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The Danube River Basin: International Cooperation or Sustainable Development

ABSTRACT

The environmental deterioration of the Danube River basin calls for unprecedented cooperation among the ten riparian and seven non-riparian basin countries, the majority of which are undergoing major economic and political transformations after the breakup of the Soviet Union. This paper discusses the recent legal and institutional developments along with the political hurdles leading to a post-Soviet regime for managing the Danube River and promoting sustainable development in the basin. After reviewing the geography and ecology, the conflicts and political issues of the Danube, the current efforts at building cooperative institutions are discussed. The question whether the Danube will be exclusively the responsibility of the basin countries, will include the Russian Federation and other countries of the Black Sea, or will be the responsibility of pan-European institutions in close connection with the European Union is addressed.

INTRODUCTION

Upheaval and change characterize the recent political and economic landscape of the Danube River basin. The disintegration of the Soviet Union, the lessening of East-West tensions, the transition to market economies in the former socialist countries and the expansion of the European Union are having profound effects on the region. Two recently independent countries of the former Soviet Union, Moldova and the Ukraine, have joined the list of ten Danubian riparian countries¹, and the separatist movements in the region have added three newly constituted riparians, including the Slovak Republic, Croatia, and Serbia-Montenegro, as well as three countries not bordering the Danube but in the drainage basin, including the Czech Republic, Slovenia and Macedonia. With the riparian countries of Germany, Austria, Hungary, Bulgaria, and Romania,

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1. The ten riparian countries include the Federal Republic of Germany, Austria, the Slovak Republic, Hungary, Croatia, Serbia-Montenegro, Romania, Bulgaria, Moldova and the Ukraine.

this makes the Danube one of the most international rivers of the world² (see Figure 1). Russia cannot now count itself as a riparian country, although its proximity to the Danube Delta and its interests in a navigation route to Western Europe makes it a country with strong interests in Danubian policies.

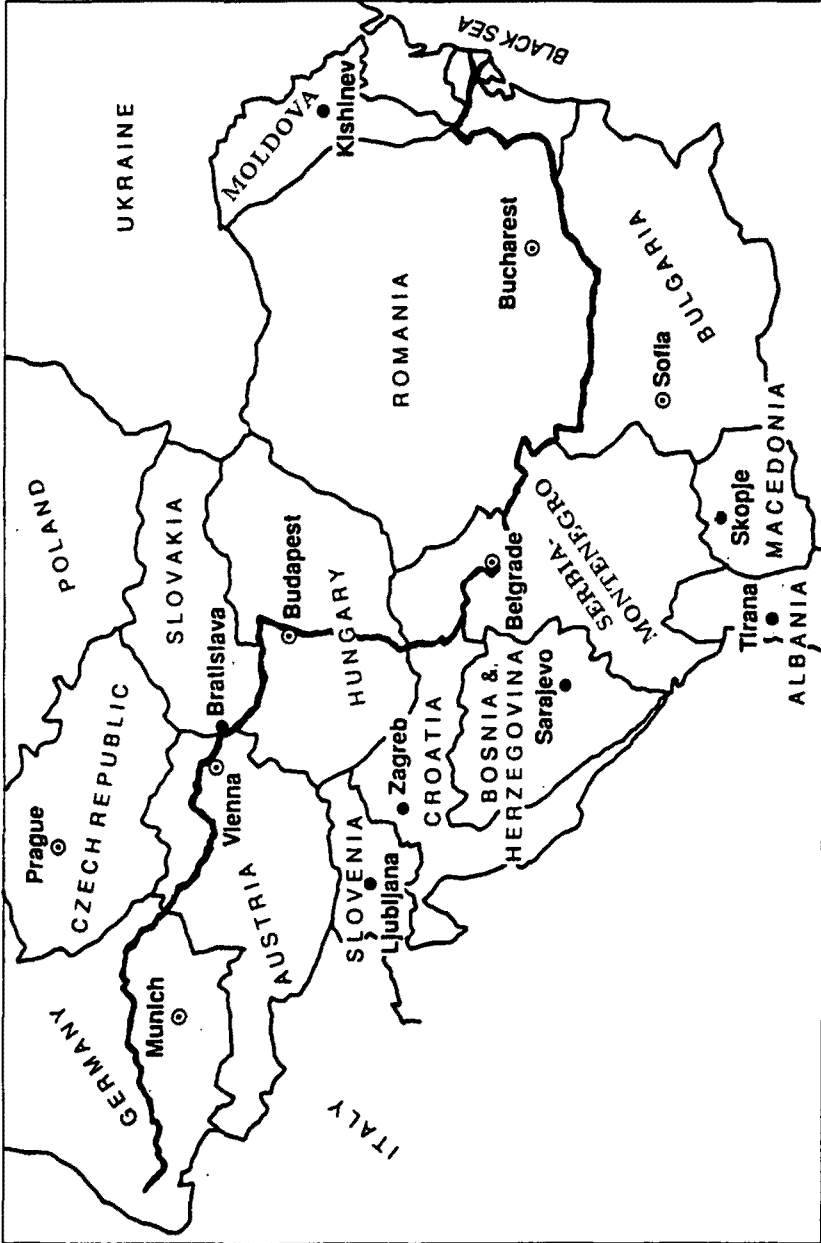
The dramatically changed political reality of the Danube region coincides with a decline in the credibility of both technocracy and centralized socialism and a rise in the awareness of ecological interdependence. This has changed the general perception of river management, from a view of exploiting the river for economic purposes to a view of integrated management of the river basin to promote sustainable development.

Confronting this changed paradigm challenges even the most stable river basin institutions and presents an almost intractable challenge to the Danube basin with its current economic and political instability. The rise in nationalism and ethnic hostilities throughout the region, especially in the former Yugoslavia, demonstrates the powerful tension between the centralized cooperation needed for addressing the economic and ecological interdependence of the Danube basin and the strong drive for national independence and decentralization. A counter-balancing, integrative force is the aspirations on the part of most of the former socialist countries in the Danube basin to join the European Union. Building western alliances in the region and eventually integrating the former socialist countries into the European Union is a powerful *raison d'état* for the West to establish a cooperative regime for promoting sustainable environmental policies in the region.

