability for the notified State's claim to compensation.[206] On the other hand, the Articles do not impose any special sanctions on a notified State that does not respond within the sixty-day period.[207] Thus, the 1994 U.N. Draft Articles give the notified State an unfair advantage over the notifying State.[208] Despite these inadequacies, the 1994 U.N. Draft Articles approach to dispute resolution through the requirement of negotiation is a beneficial contribution to the international community.

VII. CONCLUSION

For over thirty years the Helsinki Rules have provided the international community with helpful guidelines for regulating international watercourses.[209] Many States have embraced the Rules and have incorporated them into bilateral and multilateral trea-

202. *See* Lazerwitz, *supra* note 100, at 266.

203. *See* Bourne, *Principles and Planned Measures, supra* note 200, at 68-69.

204. *Id.* at 68-69.

205. *See 1994 ILC Report, supra* note 2, at art. 16(2).

206. *See id.*

207. *See* Bourne, *Principles and Planned Measures, supra* note 200, at 69.

208. *See id.* at 68-70. "There is, then, a lack of balance in the treatment of the notifying State and the notified State for failure to comply with the required procedures; while the former remains legally bound by all provisions of the Draft Articles, the latter may ignore the procedural rules with impunity." *Id.* at 69.

209. *See generally* Bourne, *ILA's Contribution supra* note 54 (providing ILA's contributions to water law). For a discussion of the work of the ILA, see *supra* notes 53-62 and accompanying text.

ties.[210] However, some States have ignored the Helsinki Rules and chosen to follow their own rules or no rules at all.[211]

The crux of the problem is not that the Helsinki Rules are outdated. To the contrary, the Rules apply just as much today as they did when they were developed in 1966.[212] However, there are two main problems with the Helsinki Rules. First, the Helsinki Rules can only be enforced on a voluntary basis. States can use the Helsinki Rules as a model for their own agreements only if they chose to do so. The lack of enforcement power of the Helsinki Rules renders them insufficient to deal with international watercourse issues today.

Second, the Rules themselves utilize unassuming language.[213] The Helsinki Rules are full of recommendations and optional responsibilities but sparse with mandatory obligations. Even if the Helsinki Rules were themselves mandatory, the language within the rules makes them fairly optional.

The potential enforcement power of the United Nations and the commanding language within the 1994 U.N. Draft Articles provides a stronger foundation for international support than the ILA's Helsinki Rules. Although the ILC and the United Nations as a whole lack absolute enforcement power, the General Assembly has the authority to make recommendations to Members of the United Nations and to the Security Council.[214] The General Assem-

---

210. For a discussion of States incorporating the Helsinki Rules and its provisions into international agreements, see *supra* note 171.

211. For example, States such as Israel have engaged in the unilateral taking of water supplies. *See* Scanlan, *supra* note 5, at 2197-99. For a discussion of the Israeli-Arab conflict, see *supra* note 32.

212. *See* Bourne, *ILA's Contribution*, *supra* note 54, at 213-14. Bourne stated that:

> [b]y 1966, in the Helsinki Rules, the ILA had identified the basic rule on the subject [of international water resources]—the principle of equitable utilization. In the intervening years the ILA has based its work on the proposition that this principle is the fundamental law, the more detailed rules subsequently adopted by it being merely more precise expressions of the principle and subject to it. The principle, requiring the reasonable and equitable sharing of the benefits of the waters of an international drainage basin is seen as the best suited for achieving the rational management of these waters.

Id. The best evidence of the Helsinki Rules' influence is seen in the work of the ILC which reveals overwhelming support for the theory of equitable utilization. *See id.* at 215-16. *But see* McCaffrey, *Commission Adopts Articles*, *supra* note 68, at 404 (stating Helsinki Rules "are now nearly thirty years old and fail to deal with key issues").

213. For a discussion of the unassuming language of the Helsinki Rules, see *supra* notes 139-48 and accompanying text.

214. *See* U.N. CHARTER art. 10. Article 10 states:

bly can recommend that Member States use the 1994 U.N. Draft Articles in forming their own international watercourse agreements and can pass a resolution supporting the implementation of these Articles.

