The International Court of Justice Decision Regarding the Gabcikovo-Nagymaros Project

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THE INTERNATIONAL COURT OF JUSTICE
DECISION REGARDING THE GABČÍKOVOS-NAGYMAROS PROJECT

Mari Nakamichi*

INTRODUCTION

The Gabcíkovo-Nagymaros Project (hereinafter the “Project”) originated in a 1977 treaty between the Hungarian People’s Republic and the Czechoslovak Socialist Republic for the construction of a system of locks in the Danube River. The Hungarian government suspended, and subsequently abandoned, the Project in 1989, alleging grave risks to Hungary’s environment and Budapest’s water supply. The Slovak Republic (hereinafter “Slovakia”), which succeeded Czechoslovakia as a party to the Project, denied these allegations and undertook an alternative project wholly on Slovak territory. This unilateral operation has allegedly had, and will continue to have, significant detrimental effects on Hungary’s environment and access to the water of the Danube River. Despite efforts at mediation by the Commission

* J.D., Fordham University School of Law, 1998. The author wishes to thank her husband for his patience and support.


4. See ICJ Communiqué, Sept. 25, 1997, supra note 2; see also dis-
of the European Communities, Hungary and Slovakia were unable to resolve their differences, and in 1993 the dispute was submitted to the International Court of Justice (ICJ) for adjudication. The case was noted internationally as the first environmental case to be decided by the ICJ, and therefore one of the most important of the century. Accordingly, many environmental organizations and scientists expected the ICJ to render a decision that would set a new international standard placing greater priority on the environment.

This Note analyzes the ICJ decision, rendered at The Hague on September 25, 1997. Part I provides an overview of the 1977 Treaty signed by Hungary and Czechoslovakia. Part II analyzes the ICJ's decision with respect to (1) whether the environmental concerns expressed by Hungary created a "state of necessity" under customary international law; (2) whether Slovakia was legally entitled to unilaterally plan and operate an alternative project; and (3) whether Hungary's notification of termination of the 1977 Treaty was legal. Part III discusses possible means of ensuring better environmental protection of the Danube River in light of the ICJ's decision.
I. THE GABCIKOVÁ-NAGYMAROS PROJECT

A. The Danube River

The Danube River is the second longest river in Europe, flowing along or across the borders of ten countries in its 2,860 kilometer (1,777 mile) course from the Black Forest to the Black Sea. For 142 of its 2,860 kilometers, the Danube River forms the boundary between Hungary and Slovakia. The portion of the Danube River which is at the heart of the dispute is an approximately 200 kilometer (124 mile) stretch between the respective capital cities of Bratislava and Budapest.

The Danube River is also one of the world's richest ecosystems, containing one of Europe's few groundwater aquifers, as well as one of its last remaining flood-plain forests, and is home to over 200 unique species of flora and fauna. Generally, riparian ecosystems are more biologically diverse than their surrounding land, and provide corridors for wildlife. A healthy riparian ecosystem also fulfills many seemingly unrelated functions, including evening out the flow of water between wet and dry seasons, retaining sediments, providing water storage, maintaining the quality of the water, and transporting organic matter downstream to form the basis of the food chain. Therefore, the continued viability of the Danube River as a healthy ecosystem is critical not only to environmentalists but also to the riparian states along the Danube River.

Throughout European history, the Danube River has played a vital role in the commercial and economic development of its ri-

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10. *Id.*


13. *Id.* at 906.
parian states, and has been the focus of countless multilateral and bilateral agreements for navigational use, as well as for the production of hydroelectric power.\(^\text{14}\) The cumulative environmental effects on the Danube River and its surrounding ecology from such human activities have been far from favorable.\(^\text{15}\) The transboundary nature of these effects has forced states to acknowledge their responsibility to other states for the environmental impacts of their agreements and activities.\(^\text{16}\)

B. Treaty on the Construction and Operation of the Gabcikovo-Nagymaros Project

The 1977 Treaty came into force on June 30, 1978, following the exchange of instruments of ratification.\(^\text{17}\) According to its Preamble, the objective of the Project was to achieve a “broad utilization of the natural resources of the Bratislava-Budapest section of the Danube river for the development of water resources, energy, transport, agriculture and other sectors of the national economy of the Contracting Parties . . . .”\(^\text{18}\)

Article 1, section 1 of the 1977 Treaty provides that Hungary and Czechoslovakia were to build, as a joint investment, two systems of locks which together would constitute “a single and indi-


16. See discussion infra Part III.


18. Id. pmbl., at 236.
visible operational system of works.” The first system of locks was to be built around Gabcíkovo, Slovakia, consisting of, inter alia: (a) the Dunakiliti-Hrusov reservoir in Hungarian and Slovak territory; (b) a dam at Dunakiliti in Hungarian territory; (c) a bypass canal in Slovak territory; (d) a series of locks on the bypass canal (the Gabcíkovo system of locks); (e) improvements to the bed of the Danube River in the joint Hungarian-Slovak section; and (f) the deepening of the bed of the Danube River in the joint Hungarian-Slovak section. The second system of locks was to be built around Nagymaros, Hungary, consisting of, inter alia: (a) a reinforcement of flood-control works on the Danube River in Hungarian and Slovak territories; (b) a series of locks in Hungarian territory (the Nagymaros system of locks) with a hydroelectric power plant; and (c) the deepening of the bed of the Danube River in Hungarian territory. In essence, Hungary and Slovakia sought to invest jointly in a project for the production of hydroelectricity, the improvement of navigation on the portion of the Danube River bordering the two states, and the protection from flooding of the areas along the banks of that portion of the Danube River.

Concurrently, Hungary and Slovakia undertook to ensure that the quality of water, the bed of the Danube River, and the surrounding natural environment were not impaired as a result of the Project.

19. Id. art. 1, § 1.
20. See id. art. 1, § 2, at 236-37.
21. See id. art. 1, § 3, at 237.
22. Article 15, section 1 of the 1977 Treaty provides that “[t]he Contracting Parties shall ensure, by the means specified in the joint contractual plan, that the quality of the water in the Danube is not impaired as a result of the construction and operation of the System of Locks.” Id. at 244. Article 16 provides that the “[m]aintenance of the bed of the Danube . . . shall be incumbent upon . . . the Contracting Parties.” Id. Article 19 provides that “[t]he Contracting Parties shall, through the means specified in the joint contractual plan, ensure compliance with the obligations for the protection of nature arising in connection with the construction and operation of the System of Locks.” Id. at 245.
C. Hungary’s Suspension and Abandonment of Construction Under the Project

After intense criticism from the public and from scientists within Hungary and internationally, the Hungarian government decided, on May 13, 1989, to suspend construction at Nagymaros pending the completion of various studies of the environmental effects of the system of locks. The studies were to be completed by July 31, 1989. On July 21, 1989, the Hungarian government extended the suspension of construction at Nagymaros, and also suspended construction at Dunakiliti, until October 31, 1989. On October 27, 1989, the Hungarian government abandoned construction of the Nagymaros system of locks, and extended the suspension of construction at Dunakiliti.

In support of its abandonment of construction under the Project, Hungary stated that the two governments had chosen the system of locks only because it was more economical than its alternatives. The Hungarian government contended that construction of the system of locks would inflict unjustifiable environmental harm on the ecology of the Danube River and its surrounding wetlands, in six principal ways.