In this paper, we discuss the recent legal and institutional developments, along with the political hurdles, leading to a post-Soviet regime for managing the Danube River and promoting sustainable development in the basin. We begin by briefly reviewing the geography, ecology and political institutions that have, in the past, characterized the Danube River's management. After describing the current issues over the competing uses of the river that challenge efforts at building cooperative institutions, we examine the institution-building activities that are currently underway on the part of both the East and the West. At issue, ultimately, is whether the management of the Danube will be exclusively the responsibility of the riparian and basin countries, will include the countries of the Black Sea or, alternatively, will be the responsibility of pan-European institutions in close connection with the European Union. We conclude by reviewing the major directions on this issue, as well as possibilities for establishing a broad river basin commission with supra-national powers.

2. Other countries in the river basin include Italy, Switzerland, Poland and Albania.

FIGURE 1: THE DANUBE RIVER BASIN



THE DANUBE RIVER: GEOGRAPHY, ECOLOGY AND POLITICS

Flowing over 2,850 kilometers from the Black Forest in Germany to the Black Sea in Romania, the Danube is Europe's second largest river after the Volga. It ranks 21st in the world. The Danube basin drains an area of 817,000 km², and transfers water from the non-riparian countries of the Czech Republic, Slovenia, Albania, Macedonia, Italy, Switzerland, and Poland. Over 300 tributaries flow into the Danube and 80 million people live in the river basin.³

Throughout its length the Danube River provides a valuable resource for many competing uses. Downstream from Slovakia, the river is the major source of drinking water in all the countries except Bulgaria and it is an important source in Austria and Slovakia. The river is also used extensively for irrigation, especially in the Hungarian plain. Fisheries are an important source of food and income at its lower reaches, and the Danube Delta at the Black Sea is a large tourist area.

The Danube is also important for industry, including hydroelectric generation, industrial cooling and waste disposal. The mountainous character of the Danube in its upper reaches and the large number of tributaries further downstream combine to make the energy potential of the river significant.⁴ There are over 40 hydropower stations on the upper Danube, which are matched in energy output by the two enormous Iron Gate stations between Serbia-Montenegro and Romania. There are also a large number of dikes, navigation locks and other hydraulic structures to aid navigation. While the Danube has not been a major international waterway, this may change with the increasing East-West trade (which has been curtailed by the hostilities in the former Yugoslavia) and with the recent opening of the Rhine-Main-Danube canal which connects the Black Sea with the Atlantic Ocean.

The Danube River and its tributaries combine to make up an internationally recognized and, in many ways, unique aquatic ecosystem. The catchment area, which is comprised of floodplain areas, meadow forests and wetlands, spans the three distinct bio-geographical regions of Central Europe, the Mediterranean and Eurasia. Despite extensive development, the wide variety of habitats supports significant species and genetic diversity. Some original floodplain ecosystems still survive, providing habitat for endemic and endangered species such as the white-

3. DANUBE ENVIRONMENTAL PROGRAMME, ACTION FOR A BLUE DANUBE 4 (1985).

4. Only about 40% of the total hydroelectric potential is currently exploited, and it is estimated that 7% of this unexploited potential could come from small hydropower stations. Equipe Cousteau, *The Danube . . . For Whom and For What?*, 1993 EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT FINAL REP. 88.

tailed eagle, black stork, black kite and night heron. The Danube Delta is the second-largest, natural wetland area in Europe, providing habitat for many diverse and sometimes endangered plants, fish (at least 100 species of fish out of 227 found in all of Europe), birds and mammals.⁵

Not only is the Danube River of exceptional ecological importance, but as the major Central European waterway, the Danube has played a significant strategic role in the history of this region.⁶ Of interest to the recent institutional developments in the basin are the early attempts in the 19th and early 20th centuries to establish multilateral cooperation along the Danube, usually in the form of federalism. These attempts were unsuccessful mainly because of nationalistic tendencies and because the international powers of that time were suspicious of Danubian unity.⁷ In this century, control of the Danube meant control of a major boundary and point of access between Eastern and Western Europe.

Although the Danube has been distinguished mainly by its strategic importance between East and West, this region never divided comfortably into the capitalist and communist blocs. Austria was and remains politically neutral; Yugoslavia was non-aligned; and, later Albania chose to remain independent. Nonetheless, the hegemony of the Soviet Union over Central Europe dominated the politics of the Danube River during the Cold War period. The dominant role of the Soviet Union was established by the 1948 Belgrade conference, which was attended by the USSR, its satellite riparian countries, as well as France, Great Britain, and the U.S. At this conference, western interests were overruled by the majority in the East, and the resulting Belgrade Convention⁸ substituted the concept of free navigation⁹ to navigation under the exclusive control of the participating countries which included all of the then-existing eight riparian countries¹⁰ with the exception of the Federal Republic of Germany.

5. The World Conservation Union (IUCN), *Analysis and Synthesis of National Reviews for the Danube River Basin Environmental Programme*, FINAL REP. 20 (1994).

6. The farthest outpost camps of the Roman Empire were built upon its banks, where centuries later Napoleon would suffer his first defeat. Among the invaders of the region include Charlemagne's Franks, the Crusaders, Attila and the Huns, Avars and Hungarians, and the Ottoman Turks. See STEPHEN GOROVE, *LAW AND POLITICS OF THE DANUBE* 2 (1964).

7. Edita Stojic, *Danube-River of Cooperation*, 41 REV. INT'L AFF. 28-32 (1990).

8. *Belgrade Convention Regarding Navigation*, Aug. 18, 1948, 33 U.N.T.S. 181 (entered into force Apr. 11, 1949); see also, *Vienna Treaty Relating to Navigation*, May 11, 1957, 342 U.S.T.S. 119 (entered into force July 20, 1955).