In addition, the United Nations can enlist the "carrot and stick" approach. The 1994 U.N. Draft Articles could be incorporated into the policies of U.N. agencies such as the Department of Technical Cooperation for Development (UNCTCD), the Food and Agriculture Organization (FAO), the Development Program (UNDP) and the Environmental Program (UNEP).[215] The U.N. agencies could help fund international water projects that utilize the provisions of the Draft Articles in their international watercourse agreements.[216] The U.N. agencies could further refuse aid to States that would not follow the principles of the Articles.[217]

Moreover, the 1994 U.N. Draft Articles require mandatory negotiation for planned measures but cannot force States to succeed in the negotiations.[218] However, if the U.N. agencies help to fund international water projects, States might be induced to succeed in negotiations with other States.[219] The Articles and the U.N. agencies would thus promote cooperation in managing international watercourses.

Although the 1994 U.N. Draft Articles provide a stronger foundation for international support than the Helsinki Rules, the Articles do not respond to all of the current problems concerning international watercourses. For example, the Draft Articles exclude groundwater from its purview and do not directly address navigational issues.[220] Furthermore, the 1994 U.N. Draft Articles contain

---

> [t]he General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the Members of the United Nations or to the Security Council or to both on any questions or matters.

Id.

215. *See* Lisa M. Jacobs, Comment, *Sharing the Gifts of the Nile: Establishment of a Legal Regime for Nile Waters Management*, 7 TEMP. INT'L & COMP. L.J. 95, 105 (1993).

216. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 54. For a discussion of providing incentives to States, see *supra* note 176.

217. *See* Jacobs, *supra* note 215, at 104.

218. *See* Dellapenna, *Treaties as Instruments*, *supra* note 2, at 53.

219. *See* Benvenisti, *supra* note 21, at 400 (stating that "international law should provide states with ample incentives to negotiate").

220. For a discussion of the exclusion of groundwater from the 1994 U.N. Draft Articles, see *supra* notes 158, 163-70 and accompanying text. For a discussion of the exclusion of navigational issues from the 1994 U.N. Draft Articles, see *supra* notes 158-62 and accompanying text.

inherent ambiguities, such as whether the principle of equitable utilization or the no-harm rule prevails if the two come into conflict.[221] The failure of the ILC to provide guidelines for important international concerns and to resolve inherent ambiguities within the text itself renders the 1994 U.N. Draft Articles incomplete.

Although the Sixth Committee convened as a working group from October 7 through October 11, 1996, to develop a framework convention based on the 1994 U.N. Draft Articles, the Sixth Committee has not yet completed its task.[222] The Sixth Committee presently has the opportunity to deviate from the 1994 U.N. Draft Articles when forming the framework convention.[223] Thus, it is still possible for the Sixth Committee to improve upon the ILC's shortcomings. However, even if the Sixth Committee neither addresses additional issues nor clarifies ambiguities, the framework convention will still be a progressive step towards codifying the international law of watercourses.[224]

Michelle R. Sergent

---

221. For a discussion of the controversy between the principle of equitable utilization and the no-harm rule, see *supra* notes 120-37 and accompanying text.

222. *See Activities of the Sixth Committee, supra* note 72. The Sixth Committee is scheduled to reconvene from March 24 to April 4, 1997 to continue elaborating on the framework convention. *See Convention on the Law of International Watercourses, supra* note 77. For a discussion of the activities of the Sixth Committee, see *supra* notes 75-77 and accompanying text.

223. *See* McCaffrey, *Commission Adopts Articles, supra* note 68, at 403. McCaffrey stated: "[i]t remains to be seen whether the working group will be able to agree upon a text or whether, if it does, the articles will depart significantly from the ILC's draft." *Id.* The Sixth Committee can also refer the 1994 U.N. Draft Articles back to the ILC for reconsideration or redrafting. *See Commission Report, supra* note 70, at para. 184. For a discussion of the Sixth Committee's options, see *supra* note 74.

224. *See* McCaffrey, *Commission Adopts Articles, supra* note 68, at 403. States have responded positively to the 1994 U.N. Draft Articles because the Articles balance the interests of upper and lower riparian States. *See id.* Neither upper nor lower riparian States have accepted the Draft Articles in their entirety nor wholly rejected them. *See id.* The success of the framework convention will depend on State acceptance. *See id.* at 403-04.