First, construction of the locks at Gabcikovo and Dunakiliti, in accordance with the Project, would produce a residual discharge of 50 to 200 cubic meters per second (m/s) of water into the old bed of the Danube River. Consequently, the groundwater level would fall in the Danube River, requiring Budapest to obtain

23. The Project “was the object . . . of increasing apprehension, both within a section of public opinion and in some scientific circles . . . as to the guarantees it offered for preservation of the environment, engender[ing] a climate of growing concern and opposition with regard to the Project.” Gabcikovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 32.
24. See id. para. 33.
25. See id. para. 36.
26. See id. para. 22.
27. See id. para. 40. The Soviet Union also reportedly exerted a great deal of pressure on both governments. See Paul R. Williams, Can International Legal Principles Play a Positive Role in Resolving Central and East European Transboundary Environmental Disputes?, 7 GEO. INT’L ENVT'L. L. REV. 421, 443 n.85 (1995); Slovaks Finish Much-Criticized Dam on Danube, N.Y. TIMES, Nov. 3, 1992, at A8.
water from the stagnant and silted-up reservoir at Dunakiliti and
the side-arms. The Hungarian government believed this would
seriously impair the quality of water in Hungary in the long
term. Second, the residual discharge into the old bed would
also increase the risk of eutrophication of surface water, particu-
larly in the reservoir of the Danube River. The old bed of the
Danube River would be choked with alga, reducing the flow of
water to a mere trickle. Third, the decrease in the groundwater
level could cause the Danube River to be choked with sand, re-
resulting in the network of side-arms to be cut off from the prin-
cipal bed. The side-arms would then dry up, causing mass extinc-
tion of the fluvial flora and fauna therein. Fourth, the
significant daily variation in water level resulting from the opera-
tion of the Gabcíkovo power plant would threaten aquatic
habitats.

Fifth, Hungary was also concerned that the construction of
locks at Nagymaros would silt-up the bed of the Danube River
upstream of Nagymaros, impairing the quality of water in the
bank-filtered wells. Sixth, Hungary feared that construction of
the Nagymaros dam would erode the riverbed downstream of
Nagymaros. This would cause the water level to fall in that sec-

28. See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra
note 3, para. 40.
29. See id.
30. Eutrophication refers to the process through which a body of
fresh water is transformed into marsh. As aquatic organisms consume
the oxygen and nutrients in the water, silt and organic debris accumu-
late, causing the water to become warmer and shallower. Eventually, or-
ganisms that thrive in warmer water dominate the ecosystem and marsh
plants fill in the basin. Sewage emissions and other waste streams may
greatly accelerate this process. See COLUM. ENCYCLOPEDIA 905-06 (5th ed.
1993).
31. See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra
note 3, para. 40.
32. See id.
33. See id.
34. Id.
35. See id.
36. See id.
37. See id.
tor, which provides two-thirds of Budapest’s water supply.\textsuperscript{38} There was also concern that any water that was supplied would be diminished in quality as a result of increases in fine sediments which would strain the filtration of the water supply.\textsuperscript{39}

Not surprisingly, Slovakia has continually disputed any scientific evidence suggesting that the system of locks would cause deleterious effects on the ecology of the Danube River or its surrounding wetlands. Slovakia contends that Hungary is either using the environment as an excuse to back out of a project which it can no longer afford or that it wishes to avoid for political reasons.\textsuperscript{40} Scientists in Slovakia have asserted that “notwithstanding the fervent continual attacks waged against this project at high international forums by Hungary’s political leadership and despite catastrophic predictions, these water projects on the Danube have invaluable environmental benefits.”\textsuperscript{41}

Specifically, Slovakia claims three principal benefits from the Project.\textsuperscript{42} First, the reservoir was planned so that the water level would be elevated by several meters at a site where the Danube River enters the Zitny Ostrov subsoil. This was expected to make the ground water regimen at the site considerably more dynamic and to contribute to the dilution and cleansing of contamination in the water caused by farming in the surrounding areas.\textsuperscript{43}

\begin{itemize}
\item \textsuperscript{38} See id.
\item \textsuperscript{39} See id.
\item \textsuperscript{40} See Olga Vavrova, Gabcíkovo 24 (Narodna Obroda 1993). Vladimir Holčík, the general manager of the Research Institute of Water Systems in Bratislava, Slovakia, which claims to have conducted extensive research since 1951 on the potential environmental impact of the Project, stated that “the waterworks of Gabcíkovo-Nagymaros represents not the problem of environment but exclusively that of geo-policy.” Id. at 14.
\item \textsuperscript{41} Vojtech Hrasko, The Gabcíkovo Project — Saving the Danube’s Inland Delta 16 (1993).
\item \textsuperscript{42} See id. at 20.
\item \textsuperscript{43} Recent studies have shown that “it is agricultural activities that cause approximately half of [Czechoslovakia’s] water pollution problems through the use of high nitrate concentrations and other chemicals, and the improper disposal of liquid animal manure.” F.W. Carter, Czechoslovakia, in Environmental Problems in Eastern Europe 63, 69 (F.W. Carter & David Turnock eds., 1996).
\end{itemize}
ond, an increase in the water level at the reservoir site would have increased the volume of water filtered through the subsoil, which could be processed for drinking, water supply and irrigation.\textsuperscript{44} Third, elevation of the water level in the reservoir would provide a continuous water supply to the side-arms of the Danube River throughout the year, including periods when they have traditionally been partially or completely dry. This, it is claimed, would "create conditions for the revitalization and lasting conservation of the Danube's delta as well as diversifying [the] region's flora and fauna."\textsuperscript{45}

Slovakia has also argued that ecological damage would be greater if the Project were discontinued now, because of problems concerning the proper disposal of concrete materials.\textsuperscript{46} Additionally damaging, Slovakia contends, is removal of sand from other areas in order to fill the large areas of land that have been dug up in preparation for construction in Gabčíkovo, Dunakiliti and Nagymaros.\textsuperscript{47} Alternatively, Slovakia claims that negative ecological effects, if any, associated with the destruction of agricultural land and the clearing of forests are irreversible at this point.\textsuperscript{48}

The extent of environmental harm threatened by construction of the system of works will never be fully known inasmuch as Hungary has never completed, nor is it likely to complete, construction of the system of locks at Dunakiliti and Nagymaros. The ICJ was therefore faced with the difficult task of weighing the rights of the parties under treaty law, as well as being "mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment . . . ."\textsuperscript{49}

\begin{itemize}
\item \textsuperscript{44} See Hrasko, \textit{supra} note 41, at 20.
\item \textsuperscript{45} Id.
\item \textsuperscript{46} See Vavrova, \textit{supra} note 40, at 22.
\item \textsuperscript{47} See id.
\item \textsuperscript{48} Id. This problematic attitude indicates what one scholar has described as a need for "greater awareness of [environmental] problems both by officials and the general population" in Slovakia. Carter, \textit{supra} note 43, at 88.
\item \textsuperscript{49} Gabčíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), \textit{supra} note 3, para. 140.
\end{itemize}
D. Slovakia's Unilateral Diversion of the Danube River

In September of 1990, a year after Hungary abandoned the Project, Slovakia informed Hungary that it was considering seven different hypothetical alternative solutions to the construction of the system of works. All of the alternative solutions contemplated an agreement between Slovakia and Hungary, with the exception of one, subsequently known as Variant C, which Slovakia intended to carry out without Hungary's agreement or cooperation. On July 23, 1991, Slovakia adopted Variant C, construction for which was begun in November of 1991.