9. As early as 1856, an international regime under the auspices of the European Commission of the Danube was in place to ensure free navigation of the Danube for all European countries.

10. In 1948, the riparian countries were the Federal Republic of Germany, Austria, Czechoslovakia, Hungary, Yugoslavia, Bulgaria, Romania and the Soviet Union.

The Belgrade Convention also set up a river commission. Although a Danube Commission existed before the Belgrade Convention, the convention changed the commission's structure by giving it quasi-legislative powers, but governing only river navigation and river inspection.¹¹ According to the convention, the Danube Commission consists of one representative from each of the riparian countries; however, the Federal Republic of Germany had only observer status in the Commission and neutral Austria joined in 1960. The Convention is closed in the sense that it does not allow for membership outside of the contracting countries.

The collapse of the Soviet Union in and around 1989, and the separatist movements in the formerly socialist countries has radically transformed the geopolitics of the Danube basin and switched alliances westward. Austria has recently joined Germany as a member of the European Union, and six of the formerly socialist basin states are now Associate Members, including the Czech Republic, Slovakia, Hungary, Slovenia, Bulgaria, and Romania.

CURRENT DANUBIAN CONFLICTS AND ISSUES

Conflicts between the different users of the Danube River have existed throughout the Danube's recent history. Transboundary disputes, in particular, have become more acute since the collapse of Soviet authority and the rise of nationalism in the region. These include conflicts over large-scale, technological developments, ethnic hostilities in the former Yugoslavia and persisting issues regarding transboundary pollution and water supply.

The Gabčíkovo-Nagymaros Hydroelectric Project

Slovakia's diversion of the Danube to feed the reservoir for the recently constructed Gabčíkovo hydropower dam has given rise to one of the most controversial bilateral disputes in Europe. The Gabčíkovo dam is one part of a large-scale barrage/hydropower project that was conceived in the early 1950s as an example of socialist cooperation

11. The main task of the 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 and resolutions take the form of recommendations to the governments of its members. While a majority vote by the Commissioners is sufficient to pass a proposal, in practice, unanimity is solicited. Gorove, *supra* note 8, at 152.

between Czechoslovakia and Hungary. An agreement between the two countries was signed in 1977. The project was to consist of a large, upstream reservoir in Slovakia, an asphalt-lined canal diverting the flow of the river to and from the Gabčíkovo power station in Slovakia, and an additional dam at Nagymaros in Hungary to control the flooding from the peak-time uses of the Gabčíkovo power plant and to provide for continued shipping on the diverted Danube.

Hungarian hostility to the scheme, mainly for environmental reasons, was a focal point for the Hungarian democratic opposition in the late 1980s,¹² when the Hungarians canceled work at Nagymaros and later renounced the 1977 agreement. The Slovaks protested the Hungarian renunciation with the view that the Hungarians should pay damages. The Slovaks continued with a Provisional Solution, consisting only of the Gabčíkovo part of the project and, in disregard of strong Hungarian protests within Hungary, Slovakia and internationally, diverted the river in 1992 to feed the Gabčíkovo dam reservoir. This means that over a 30 mile stretch of the Danube River, which formed the border between Slovakia and Hungary, is now located in Slovakia.

The Hungarians claimed that the project violates their territorial sovereignty and jeopardizes the rights of the ethnic Hungarians who are located in Slovakia between the old and new river beds. Their most vociferous concern, however, is that the reduction of water flow in the old Danube bed, which was reduced to only 20 percent of the original, has had a serious effect on the groundwater level of this region, endangering drinking water, agriculture, forestry, and fishing, as well as the biodiversity and ecology of what was a pristine area of Hungary and Slovakia. The Slovaks claimed that the environmental damages could be mitigated with properly engineered measures, and particularly by completing the project with the construction of the dam at Nagymaros, and that the costs would then be outweighed by the benefits from electricity production, flood protection and enhanced navigability of the river. The Slovaks tend to view the power station as standing for their new national independence and symbolizing their strength and creativity, whereas the Hungarians tend to view the power station as a manifestation of communist gigantomania and disdain for public opinion.¹³

Following a recommendation by the European Community, Hungary and Slovakia have recently submitted the dispute to the

12. Tamas Fleischer, *Jaws on the Danube: Water Management, Regime Change and the Movement Against the Middle Danube Hydroelectric Dam*, 17 INT'L J. URB. & REGIONAL RES. 429-44 (1993).

13. Helen Ingram, *Slovaks Pushing Danube Project*, N.Y. TIMES, Oct. 25, 1992, at 13.

International Court of Justice.¹⁴ The legal question central to the court's resolution of the dispute is the legitimacy of Hungary's unilateral abrogation of the 1977 Agreement.¹⁵ The resolution of this issue will lay the legal basis for deciding whether the Provisional Solution can continue, possibly with Slovakian compensation to Hungary for environmental damages, or whether the Provisional Solution is prohibited, possibly with Hungarian compensation to Slovakia for economic damages.¹⁶ Since the most likely legal basis of this abrogation will be the customary international law doctrine of "a fundamental change of circumstances", the extensive environmental evidence collected by both sides will play a key role in the deliberations.¹⁷

Despite the pending international court case, Williams argues that the resolution of the Gabčíkovo-Nagymaros dispute will probably result from a shift away from allegations of environmental damage and violations of international law towards a negotiated settlement.¹⁸ Recently, the two countries have agreed to and undertaken measures to restore more water to the old Danube bed, which appears to have considerably lessened the environmental damages to the area.¹⁹ Moreover, a recent survey shows that both the Slovaks and Hungarians in the region favor continuation of the project, with the Hungarians viewing a fair solution as one with financial compensation.²⁰ Given the aspirations on the part of both countries to become members of the European Union, the most important factor suggesting a negotiated settlement may be their desire to be viewed as peaceful neighbors with the capacity and will to settle their own differences.