Variant C involved the unilateral diversion of the Danube River on Slovak territory at a point ten kilometers upstream of Dunakiliti. In its final form, Variant C included the construction of an overflow dam at Cunovo, where both banks of the Danube River are on Slovak territory, and a levee linking that dam to the south bank of the bypass canal. The filling of the Cunovo dam rapidly caused a major reduction in the flow and level of downstream waters in the old bed and side-arms of the Danube River. Hungary claimed that Slovakia's operation of the works under Variant C not only violated the 1977 Treaty, but also infringed on Hungary's territorial sovereignty and integrity, and violated customary international law regarding shared international watercourses.

II. The International Court of Justice Decision

The dispute between Hungary and Slovakia over Hungary's abandonment of the Project, as well as Slovakia's unilateral diversion of the Danube River under Variant C, led the Commission of the European Communities to offer to mediate their differences. Mediation was held in London on October 28, 1992, dur-
ing which the governments of Hungary and Slovakia were able to agree on only two matters: (1) to submit their dispute to the ICJ, and (2) to create a tripartite group of experts to conduct a fact-finding mission regarding the effects of Variant C and submit suggestions for emergency measures regarding the Project. On December 1, 1993, the experts recommended various temporary remedial measures which were incorporated in an agreement which was to terminate fourteen days after the ICJ rendered its judgment.

On April 7, 1993, Hungary and Slovakia signed and forwarded an agreement to submit their dispute to the ICJ for adjudication. Three questions were submitted for resolution by the ICJ: (1) whether Hungary was entitled to suspend and subsequently abandon the works on the Project; (2) whether Slovakia was entitled to proceed with a provisional solution for damming up the Danube River on Slovak territory; and (3) the legal effects of Hungary's notification, on May 19, 1992, to terminate the 1977 Treaty. The ICJ was "also requested to determine the legal consequences, including the rights and obligations of the Parties, arising from its Judgment" on these three questions. The panel was composed of the ICJ's fifteen judges under the Presidency of

58. Id. The tripartite group of experts was to be made up of one expert designated by each party and three independent experts designated by the Commission of the European Communities. See id. para. 25.


61. See id. art. 2, § 1, 32 I.L.M. at 1295.

62. Id. art. 2, § 2, 32 I.L.M. at 1295.
A. Hungary’s Unilateral Suspension and Abandonment of the Project

In defense of its abandonment of the Project, Hungary asserted that the potential environmental harm to the ecology of the Danube River and its surrounding wetlands, as well as the threat to Hungary’s water supply, created a “state of ecological necessity” in 1989.64

Slovakia’s rebuttal was twofold. First, it argued that “ecological necessity” or “ecological risk” did not fall within the “state of necessity” exception.65 Therefore, environmental considerations did not ameliorate the wrongfulness of an act under customary international law.66 Second, even if ecological necessity could fall within the “state of necessity” exception, Slovakia denied that any “state of ecological necessity” existed in 1989 or at any time thereafter.67 Slovakia argued that Hungary gave an “exaggeratedly pessimistic description of the situation.”68 At the same time, however, Slovakia did not deny that ecological problems could have arisen, although it did assert that they could, to a large extent, have been remedied through modifications and amendments to the 1977 Treaty.69

64. See discussion supra Part I.C.
66. Id.
67. Id.; see supra notes 40-48 and accompanying text regarding Slovakia’s views that the Project benefited the ecology of the Danube River and its surrounding areas.
68. Gabčíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 44.
69. See id. Both Hungary and Slovakia presented a tremendous amount of scientific evidence in support of their respective arguments regarding the environmental consequences of the construction of the system of locks at Gabčíkovo and Nagymaros. At the requests of both parties, the judges took the unprecedented measure of actually visiting the affected areas in Hungary and Slovakia. See Gabčíkovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 3 (Feb. 5). The visit was made between April 1, 1997 and April 4, 1997. Accompanied by agents and
The “state of necessity” exception is a ground recognized under customary international law for precluding wrongful conduct which is not in conformity with an international obligation.\(^70\) A “state of necessity” has been defined as “the situation of a State whose sole means of safeguarding an essential interest threatened by a grave and imminent peril is to adopt conduct not in conformity with what is required of it by an international obligation to another State.”\(^71\) Under article 33 of the Draft Articles on State Responsibility, a “state of necessity” exception may not be invoked by a state as a ground for precluding the violation of the state’s international obligation to another state unless “the act was the only means of safeguarding an essential interest of the State against a grave and imminent peril” and “the act did not seriously impair an essential interest of the State towards which the obligation existed.”\(^72\) Moreover, because the exception should only be applied under exceptional circumstances,\(^73\) it may not be invoked if any of the following three conditions apply: (1) the international obligation of the state, with which its acts are

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technical advisors for both Hungary and Slovakia, the judges were shown a number of locations in the Danube River area between Bratislava, Slovakia, and Budapest, Hungary. The judges were able to put questions of fact to the two delegations during the visit. See I.C.J., Press Communiqué, Apr. 9, 1997 (visited Mar. 25, 1998) <http://www.icj-cij.org/Presscom/ipp9707.htm>.

70. See Gabcikovo-Nagymaros Project, (I.C.J. Sept. 25, 1997), supra note 3, para. 50. Customary international law is evidenced by the general practice of states accepting it as law. Evidence of customary international law may also be found in the writings of international lawyers, in judgments of international tribunals and in treaties. See MICHAEL AKEHURST, MODERN INTRODUCTION TO INTERNATIONAL LAW 33-34 (1987).


72. Id. art. 33, § 1, at 34.

not in conformity, arises out of a peremptory norm of general international law; (2) the international obligation of the state, with which its acts are not in conformity, is stipulated by a treaty that, explicitly or implicitly, excludes the possibility of invoking the "state of necessity" exception with respect to that obligation; or (3) the state in question has contributed to the occurrence of the "state of necessity."\(^7\)

For the "state of necessity" exception to apply with respect to the Gabcikovo-Nagymaros case, seven factors would therefore have to be established by Hungary:

1. The environmental concerns constituted an "essential interest" of Hungary;
2. Hungary's environmental concerns were threatened by "grave and imminent peril" in 1989;
3. Suspension and abandonment of the construction of works at Nagymaros and Dunakiliti were the only means by which Hungary could have safeguarded its environmental concerns;
4. Hungary's suspension and abandonment of the construction of works at Nagymaros and Dunakiliti did not impair an essential interest of Slovakia;
5. Hungary's obligations under the 1977 Treaty did not arise out of a peremptory norm of general international law;
6. The 1977 Treaty did not, either explicitly or implicitly, exclude the possibility of invoking the "state of necessity" exception with respect to Hungary's obligations under the 1977 Treaty; and
7. Hungary had not contributed to the occurrence of the "state of necessity."

There was no question that Hungary's environmental concerns constituted an "essential interest" within the meaning of the Draft Articles.\(^7\) The International Law Commission envisioned that an "essential interest" not be limited to matters relating to the existence of the state, and in fact explicitly recognized that "safeguarding the ecological balance has come to be considered

\(^{74}\) *Id.* art. 33, § 2, at 34.
an 'essential interest’ of all States.”

The fifteen judges of the ICJ found it very difficult, however, to conclude that Hungary's environmental concerns were threatened by “grave and imminent peril.” The existence of a “peril” is measured by an objective standard, and envisages a risk that exists at the relevant point in time. The mere apprehension of a possible peril is not sufficient to meet this standard, as it must be simultaneously “grave” and “imminent.” On the other hand, a future peril may still be considered “imminent” if the knowledge and realization of future peril is imminent, and such future peril is certain and inevitable.

The ICJ noted that the dangers Hungary ascribed to the upstream reservoir following construction of the works at Nagymaros were mostly of a long-term nature and, more importantly, uncertain. Also, Hungary's concern over environmental harm to the flora and fauna from operation of the Gabcíkovo power plant had, in the ICJ's opinion, “already materialized to a large extent for a number of years, so that it could not, in 1989, represent a peril arising entirely out of the project.” Therefore, the judges concluded, Hungary had failed to prove that the threat to the environment was either “grave” or “imminent” when Hungary suspended and abandoned its obligation to continue construction of the system of locks in 1989.

The ICJ also disagreed with Hungary's contention that suspension and abandonment of construction of the system of locks at Nagymaros and Dunakiliti were the only means by which Hun-

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76. ILC, Draft Articles, supra note 71, art. 33 cmt. 14, at 39.
78. Id.; see also Ludwik A. Teclaff, Fiat or Custom: The Checkered Development of International Water Law, 31 NAT. RESOURCES J. 45, 69 (1991) [hereinafter Teclaff, Fiat or Custom].
79. Id.; see also ILC, Draft Articles, supra note 71, art. 33, § 1(a) & cmt. 3, at 34-35.
81. See discussion supra Part I.C.
83. Id. para. 57.
gany could have safeguarded its environmental concerns. The judges noted that any dangers to the environment in the areas upstream and downstream of Gabcikovo and Nagymaros were linked closely to whether Hungary and Slovakia chose to operate the Gabcikovo power plant in peak mode. In the court's opinion, Hungary could have negotiated with Slovakia to operate the Gabcikovo power plant at a level lower than peak mode to limit environmental harm. As for environmental concerns downstream of Nagymaros, Hungary and Slovakia could have regularly discharged gravel into the river to prevent erosion of the river bed.

The ICJ held that it had "no need to consider whether Hungary... 'seriously impair[ed] an essential interest' of [Slovakia]," because Hungary had failed to prove a threat of "grave and imminent peril" to support its claim under the "state of necessity" exception. Nor did the judges address the fifth and sixth criteria for establishing a "state of necessity" exception: whether Hungary's obligations under the 1977 Treaty arose out of a peremptory norm of general international law, and whether the 1977 Treaty, either explicitly or implicitly, excludes the possibility of invoking the "state of necessity" exception with respect to Hungary's obligations thereunder.

The ICJ briefly addressed the seventh criterion which Hungary would have needed to satisfy under the "state of necessity" exception: that Hungary had not contributed to the occurrence of the "state of necessity." The judges noted that both Hungary and

84. Id.
85. Id. para. 55.
86. Id.
87. Id.
88. Id. para. 58.
89. Id.
90. A peremptory norm of international law, also known as jus cogens, "is a norm accepted and recognized by the international community of states as a whole as a norm from which no derogation is permitted and which can be modified only by a subsequent norm of general international law having the same character." Law of Treaties, supra note 73, art. 53; see also AKEHURST, supra note 70, at 40-42; GERHARD VON GLAHN, LAW AMONG NATIONS: AN INTRODUCTION TO PUBLIC INTERNATIONAL LAW 582-84 (Bruce Nichols ed., 1992).
Slovakia had undertaken numerous scientific and technical studies before 1977, and that, therefore, Hungary was aware of the "situation as then known, when it assumed its obligations under the [1977] Treaty."91 Hungary asserted that "the environmental, ecological and water quality impacts were not taken into account properly during the design and construction period,"92 and that any studies that had been conducted were therefore inadequate.93 However, the ICJ held that Hungary had indeed helped, by act or omission, to bring about the "state of necessity" such as it was by its recognition in articles 15, 19, and 20 of the 1977 Treaty of the need to ensure the protection of the environment.94

In sum, as to the first question presented by Hungary and Slovakia, the ICJ found that the "state of necessity" exception did not apply and that, therefore, "Hungary was not entitled to suspend and subsequently abandon, in 1989, the works on the Nagymaros Project and on the part of the Gabcíkovo Project for which the 1977 Treaty and related instruments attributed responsibility to it."95

B. Slovakia's Unilateral Diversion of the Danube River

In defending its unilateral adoption of Variant C, Slovakia96 claimed that this recourse was rendered inevitable for economic, ecological, and navigational reasons, because of Hungary's suspension and abandonment of the Project.97 Applying the "principle of approximate application," Slovakia argued that, under the circumstances, Variant C represented the closest solution to the Project's original objective and the only possibility remaining to Slovakia "of fulfilling not only the purposes of the 1977 Treaty,

92. Id. para. 56 (citing June 23, 1989 report by ad hoc Committee of the Hungarian Academy of Sciences) (emphasis added).
93. See id.
94. See id. para. 57.
95. Id. para. 59.
96. At this time, the argument was made by Czechoslovakia, Slovakia's predecessor in interest. See supra note 3.
97. See id. para. 68; see also supra Part I.D.
but the continuing obligation to implement [the 1977 Treaty] in good faith. 98

Slovakia further claimed that it was not only entitled, but even obligated under international law to implement Variant C. 99 Damages would have been tremendous in the dispute, not only because of the large national expenditures made in the preparation and partial construction of the system of locks, but also because of “the additional economic and environmental prejudice which would have resulted from the failure to complete the works at Dunakiliti/Gabcíkovo and to put the system into operation.” 100 Therefore, Slovakia argued, it had an obligation under international law to mitigate such damages by implementing Variant C. 101

Hungary rebutted by arguing that Slovakia’s unilateral diversion and regulation of the Danube River were: (1) an infringement of Hungary’s territorial sovereignty and integrity under international law because it diverted the natural course of the Danube River; 102 (2) a violation of the principle of customary international law governing the utilization of shared international resources; 103 (3) a violation of the 1977 Treaty; 104 (4) a violation

99. See id. para. 68.
100. Id.
101. See id.
102. See id. para. 64. But see Teclaff, Fiat or Custom, supra note 78, at 69 (discussing 1952 memorandum by the UN Econ. Comm’n for Europe suggesting that full exercise of sovereign power of states over waterways within their borders would unduly limit the rights of other riparian states).
103. See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 64. In 1929, the Permanent Court of International Justice stated, in reference to navigation on the River Oder, that the “community of interest in a navigable river becomes the basis of a common legal right, the essential features of which are the perfect equality of all riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the other.” Territorial Jurisdiction of the International Commission of the River Oder, 1929 P.C.I.J. (ser. A) No. 23, at 27 (Sept. 10); see also Convention on the Law of the Non-Navigational Uses of International Watercourses, May 21, 1997, 36 I.L.M. 700 (laying down princi-
of the 1976 Border Waters Agreement, and (5) a violation of the spirit of the 1948 Danube River Convention. Moreover, Hungary argued, mitigation of damages relates solely to the quantification of loss, and could not serve to excuse conduct which is otherwise substantively unlawful.