14. After the diversion of the river, Slovakia and Hungary accepted a plan for mediation by the European Community and subsequently signed the London Protocol under which construction was to be halted, 95% of the water that was diverted would be restored to its original course, and the power plant taken out of operation. But Slovakia broke this protocol, returning only 20% of the water to the original riverbed. See Anna Vari, *The Gabčíkovo-Nagymaros Hydropowerplant Dispute*, Conference on Transboundary Risk Assessment in an East-West Context, Stockholm (Aug. 20-22, 1995) (this was a paper presented at the conference).

15. Paul R. Williams, *International Environmental Dispute Resolution: The Dispute Between Slovakia and Hungary Concerning Construction of the Gabčíkovo and Nagymaros Dams*, 19 COLUM. J ENVTL. L. 56 (1994).

16. *Id.* at 56.

17. Vienna Convention on the Law of Treaties, opened for signature May 23, 1969, 1155 U.N.T.S. 331 (entered into force Jan. 27, 1980).

18. Williams, *supra* note 17, at 57.

19. Alfred A. Reisch, *Hungarian-Slovak Relations: A Difficult First Year*, 2 RADIO FREE EUROPE/RADIO LIBRARY RES. REP. 17, 50 (1993); Fred Pearce, *Dam Truths on the Danube*, NEW SCIENTIST, Sept. 1994, at 27-31.

20. Vari, *supra* note 16, at 32.

This conflict reflects several changed characteristics of the area's geopolitics. The project, itself, was conceived during the communist era when there was more optimism in technological projects and the ecological consequences of large projects gained less attention. Hungarian protests over its implementation were a product of emerging ecological consciousness as well as a vehicle for political dissent to the old order. Most dramatically, the conflict underscores the acute lack of institutions, particularly with the changed political alliances in the basin, for mutual planning and conflict resolution (which at one point raised the worrying prospect of military interventions).

The Iron Gates Hydroelectric Power Station

The 60 meter high dam and hydroelectric facilities located near the border of Romania and the former Yugoslavia impounds the once spectacular rapids of the Danube's Iron Gates. This power plant was and remains controversial. Bank and bed erosion is a severe problem downstream of the dam, especially in Bulgaria.²¹ Also of concern to both countries is the accumulation of heavy metals in the sediments behind this impoundment. The sometimes erratic management of the Iron Gate dams, where accidental discharges have been as low as 1,600 m³/s and as high as 20,000 m³/s, has meant that the discharge necessary for transport during periods of low flow is not always available, and conversely, that there is a potential flood danger to populated areas.²²

The Rhine-Main-Danube Canal

Another project affecting the Danube basin is the opening in 1992 of a 171 km. canal connecting the Danube with the Main and Rhine and thus linking the North Sea with the Black Sea. This age-old European dream (the idea dates back to Charlemagne) was supposed to greatly increase the international importance of the Danube as a European waterway. The canal has been fully financed by the Bavarian government, which expects a return from increased German shipping, the hydroelectric stations on the canal, and the use of the water for irrigation, industrial and recreational purposes.

Critics claim that the canal poses environmental risks to the water table and the fauna and flora of the area. Moreover, there are doubts whether such a waterway is needed in Europe. The 59 locks on the canal and the Main will slow traffic considerably and may render the canal

21. The World Conservation Union, *supra* note 7, at 11.

22. The World Conservation Union, *supra* note 7, at 68, 111.

noncompetitive with rail traffic. In part because of the stalled East-West traffic due to the conflicts in the former Yugoslavia, the early estimates of traffic on the canal seem to be grossly overestimated.²³

Conflict in the Former Yugoslavia

After leaving Hungary, the Danube forms the border between Croatia and Serbia-Montenegro before turning eastward to Novi Sad and Belgrade. During the Yugoslavian conflict, this short border region was the center of intense fighting between the Serbs and Croats, and Croatian territory abutting the Danube River was until recently under Serbian occupation. This fighting endangered foreign vessels, and was thus the responsibility of the Danube Commission.²⁴ The United Nations imposed trade sanctions on Serbia, a measure which did not contravene the Belgrade Convention since it is subordinate to overriding decisions of the UN.²⁵ The Serbs, however, did breach the Convention by their decision to impose transit fees on vessels passing through their waters. The Danube Commission criticized this breach, and more importantly, informed the UN Security Council about the difficulties in navigation on this reach of the Danube, requesting that authorities put an end to armed attacks on foreign ships.

In response to the armed attacks, the German government banned traffic from shipping companies based in Serbia. This ban, which was the first in the Danube's history, was contrary to the Belgrade Convention which declared the Danube to be a free shipping artery for ships of all European countries. With the recent signing of the Dayton Peace Accords,²⁶ it is hoped that fighting in this region will cease and relations on the Danube will normalize.

23. In 1974, the Economic Commission of Europe estimated that by the end of the 1980s, the traffic on the canal would be approximately 14 million tons per year. Construction Report 1974, April 1975 (Rhein-Main-Donau, Inc., Munich). Current estimates range between 3 and 10 million tons per year. Canal fulfills European Dream, *FINANCIAL TIMES*, Sept. 25, 1992, at 16.

24. Ukraine and Bulgaria are pressing for compensation for loss of trade due to the UN sanctions against Serbia and Montenegro. Vera Rich, *The Murky Politics of the Danube*, 49 *THE WORLD TODAY* 151-52 (1993).

25. *Id.* at 152.

26. The Dayton Peace Accords (signed December 14, 1995, in Paris) provide foreign powers, as represented by the NATO-led Implementation Force (IFOR), the Organization for Security and Cooperation in Europe (OSCE), and other bodies, with broad authority over civilian and military activity in the territory of the Republic of Bosnia and Herzegovina).

Water Supply and Quality

The intensive urban, agricultural and industrial uses of the Danube are creating serious problems of water quality and quantity, as well as decreasing the region's biodiversity and posing risks to the health of the basin ecosystems. Although the volume of Danube water is generally sufficient to supply current needs,²⁷ a 10-year drought throughout the basin has created localized shortages for such uses as drinking water, irrigation, energy production and navigation.²⁸ The water in 1993 was the lowest in a century. Some of the lower Danubian states already experience seasonal water shortages, for example, during the peak of the drought, Sofia was supplied from the bottom of an almost empty reservoir of poor water quality. In downstream Danubian countries, irrigation is the dominant consumer, accounting for up to 85 percent of all water usage.²⁹ The systems are mostly old and overloaded, and there are substantial water losses from inefficient distribution. Water for drinking and economic purposes directly competes with supplies for maintaining ecosystems and biodiversity.³⁰

Despite substantial pollution entering the river, the water quality in the main stem of the Danube is reasonably good because of the Danube's high capacity for dilution and self purification. However, the water quality of many Danube tributaries is far below international standards, and the Danube discharges substantial loads of nutrients and non-degradable contaminants into the Black Sea where there is serious environmental deterioration.³¹

Despite the Danube's capacity for purification, water pollution from nutrients, oxygen-depleting substances, hazardous substances and microbiological contaminants is imposing risks to the region's ecology

27. The Danube builds up to a mean annual discharge of 6,800 m³/s; its peak flow at the upstream location of Regensburg-Schwabelweis is 2,300 m³/s.

28. See, Don Hinrichsen, *Putting the Blue Back in the Danube*, AMICUS, Fall, 1994.

29. The World Conservation Union, *supra* note 7, at 41. Romania and Serbia both maintain that the other uses more than its share of water for irrigation. Rich, *supra* note 26, at 152.

30. ENVIRONMENTAL PROGRAMME FOR THE DANUBE RIVER BASIN, STRATEGIC ACTION PLAN FOR THE DANUBE RIVER BASIN 1995-2005 81 (1994) (Task Force for the Programme) [hereinafter STRATEGIC ACTION PLAN].

31. The Delta's extensive reed beds and maze of tributaries and lakes constitute one of Europe's most unique habitat complexes. The channelization of the Danube, the extensive loss of floodplain and construction of dams upstream has had severe effects on the Delta. REGIONAL ENVTL. CTR. FOR CENT. & E. EUROPE, 2 INFORMATION BULLETIN (Autumn, 1992); ENVTL. PROGRAMME FOR THE DANUBE RIVER BASIN, PROGRAMME WORK PLAN (1992).

and the health of the people.³² The most important sources of this pollution include agricultural and livestock wastes and runoff, urban runoff, and industrial output from the chemical, pulp and paper, and mining and textile industries. The nutrient levels (nitrogen and phosphorous) of the Danube have increased three to four-fold in the recent past. Although nitrate levels generally remain below the European Union standard for drinking water, some groundwater concentrations are approaching critical levels.³³ Organic toxics and heavy metals are also polluting the Danube, although the extent of this pollution is not fully known. Microbiological contamination from the discharge of urban waste and agricultural run-off is a problem throughout the river basin, and there are reports of water-borne diseases³⁴ on the part of those using water contaminated with unacceptable bacteria levels.³⁵ Air pollution is a significant non-point source of both soil and water pollution in the basin. The most important point sources are from urban centers, and most of the major cities on the river have no or only partial waste treatment facilities.³⁶

Currently, more than half of the wastewater in the former socialist states is untreated or receives only conventional primary treatment. The rest receives biological treatment, often, however, in Soviet-designed plants that are technically inferior and usually vastly overloaded. The investment cost requirements to significantly increase biological treatment in these countries is prohibitive.³⁷ As a case in point, the cost of upgrading and rebuilding Budapest's larger of its two treatment plants has been estimated at US \$1.8 billion³⁸ (the amount of money committed by the G-24 countries to all environmental programs in Eastern Europe is US \$4 billion). Even with this investment, only about half of Budapest's total wastewater discharge would conform to European Community standards.

Romania's Minister of Waters, Forests, and Environmental Protection once queried, "What if the Danube flowed in the opposite

32. See, STRATEGIC ACTION PLAN, *supra* note 32.

33. STRATEGIC ACTION PLAN, *supra* note 32, at 73.

34. STRATEGIC ACTION PLAN, *supra* note 32, at 78.

35. Drinking water supply is threatened in the Czech Republic, Slovakia, Hungary, Bulgaria and Romania, where supplies are taken from bank-filtered groundwater. DANUBE ENVIRONMENTAL PROGRAMME, *supra* note 5, at 6.

36. The only major cities on the Danube with adequate treatment facilities are Regensburg, Linz, and Vienna.

37. Susan E. Murcott & Donald R.F. Harleman, Use of Chemical Upgrading in Hungary and Slovakia, 30 WATER SCI. TECH. 5, 87-95 (1994).

38. Mihaly Szilagyi, Canalization and Sewage Treatment at the Hungarian Capital, Budapest, International Conference on Engineering and Urban Sustainability Beyond 2000, Budapest (Oct. 2-4, 1995) (this was a paper presented at the conference).

direction?"³⁹ Certainly, cooperation on improving the water quality of the Danube has been severely hampered by the asymmetries between the upstream and downstream countries with respect to their uses of the river, their economic resources and their pollution inputs. The more prosperous, upper-riparian countries, Germany, Austria, the Czech Republic and Slovakia, depend on the Danube mostly for industrial and waste disposal purposes and benefit greatly from the water power potential; the less-developed downstream riparian countries are more dependent on the river for drinking water, irrigation, fisheries, and a large tourist industry at the Black Sea. As a middle riparian, Hungary has little exploitable energy from the Danube, has been required to make large investments in adapting its wetlands to a navigable channel, and is becoming increasingly concerned with pollution that originates primarily upstream and threatens the large quantities of water used for drinking and irrigation. Some 97 percent of Hungary's surface water originates out of the country.⁴⁰

Moreover, few possibilities exist for trading off downstream advantages for upstream favors. With the exception of Northern Hungary and the Iron Gate region, the energy potential of the Danube is found mainly in the upstream countries. As for navigation, the interests of the Eastern countries in an unrestricted navigation route to the Atlantic have been at least as great as Western Europe's interests in an unrestricted eastern route.⁴¹

The asymmetrical interests regarding the benefits from the protection of Danube water quality, which were viewed as falling mainly on the countries at the middle and lower reaches of the river, are confounded by the asymmetry of the resources available for environmental protection, which are found mainly in the countries at the upper reaches. Prior to 1989, the Danube could be characterized, thus, by a mismatch between countries that viewed themselves as benefiting from water pollution control and those with the resources for providing this control.