In regard to Slovakia's primary contention, the ICJ declined to address whether there is a principle of international law or a general principle of law of "approximate application" because, in its opinion, "even if such a principle existed, it could by definition only be employed within the limits of the treaty in question . . . [and] Variant C does not meet that cardinal condition with regard to the 1977 Treaty." The ICJ stressed that, by definition,
a "joint investment . . . constituting a single and indivisible operational system of works" cannot be carried out by one party's unilateral action.109

Moreover, despite the fact that the Danube River is a shared international watercourse, not to mention an international boundary river, operation of Variant C involved the appropriation of eighty to ninety percent of the water from the Danube River for the sole use and benefit of Slovakia before being returned to the main bed of the river.110 Although Hungary had undoubtedly agreed to the diversion of water into the bypass canal when it concluded the 1977 Treaty, such agreement was only in the context of a joint operation and benefit.111 Therefore, the ICJ held, Hungary could not have forfeited its right to an equitable sharing of the resources of the Danube River.112 The ICJ accordingly concluded that Slovakia's unilateral operation of Variant C was a violation of express provisions of the 1977 Treaty.113 The judges also concurred with Hungary's argument that the duty to mitigate damages provides a basis for the calculation of damages, but could not justify an otherwise wrongful act.114

The remaining consideration regarding Slovakia's unilateral action was whether Variant C was a justifiable countermeasure to Hungary's illegal act, thereby precluding Slovakia's wrongful act. As such, Slovakia's countermeasure would have to meet four basic conditions.115 First, its action must have been taken in response to a prior international wrongful act by Hungary, and must have been directed against Hungary.116

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Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 75.
110. See id. para. 78.
111. See id.
112. See id.
113. See id.
114. See id. para. 79.
ariant C had indeed been taken in response to Hungary's prior unlawful suspension and abandonment of the Project and had been directed against Hungary.\textsuperscript{117} Second, Slovakia must have told Hungary to discontinue its wrongful conduct or to make reparations.\textsuperscript{118} Slovakia had on several occasions requested Hungary to continue construction of the system of works.\textsuperscript{119} Third, the effects of the countermeasure must be commensurate with the injury suffered by Slovakia.\textsuperscript{120} The ICJ found that deprivation of Hungary's right to an equitable share of the natural resources of the Danube River constituted a failure to respect the proportionality required of Slovakia under international law, and therefore was not commensurate with Slovakia's injury.\textsuperscript{121} Fourth, the purpose of Slovakia's countermeasure must have been to induce Hungary to comply with its obligations under international law, and must be reversible.\textsuperscript{122} It is debatable whether the purpose of Slovakia's unilateral diversion of the Danube River under Variant C was to induce Hungary to comply with its obligation to continue construction of the system of works. It is equally, if not more, plausible that Slovakia had found it to be in its own economic interest to make use of what had already been constructed and to satisfy its need for hydroelectricity.

In summary, the ICJ concluded that while Slovakia was entitled to unilaterally plan and construct its alternative solution to the Project, it did not have the right to put that alternative solution into operation, because it violated the express purpose of the

\textsuperscript{117} See supra Part II.A (with respect to the ICJ's holding that Hungary's suspension of construction under the Project was a violation of international law).

\textsuperscript{118} Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 84.

\textsuperscript{119} See id. paras. 61-64.

\textsuperscript{120} See id. para. 85.

\textsuperscript{121} See id. Under international law, a State's response to a breach by another state must be in some sense proportionate to the breach in both magnitude and kind. See John K. Setear, Responses to Breach of a Treaty and Rationalist International Relations Theory: The Rules of Release and Remediation in the Law of Treaties and the Law of State Responsibility, 83 VA. L. REV. 1, 8 (1997).

\textsuperscript{122} Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 87.
1977 Treaty, as well as Hungary's territorial integrity and sovereign independence. Moreover, Slovakia's operation of the alternative solution did not constitute a lawful countermeasure under international law, because the deprivation of Hungary's right to an equitable share of the use of the Danube River was in excess of the injury suffered by Slovakia.

C. Hungary's Notification of Termination of the 1977 Treaty

On May 16, 1992, Hungary submitted a formal declaration terminating the Project, claiming that the immediate cause for termination was Slovakia's continued refusal to suspend its construction on Variant C pending negotiations and mediation efforts by the Commission of the European Communities. Hungary further stated that it could not accept the deleterious effects on the environment accompanying the implementation of Variant C, which would be equivalent to the environmental dangers under the original Project. The ICJ considered each of the five arguments raised by Hungary as alternative or concurrent bases under the Law of Treaties for the legality of their notification of termination of the 1977 Treaty: (1) the existence of a State

123. See id. para. 88.
124. See supra note 121 and accompanying text.
127. Id. See supra notes 28-39 and accompanying text with respect to Hungary's allegations of environmental harm under the original project.
128. Law of Treaties, supra note 73.
129. Before addressing whether Hungary's notification of termination was legally effective, the ICJ found that the Law of Treaties was not directly applicable to the 1977 Treaty inasmuch as the 1977 Treaty was concluded before the Law of Treaties entered into force. See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997); supra note 3, para. 99. Article 4 of the Law of Treaties provides that it "applies only to treaties which are concluded by States after the entry into force of the
of Necessity; (2) impossibility of performance of the 1977 Treaty; (3) the occurrence of a fundamental change of circumstances; (4) material breach of the 1977 Treaty by Slovakia; and (5) the development of new norms of international environmental law.\textsuperscript{130}

1. The Existence of a State of Necessity

Hungary contended that Slovakia's continued inflexibility regarding suspension of construction under Variant C during negotiations converted a temporary state of necessity into a permanent state of necessity.\textsuperscript{131} The ICJ, having found that no "state of necessity" existed with respect to Hungary's environmental concerns, negated this first ground for legality of termination.\textsuperscript{132} Moreover, it found that even if a "state of necessity" had existed, it would not be a ground for termination of a treaty because a "state of necessity" merely suspends a treaty until the "state of necessity" disappears, but does not otherwise terminate a treaty.\textsuperscript{133} The treaty can only be terminated by the mutual agreement of the parties, or by the fulfillment of all conditions for termination stipulated in the treaty itself\textsuperscript{134} or in the Law of present Convention with regard to such States." Law of Treaties, \textit{supra} note 73, art. 4. However, rules in the Law of Treaties which codify customary international law are applicable to the 1977 Treaty. Specifically, the ICJ found that articles 60 through 62 of the Law of Treaties, which relate to termination or suspension of a treaty, are declaratory of customary international law. Because the 1977 Treaty does not provide for termination of the 1977 Treaty and Hungary and Slovakia have not agreed otherwise, the principles enumerated in the Law of Treaties provide the best grounds for termination of the 1977 Treaty. See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), \textit{supra} note 3, para. 100.

\textsuperscript{130} See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), \textit{supra} note 3, para. 92.

\textsuperscript{131} See \textit{id.} para. 93.

\textsuperscript{132} See \textit{id.} para. 101; see discussion \textit{supra} Part II.A.

\textsuperscript{133} See Gabcíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), \textit{supra} note 3, para. 101. The exception may apply where the terms of the treaty itself provided that the existence of a "state of necessity" serves to automatically terminate the treaty.

\textsuperscript{134} See \textit{id.}
2. Impossibility of Performance of the Treaty

Hungary's second argument relied on article 61 of the Law of Treaties which allows a party to a treaty to invoke the "impossibility of performing a treaty as a ground for terminating or withdrawing from it if the impossibility results from the permanent disappearance or destruction of an object indispensable for the execution of the treaty." Hungary argued that it was impossible to construct a system of locks on its territory knowing it would cause irreparable environmental damage. Moreover, by May 1992, the essential purpose of the 1977 Treaty—a joint investment and operation consistent with environmental protection—had permanently disappeared, and, therefore, it was impossible to perform the 1977 Treaty. In Hungary's view, the "object indispensable to the execution of the treaty" did not have to be a physical object, but could be a "legal situation which was the raison d'être of the rights and obligations."

The ICJ found that the intention of the drafters of article 61 of the Law of Treaties was to exclude such situations as a ground for termination or suspension of a treaty. Even if the phrase "object indispensable to the execution of the treaty" did encompass legal regimes, however, Hungary failed to show that the legal regime had permanently disappeared given that the 1977 Treaty contained provisions for the parties to negotiate and make amendments as needed. The judges further added that if the legal regime could indeed be considered as having permanently disappeared, this was because Hungary had originally failed to carry out its obligations under the 1977 Treaty and therefore, under article 61(2) of the Law of Treaties, Hungary was precluded from invoking the impossibility of performance.

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135. See id. para. 99 (citing Law of Treaties, supra note 73, arts. 60-62).
136. Law of Treaties, supra note 73, art. 61, § 1.
137. See Gabčíkovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 94.
138. Id.
139. Id. para. 102.
140. Id. para. 103.
3. Occurrence of a Fundamental Change of Circumstances

Hungary's third argument relied on article 62 of the Law of Treaties which provides that:

A fundamental change of circumstances which has occurred with regard to those existing at the time of the conclusion of a treaty, and which was not foreseen by the parties, may not be invoked as a ground for terminating or withdrawing from the treaty unless:

A. the existence of those circumstances constituted an essential basis of the consent of the parties to be bound by the treaty; and

B. the effect of the change is radically to transform the extent of obligations still to be performed under the treaty.  

Hungary contended that, in addition to political and economic changes in Hungary and Slovakia since the 1977 Treaty came into force, the 1977 Treaty had been transformed from a treaty consistent with environmental protection to a "prescription for environmental disaster." These fundamental changes, it urged, served as a ground for termination of the 1977 Treaty.

The ICJ found that the political and economic changes were not sufficiently linked to the primary purpose of the 1977 Treaty — a joint investment for the production of energy — as to constitute an essential basis of the consent of the parties. Moreover, any environmental dangers which may have occurred were not completely unforeseen, and therefore could not constitute a "fundamental change of circumstances."

141. Id. Article 61(2) of the Law of Treaties provides that "[i]mpossibility of performance may not be invoked by a party as a ground for terminating . . . a treaty if the impossibility is the result of a breach by that party . . . of an obligation under the treaty . . . ." Law of Treaties, supra note 73, art. 61, § 2.

142. Law of Treaties, supra note 73, art. 62, § 1.


144. Id. para. 92.

145. Id. para. 104.
4. Material Breach of the Treaty by Slovakia

Hungary invoked article 60 of the Law of Treaties to support its contention that Slovakia's breach of the 1977 Treaty entitled Hungary to terminate the 1977 Treaty. Article 60 of the Law of Treaties provides that "[a] material breach of a bilateral treaty by one of the parties entitles the other to invoke the breach as a ground for terminating the treaty or suspending its operation in whole or in part." The ICJ found that Slovakia's violation of the 1977 Treaty did not occur until October of 1992, when it proceeded to operate the works constructed under Variant C. Therefore, Hungary's notification of termination in May of 1992 preceded any violation by Slovakia of the 1977 Treaty, thereby precluding Hungary from using Slovakia's material breach as grounds for a legal termination of the 1977 Treaty.

5. The Development of New Norms of International Environmental Law

Hungary's last contention was that the emergence of new international requirements for the protection of the environment precluded performance of the 1977 Treaty. The ICJ noted that neither of the parties contended that new peremptory norms of environmental law had emerged subsequent to the adoption of the 1977 Treaty, and therefore declined to address the scope of article 64 of the Law of Treaties.

146. See id. para. 96.  
147. Law of Treaties, supra note 73, art. 60, § 1.  
149. See id. para. 109.  
150. See id. para. 97.  
151. See id. para. 112 (citing Law of Treaties, supra note 73, art. 64 ("If a new peremptory norm of general international law emerges, any existing treaty which is in conflict with that norm becomes void and terminates."). Significantly, the ICJ noted that the parties could have jointly incorporated "newly developed norms of environmental law" into the 1977 Treaty, thereby hardening the soft law principles. Id.; see discussion infra Part III.A; see also ALEXANDRE KISS & DINAH SHELTON, INTERNATIONAL ENVIRONMENTAL LAW 55 (Supp. 1994) ("The number of treaties and other international instruments reproducing the same legal norms concerning the environment continues to grow . . . . The
In sum, the ICJ found that Hungary's notification of termination of the 1977 Treaty was at best premature, and did not have the effect of terminating the 1977 Treaty under international law.

III. PROTECTION OF THE DANUBE RIVER IN THE TWENTY-FIRST CENTURY

Environmental policy decisions made by governments, international organizations, and international tribunals today directly affect the quality of human life tomorrow. As the ICJ itself noted, "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn." 

The case concerning the Gabcikovo-Nagymaros Project was the first international dispute brought before the ICJ in which environmental issues were "so fully pleaded and considered." It was also brought at a time of growing international concern for the environment. As such, the ICJ was presented with the opportunity of being "mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment . . . ." Gabcikovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 140.

152. In the decision, the ICJ judges themselves stressed the importance of being "mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment . . . ." Gabcikovo-Nagymaros Project (I.C.J. Sept. 25, 1997), supra note 3, para. 140.


154. I.C.J. Communiqué, Sept. 19, 1997, supra note 6; see supra note 6 (highlighting prior international environmental disputes which have been settled or adjudicated by other tribunals).

portunity to set a new standard for environmental protection in the next century, putting the spirit of countless international environmental agreements and conventions into effect. It explicitly declined to do so.

Certainly, the ICJ faced the difficult task of weighing the rights of parties vis-à-vis the environment under circumstances where the likelihood and extent of environmental harm remain unknown. Significantly, no tribunal or international agreement has ever addressed the rights of states with respect to possible future environmental harm. The paucity of rules or principles that address unrealized harm is untenable in light of the distended temporal gap between act and effect that characterizes environmental malfeasance.