39. Interview with Aurel Ilie, Romania's Minister of Waters, Forests and Environmental Protection, 1 DANUBE WATCH, Mar. 1995 (DANUBE WATCH is the newsletter of the Environmental Programme for the Danube Water Basin).

40. See, Pal Benedek & Ferenc Laszlo, A Large International River: The Danube, 13 PROGRESS IN WATER TECHNOLOGY 61-76 (1980).

41. See, Joanne Linnerooth, The Danube River Basin: Negotiating Settlements to Transboundary Environmental Issues, 30 NAT. RESOURCES J. 629 (1990).

THE CHANGING INSTITUTIONAL STRUCTURES OF THE DANUBE RIVER BASIN

Since 1989, a new dimension to the upstream-downstream characterization of Danubian politics has emerged with the disintegration of the Soviet Union and the political and economic transformation of the socialist countries in the Danube region. Since many of the former socialist states are aspiring for western affiliation and even membership in the European Union, including Bulgaria, the Czech Republic, Hungary, Romania, the Slovak Republic, and Slovenia, there is a powerful new incentive for cooperation on regional issues. This is having profound effects on the transformation of the legal and institutional structures of the Danube basin. The dominant institutions and legal instruments in the Soviet era and the emerging new structures in the post-Soviet era are shown in Tables 1 and 2, and are described below.

Soviet Era Institutions

The international order created by the 1948 Belgrade Convention established the Soviet Union and its satellite countries as the dominant force in Danubian affairs. Germany and the neutral countries of Austria and Yugoslavia, however, formed a coalition that constrained the influence of the Soviet Union in the region. The main institutional structure created by the Belgrade Convention was the Danube Commission. Although a Danube Commission existed before the Belgrade Convention, the convention changed the Commission's structure by giving it quasi-legislative powers, but governing only river navigation and river inspection. The Convention is closed in the sense that it does not allow for membership outside of the then-existing riparian countries.

A second, but politically less important, international Danubian institution is the Joint Danube Fishery Commission⁴², which has the purpose of facilitating the improvement of the natural conditions for fish breeding and of safeguarding the normal migratory movements of fish in the event of engineering works obstructing this movement. Although nominally the Fishing Commission has responsibility for water quality, in practice it has little power to affect national reforms.

Concern about the lack of any form of effective regional cooperation for controlling water pollution of the Danube led the eight riparian countries, in 1985, to meet in Bucharest and declare their

42. This commission was brought into existence by the 1958 Bucharest Convention Concerning Fishing.

Table 1: International Agreements Relevant to the Danube River Basin

Danube Basin States *)	European Union	Ramsar Wetlands Convention 1974	Transboundary Air Pollution Convention 1979	Transboundary Water-Courses Convention 1992	Biological Diversity Convention 1992	Climate Change Convention 1992	Environmental Action Program 1993	ECE Danube Charter (Draft)
Austria	M	R	R	S	R	S	P	
Bulgaria	A	R	R	S	S	S	P	
Croatia		R			S		P	
Czech Rep.	A	R	R		R	R	P	
Germany	M	R	R	R	R	R	P	
Hungary	A	R	R	R	R	S	P	
Moldova		R		R	R	S	P	
Romania	A	R	R	S	R	S	P	
Slovak Rep.	A	R	R		R		P	
Slovenia	A	R			S	S	P	
Ukraine			R		S		P	

- A - European Union Associate Agreement
- M - European Union Member
- P - Participant
- R - Ratification
- S - Signatory

*) Excluding Serbia-Montenegro and Macedonia.

Table 2: Basin-Wide Environmental Agreements for the Danube River

River Basin States *)	Danube Commission **)	Bucharest Declaration 1985	River Tisza Convention 1986	Danube Environmental Program 1991	Black Sea Convention 1992	Danube River Protection Convention 1994	Danube River Basin Declaration 1994	Danube Ecological Convention (Draft)
Austria	M	S		P		S		
Bulgaria	M	S		P	R	S		
Croatia	O			P		S		
Czech Rep.				P				
Germany	O	S		P		S		
Hungary	M	S		P		S		
Moldova	O			P	R	S		
Romania	M	S		P	R	S		
Slovak Rep.	M			P		S		
Slovenia				P		S		
Ukraine	M			P	R	S		

M — Member

O — Observer

P — Participant

S — Signatory

R — Ratification

*) Excluding Serbia-Montenegro and Macedonia.

**) The Russian Federation and Serbia-Montenegro are also members.

willingness to protect the river from pollution.⁴³ In the eight years since this Bucharest Declaration, a monitoring program has been put into place; however, this system is generally seen as insufficient and ineffective because of wide differences in approach and resources.⁴⁴ Despite this declaration, at the time of the political transitions in 1989, formal protection of the Danube environment from excessive water pollution was essentially nonexistent.⁴⁵ The upstream-downstream politics and interests are partly to blame, but an intractable and persistent problem is the lack of resources on the part of the transition countries.

In addition, the 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 point and non-point sources. The political and economic conditions prior to 1989 prevented the Danube Commission from expanding its authority from that of navigation to areas such as environmental quality. The neutral and non-aligned countries, Austria and Yugoslavia, formed a blocking coalition preventing the USSR from expanding the influence of the Danube Commission, and thus its own influence, beyond that of navigation. Since the creation of a multi-purpose commission with the breadth to make politicized tradeoffs between the conflicting interests of the river was politically impossible, any progress on combating the pollution of the Danube was made through narrowly focused, rather than integrated and more holistic agreements between two or maybe clusters of countries. This strategy of "functional" and "participant" incrementalism was explicitly set out in the Bucharest Declaration.⁴⁶

Indeed, in the Soviet era almost all agreements and treaties for the Danube River, both basin-wide and internationally, were bilateral⁴⁷. There were only two important exceptions: the Bucharest Declaration and a shortly-to-follow convention concerning the protection of the River Tisza system, the largest tributary of the Danube, against pollution.⁴⁸

43. Declaration of the Danube Countries to Cooperate on Questions Concerning the Water Management of the Danube, especially to protect the Danube from Pollution. This declaration is reprinted in *Aktuelle Österreichische Praxis zum Völkerrecht 1985-1986, ÖSTERREICHISCHE ZEITSCHRIFT FÜR ÖFFENTLICHES RECHT UND VÖLKERRECHT* 429 (P. Fischer & G. Hafner eds., 1986).

44. The World Conservation Union, *supra* note 7, at 75.

45. Arthur H. Westing, *Environmental Security for the Danube River Basin*, 16 *ENV'T CONSERVATION* 327 (1989).

46. Linnerooth, *supra* note 43, at 646.

47. *Id.* at 649.

48. Convention on the Protection of the River Tisza, signed May 28, 1986 (entered into force Dec. 26, 1990). *Green Globe Yearbook of International Co-operation on Environment and Development* 162 (1995).

The most important international treaties involving countries within as well as outside the Danube basin were the 1974 convention to preserve wetlands⁴⁹ and the 1979 European convention on transboundary air pollution.⁵⁰

The disintegration of the Soviet Union in 1989, and the formation of the independent states that now constitute the majority of the ten Danubian riparian countries, is having far-reaching effects on the institutions managing the Danube River. Coinciding with these changed political circumstances has been an equally dramatic change in the perception of the Danube environment. Whereas in the Soviet era, the Danube was viewed primarily as an economic resource, providing drinking water as well as such uses as navigation, energy production, irrigation, and industrial cooling, a more recent perception is that the river supports and maintains an intricate and essential ecosystem throughout the entire basin. The health of the Danube River, therefore, mirrors the health of the overall environment of the Danubian countries. This perception broadens the concept of protecting the Danube, from a narrow focus on improving water quality to a focus on the sustainable use of the water resources given the importance of protecting the basin's landscape, habitat and biodiversity.

This changed problem frame diminishes the relevance of the upstream-downstream circumstances, and along with the political revolutions, has enhanced interest in cooperating on managing the Danube as a common property resource. The process of building institutions to promote the requisite cooperation for the sustainable use of the Danube, however, still confronts the political tug of war between the Eastern and Western powers vying for influence in this region. Two parallel trends for building a more powerful institutional base for promoting environmentally sustainable development of the basin, therefore, can be identified. The first is a reconstruction of the present Danube Commission with its more Eastern European roots and focus. The second is a movement towards Western Europe with an institutional capacity closely linked to the European Union.

The Danube Commission

At issue is whether the Danube Commission can be revamped to reflect the basin's changed political geography and the changed paradigm

49. Convention on Wetlands of International Importance, Especially as Wildlife Habitat, Feb. 2, 1971, 996 U.N.T.S. 245, 11 I.L.M. 969 [hereinafter Ramsar Convention].

50. Convention on Long-Range Transboundary Air Pollution, Nov. 13, 1979, T.I.A.S. 10,541, 18 I.L.M. 1442 (entered into force 1983) (under auspices of the United Nations Economic Commission for Europe).

from economic development to that of sustainable development. In other words, can a new Danube Commission emerge that encompasses expanded membership, responsibilities and scope? As it now stands, the Danube Commission is a relic of the past. Its official working languages are French and Russian, neither of which is the spoken language of any of the current riparian nations. Perhaps the most intractable hurdle confronting supporters of a revised Danube Commission, however, is the lack of institutional credibility of the Commission. The Danube Commission tends to be regarded as a highly-politicized and ineffectual hangover from the Communist era. Posts for the Secretariat are filled by political appointment, which has tended to discredit its independent and scientific qualities that are viewed as critically important for an effective Commission.

Despite the Danube Commission's problems of credibility, its charge of assuring a navigable and freely accessible waterway has certainly not declined in importance; to the contrary, the shipping traffic on the Danube River is expected to increase substantially, especially if the Balkan conflict ceases to threaten traffic. It can easily be envisaged that, following the institutional model of the Rhein, the single-purpose Danube Commission will co-exist with other more broadly mandated organizations in managing the Danube River; however, this fragmentation will hinder attempts at integrated policies that explicitly address the tradeoffs between commercial uses of the river and the basin's ecological integrity. If the Danube Commission is to become an effective river basin commission for promoting sustainable policies in the basin, and not just promoting navigation on the Danube, an expansion of its membership and scope is essential.

The current membership of the Danube Commission has changed since 1989. From the original eight members of the Danube Commission, four remain: Austria, Hungary, Bulgaria and Romania. Slovakia and Serbia-Montenegro have succeeded Czechoslovakia and Yugoslavia as members, respectively, and Russia and Ukraine have succeeded the Soviet Union. The Federal Republic of Germany retains its observer status, and both Croatia and Moldova have gained observer status.