Notwithstanding the difficulty of imposing liability for future harm, there are alternative mechanisms that may serve the interests of the environment, particularly in the case of the Danube River. The first is the resort to “soft law.” The second is the establishment of an ongoing institution that has quasi-judicial, investigatory, surveillance and coordination authorities with respect to activities affecting the Danube River.

A. The Use of “Soft Law” in Protecting the Danube River

“Hard law” entails the accrued rules and principles, derived largely from treaties and custom, by which states may assert their rights in transboundary disputes. Not coincidentally, however, treaties are generally worded in vague and general terms, while customary law principles require a great deal of time and repeated state practice before they are recognized as legally enforceable rules.

In contrast, “soft law,” articulated in the form of political statements or values, “is increasingly used precisely because it is so politically convenient.” The importance and value of soft law


157. See id.

158. Id.
lies in the fact that it promotes international comity and cooperation, and can serve to secure an agreement that would otherwise not be achieved.\textsuperscript{159} Any resulting agreement can also serve as a foundation for a harder-edged agreement later.\textsuperscript{160} In essence, "[s]oft law is where international law and international politics combine to build new norms."\textsuperscript{161}

The "soft law" approach is especially appropriate to the Danube basin in light of the region's lingering economic and political instability in the wake of the Soviet Union's retreat from Eastern Europe at the turn of the decade.\textsuperscript{162} These political changes were accompanied by dramatic shifts in the perception of the Danube River by the governments of riparian states. Prior to 1989, the Danube River was viewed as a resource to be exploited for navigation, energy production, irrigation, and industrial uses. More recently, however, many riparian states have come to view the Danube River as a valuable resource essential for the maintenance of ecosystems, and have focused their attention on the sustainable use of the Danube River commensurate with their economic development.\textsuperscript{163}

The rise in nationalism, as well as the rise in transboundary disputes over the Danube River, makes cooperation in the form of international agreements or treaties unlikely.\textsuperscript{164} On the other hand, the aspirations of many of these now, in varying degrees, democratic states to become a part of the European Union is

\begin{itemize}
\item \textsuperscript{159} Id.
\item \textsuperscript{160} Id. The Helsinki Declaration on the Protection of the Ozone Layer is a good example. Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol: Helsinki Declaration of Participating States, May 2, 1989, 28 I.L.M. 1335. The consensus reached at Helsinki was helpful in ensuring "that the London meeting in 1990 could agree on hard amendments to the Montreal Protocol." Palmer, \textit{supra} note 156, at 269-70.
\item \textsuperscript{161} Palmer, \textit{supra} note 156, at 269.
\item \textsuperscript{162} See Linnerooth-Bayer & Murcott, \textit{supra} note 8, at 538.
\item \textsuperscript{163} See \textit{id}.
\item \textsuperscript{164} See \textit{id}. at 526-33 regarding current conflicts and issues surrounding the Danube River, including the Gabcíkovo-Nagymaros dispute. The authors state that while conflicts over the use of the Danube River have existed throughout its history, transboundary disputes have become particularly more pressing since 1989. See \textit{id}. at 526.
\end{itemize}
conducive to the active use of "soft law," and to the development of a cooperative regime for promoting environmentally sustainable development in the Danube River region. While the riparian and non-riparian states with an interest in the use of the Danube River may not be able to agree on hard rules and principles in the form of a treaty, they may at least be able to jointly articulate the need for cooperation in protecting the Danube River and its surrounding wetlands. Such statements and shared values can become the basis for future hard-edged multilateral agreements.

B. The Development of an International Commission for the Danube River

The environmental degradation facing the Danube River basin makes it imperative that, in addition to, or apart from, the use of "soft law" to achieve political consensus, an international commission be established to regulate all activities on and/or affecting the Danube River and its surrounding wetlands. There have, in fact, been several commissions for the Danube River in the past. However, these commissions, including the current Danube Commission, have focused on the regulation of navigation

165. See id. at 522.
166. See Teclaff, Fiat or Custom, supra note 78, at 55-56.
167. The current Danube Commission was established by the Belgrade Convention, supra note 14, arts. 5-19, 33 U.N.T.S. at 199-205. It is the only commission currently operating on the Danube River, is composed of only the riparian states, and is "a mere organ of coordination." Teclaff, Fiat or Custom, supra note 78, at 56.

The main task of the [current] Danube Commission is to assure navigable conditions on the river. This includes, inter alia preparing a regional plan for river projects; the dissemination of all construction and project proposals by the riparian countries to the other member countries for comment; the creation of a unified system for marking the channel; the harmonization of regulations; the publication of a Hydrology Bulletin; and, the collection of relevant statistics. The Commission has no sovereign powers, and its decisions take the form of recommendations to the governments of its members.

Linnerooth-Bayer & Murcott, supra note 8, at 526 n.11.
on the Danube River, and not on environmental protection of the Danube River.\textsuperscript{168}

The experience of the United States and Canada in dealing with transboundary water pollution suggests that the use of an ongoing international commission regulating the Danube River would be clearly beneficial.\textsuperscript{169} Differences concerning pollution, diversion, water levels, and the utilization of the water resources of the Great Lakes, in particular, led the United States and Canada to establish the International Joint Commission in 1909.\textsuperscript{170} This permanent binational commission consists of six commissioners — three from each country — who were intended to act, and have in fact successfully acted, “as a single impartial body, rather than as two instructed national delegations.”\textsuperscript{171}

The International Joint Commission serves four primary functions in protecting the Great Lakes.\textsuperscript{172} First, it performs “quasi-judicial functions,” approving applications from governments, public agencies, private corporations and individuals for the construction or operation of dams and other works that could affect the natural level or flow of the Great Lakes.\textsuperscript{173} Second, it performs “investigative and recommendation functions” by providing examinations and recommendations with respect to the rights or interests of either the United States or Canada in the

\textsuperscript{168} See Linnerooth-Bayer & Murcott, supra note 8, at 526; see also Aaron Schwabach, Diverting the Danube: The Gabcikovo-Nagymaros Dispute and International Freshwater Law, 14 BERKELEY J. INT’L L. 290, 313-22 (1996) (discussing the various mechanisms that have regulated activities on the Danube River). The Belgrade Convention would apply insofar as eutrophication, for example, affects the signatory states’ obligation to maintain the “navigable condition” of the Danube. Belgrade Convention, supra note 14, art. 3, 33 U.N.T.S. at 199; see supra note 30. The importance of maintaining the navigability of the Gabcikovo sector is articulated in an annex to the Convention. See Belgrade Convention, supra note 14, Annex II, 33 U.N.T.S. at 219.


\textsuperscript{170} See id. at 1208.

\textsuperscript{171} See id.

\textsuperscript{172} See id. at 1208-09.

\textsuperscript{173} See id. at 1208.
Great Lakes.\textsuperscript{174} Although the International Joint Commission’s recommendations are only advisory, the governments of the United States and Canada have made extensive use of this device.\textsuperscript{175} Third, it performs “surveillance and coordination functions” by monitoring compliance with their recommendations, and monitoring and coordinating other actions or programs when requested by the two governments.\textsuperscript{176} Fourth, it performs a “judicial function,” serving as an agency to which parties can refer disputes for binding decisions.\textsuperscript{177}

The success of the International Joint Commission is rooted in several factors, all of which suggest that a similar commission could be successfully established with respect to the Danube River. First, the International Joint Commission is structured as an independent agency of technical experts, rather than as a group of government agents serving in a representative capacity.\textsuperscript{178} This structure not only relieves the United States and Canadian governments from incurring the cost of maintaining a large permanent staff,\textsuperscript{179} but also increases the credibility of the International Joint Commission as an institution.\textsuperscript{180} Second, the ongoing investigation, monitoring and dispute-resolution functions performed by the commission promote efficient environmental dispute avoidance, management, and resolution.\textsuperscript{181} Third, its

\textsuperscript{174} See id. at 1209.

\textsuperscript{175} See id. The two governments are likely to follow the recommendations of the International Joint Commission out of recognition of their joint interest in maintaining the environment of the Great Lakes.

\textsuperscript{176} See id.; see also Greg Block, Independent Review of the North American Agreement for Environmental Cooperation (NAAEC), SB79 A.L.I.-A.BA. 291, 326 (1997) (discussing the coordination and advisory roles which the International Joint Commission has assumed with respect to boundary water issues between Canada and the United States).

\textsuperscript{177} See Bilder, supra note 169, at 1209.

\textsuperscript{178} See id. at 1211; see also Daniel K. DeWitt, Great Words Needed for the Great Lakes: Reasons to Rewrite the Boundary Waters Treaty of 1901, 69 Ind. L. J. 299, 313 (stating that the International Joint Commission’s success is rooted to some degree in its relative obscurity, and having limited its function to scientific and technical investigations).

\textsuperscript{179} See Bilder, supra note 169, at 1211.

\textsuperscript{180} See id. at 1210.

\textsuperscript{181} See id.
function as a central coordinating institution also allows it to monitor all activities and to minimize any cumulative negative effects on the environment more efficiently than would an ad hoc commission established for each proposed activity or upon the occurrence of a dispute.

Finally, the Commission has also proven to be effective at dispute resolution. Most of the complex technical issues and politically sensitive problems underlying the environmental disputes have been dealt with by the International Joint Commission rather than by ad hoc tribunals, or the ICJ. The benefit of the International Joint Commission serving a judicial function is that “[it] take[s] account of a multiplicity of factors, [is] founded on the necessity for compromise and a balancing of interests, and permit[s] the Governments to retain control over the most significant decisions and policy.”

The environmental dangers facing the Danube River make it important, if not imperative, that an ongoing international commission be established for monitoring and regulating activities which not only do, but also could, affect the ecology of the Danube River and its surrounding wetlands. The establishment of an international commission would allow riparian and non-riparian states to cooperate out of a joint interest in maintaining the ecology of the Danube River for future use. Given the political and economic tensions facing these states, they are more likely to cooperate through a multinational impartial commission than through an agency composed of national representatives. More importantly, a commission regulating the Danube River would be able to monitor the cumulative negative environmental effects on the Danube River and its flora and fauna. As an ongoing impartial commission, the commission would have the scientific expertise, the knowledge of other activities affecting the Danube River, and the credibility needed to protect one of the world’s

182. See id.
183. Id.
184. “[T]he absence of effective measures to abate water pollution was and remains hampered by the lack of a basin-wide authority that can promote multilateral, integrated policies to control the pollution entering the river from the multiple . . . sources.” Linnerooth-Bayer & Murcott, supra note 8, at 537.
unique aquatic ecosystems.\textsuperscript{185}

There are currently two proposals under consideration for developing an international commission for the Danube River.\textsuperscript{186} The first is to expand the current Danube Commission beyond the regulation of navigation to include the mandate of promoting sustainable development.\textsuperscript{187} The second is the establishment of a new commission, possibly with a close link to the European Union.\textsuperscript{188} A third possibility — creating a separate commission in addition to the current Danube Commission — is disfavored inasmuch as such fragmentation defeats the ostensible value of a commission: undertaking integrated policies that seek to balance the interests of economic development with protection of the Danube River.\textsuperscript{189}

There are several drawbacks to expanding the current Danube Commission to incorporate protection of the environment within its mandate. First, and most importantly, it lacks the credibility required of a successful multinational institution.\textsuperscript{190} It has been regarded by many states as "a highly-politicized and ineffectual hangover from the Communist era."\textsuperscript{191} Second, membership in the Danube Commission is limited.\textsuperscript{192} Under consideration are proposals to expand membership to all countries of the Black Sea, to all riparian states, or to all states with an interest in the Danube River basin.\textsuperscript{193} Regardless of which option is chosen, expanding membership in the current Danube Commission will require an amendment to the Belgrade Convention, which currently precludes new parties.\textsuperscript{194}

\textsuperscript{185} See id. at 524-25.
\textsuperscript{186} See id. at 538-45.
\textsuperscript{187} See id. at 538.
\textsuperscript{188} See id.
\textsuperscript{189} See id. at 539.
\textsuperscript{190} See id.
\textsuperscript{191} Id.
\textsuperscript{192} Currently, the Danube Commission consists of Austria, Bulgaria, Hungary, Romania, Russia, Serbia-Montenegro, Slovakia, and Ukraine. In addition, Croatia, Germany and Moldova have observer status. See id. at 539.
\textsuperscript{193} See id. at 540.
\textsuperscript{194} By its terms, the Belgrade Convention is limited to states situated on any bank of the Danube's navigable portion. See Belgrade Con-
The current Danube Commission’s lack of credibility suggests that the establishment of a new commission would better serve the ecology of the Danube River in the long term. A new commission could be structured in a fashion similar to the International Joint Commission: an independent and impartial agency of scientists and technical experts, not acting in the capacity of national delegates, that monitors and regulates all activities which could affect the Danube River, and settles disputes relating to such activities. Through joint cooperation and a shared interest in protecting one of Europe’s great international rivers, the riparian and non-riparian states of Europe have the opportunity to realize economic development with minimal sacrifice to the environment.

Conclusion

In the Gabcíkovo-Nagymaros dispute between Hungary and Slovakia, the fifteen judges of the ICJ faced the difficult task of balancing the rights of the parties under treaty law against the ever-growing need to protect the environment. Their difficulties were compounded by the fact that long-term environmental damage resulting from the Project may not become evident for years in the future, by which point it may be irreversible. Insofar as the ICJ was unable or unwilling to impose liability on Slovakia for harm which has not yet materialized, the court has seriously compromised its own power to advance international environmental law.

Although the ICJ was limited in the extent to which it could protect the environment, there are alternative non-judicial means by which the Danube River, and other international water resources can be better protected for future generations. Recognition among states of a joint interest in protecting the environment can foster cooperation through the use of “soft law” and the development of multinational independent agencies. In the case of the Danube River, a commission of scientists and environmentalists, similar to the International Joint Commission, which has successfully protected the transboundary water re-

vention, supra note 14, arts. 2, 44, 33 U.N.T.S. at 199, 217; see also Lin-nerooth-Bayer & Murcott, supra note 8, at 539.
sources of Canada and the United States for nearly 90 years, is advisable. The successful establishment and operation of a new Danube Commission, like the International Joint Commission, will serve as a precedent for other states, and will help to develop the still nascent principles of customary international environmental law.