Adding any additional members to the Danube Commission, as well as expanding its mandate, will require an overhaul of the existing Belgrade Convention, which currently does not allow for new parties to the Convention. For this purpose, a Diplomatic Conference on Danubian Cooperation is planned. If an effective post-cold war regime is to emerge from this conference, it will be necessary to confront and resolve several difficult issues. As a start, this regime will require German participation, but Germany has been reluctant to join any institution with Serbian membership. Russia, which does not border on the Danube but shares its use via the Black Sea, presents the most politically sensitive issue for

resolution. The Ukrainians maintain that Russia should not continue to have a place in the Danube Commission in spite of their claim of "special interest" in the area. The Ukrainians also claim that the Moldovians, despite their 937 meters of river frontage, should not gain a place in the Commission. The reason, the Ukrainians argue, is that the original frontiers of the Moldovan Soviet Socialist Republic did not give that republic a river frontage, and that the 937 meters are legally the territory of Ukraine.⁵¹ Finally, the eventual membership of Croatia is problematic since Croatia is not recognized as a state by Serbia.

Not only are there contentious issues among the present members and observers of the Danube Commission, but the larger question of membership outside the present eight countries (and three observers) will have to be resolved. Under consideration, for instance, was a proposal to include all countries of the Black Sea in the new regime, which shifts the country balance decidedly eastward.⁵² Alternatively, the new regime might be formulated to consist, as it now stands, of exclusively Danubian riparian nations, or it might be reformulated to include exclusively the countries of the basin, the countries of the Black Sea, and/or all countries with an interest in the Danube as at the original Belgrade Conference where the U.S., France, and the U.K. were present.⁵³ The other important issue to be resolved at the Diplomatic Conference is the scope of the Danube Commission. It is envisaged that the new scope could go substantially beyond navigation to include issues of tourism, energy, legal and statistical harmonization of data collection, and even issues of environmental regulation of the river.⁵⁴

To date, all that has been resolved is which countries will take part in the Preparatory Committee for planning the Diplomatic Conference on Danubian Cooperation, which has the aim of determining the fate of the Belgrade Convention and, therefore, the new scope and membership of the Danube Commission. For this purpose, the Danubian states have been defined as all of the eight existing members of the Danube Commission plus the three countries with observer status.⁵⁵ This definition justifies the continued presence of Russia and Serbia at the negotiations.

51. Rich, *supra* note 26, at 152.

52. There is a long-standing rivalry between Romania (where the original seat of the Danube Commission was) and Hungary (where the Danube Commission now resides).

53. Communication from Adam Alexander Erlich, Austrian Ministry for Foreign Affairs (Nov. 9, 1992).

54. Interview with Dr. Helmut Strasser, Director General of the Danube Commission (Oct. 17, 1995).

55. See, The World Conservation Union (IUCN), Analysis and Synthesis of National Reviews for the Danube River Basin Environmental Programme, FINAL REP. 20 (1994).

The Danube Program

This Diplomatic Conference is long overdue. The delay can be partly attributed to the conflict in the former Yugoslavia which blocked resolution of many underlying issues. Yet, East-West tensions are still apparent, and the majority of the Danubian countries, especially those which aspire to join the European Union, have little interest in perpetuating and expanding institutional structures that are both hangovers of the communist era and which include the participation of Russia and, at least before the Dayton Accords, Serbia.

Alternatively, since 1989, there has been an outburst of international legal and institution-building activity that is strongly supported by Western interests and that focuses on issues of environmental degradation, both at the regional and global levels. The eagerness of the former socialist states to join international agreements on the protection of the global environment has been apparent by the strong support of the 1992 Convention on Biological Diversity and the U.N. Framework Convention on Climate Change. Although few of the Danubian countries have ratified these conventions, most of them are signatories. It remains to be seen, however, how the countries in economic transition will approach their obligations under the two conventions.

On the regional level, the Danubian states have also supported international agreements to protect the environment. The 1992 Helsinki Convention on the protection of transboundary watercourses⁵⁶ was signed by 25 UN/ECE countries, including six Danubian states. This convention obliges Parties to take compatible legal and financial measures, including the precautionary and polluter-pays principles, to reduce significant adverse effects on transboundary waters.⁵⁷ Although the treaty has already had some positive effects, the problems of resource capabilities in the Danube region and the persistent lack of compatibility between countries have impeded progress.⁵⁸

In the same year, an initiative by the Russian Federation and the Eastern Danubian countries was also taken in the form of a convention to protect the Black Sea against further pollution and ecological deterioration.⁵⁹ The Convention contains legal provisions for the

56. Convention on the Protection and Use of Transboundary Watercourses and International Lakes, adopted Mar. 17, 1992 [hereinafter Helsinki Convention]. Green Globe Yearbook of International Co-operation on Environment and Development 206 (1995).

57. The World Conservation Union, *supra* note 58, at 76.

58. *Id.* at 77.

59. Convention on the Protection of the Black Sea Against Pollution, 1992. This convention has been signed by Bulgaria, Georgia, Romania, the Russian Federation, Turkey

establishment of a Black Sea Commission, and provides protocols for protection against land-based pollution, for the regulation of waste management and for emergency response to spills.

The idea of a regional environmental program for the Danube River basin was first introduced at a 1991 meeting of the European environmental ministers at Dobris Castle in Czechoslovakia, where the Environmental Action Programme for Central and Eastern Europe (EAP), was put forth. The EAP, which was endorsed in 1993,⁶⁰ sought to integrate environmental sustainability considerations into the process of economic reconstruction by building the institutional capacity for efficient legal and administrative frameworks. It also sought to identify areas where human health or natural ecosystems are severely threatened by environmental hazards. The main purposes of the EAP has been to build a solid institutional context and to identify priority areas in order to attract western support and assistance. A follow-up to the EAP has been the formulation of National Environmental Action Plans.

This broad environmental program was accompanied by a more specific "Environmental Programme for the Danube River Basin". Also western oriented, the program's support comes mainly from international funding agencies.⁶¹ A Task Force comprised of representatives of the riparian states, international organizations and non-governmental organizations has developed a three-year work plan, which includes short-term actions (1995-1997), strategic and pre-investment activities, institutional development and environmental management activities. One of the main tasks during the three-year period is the development of the overall "Strategic Action Plan" which specifies goals and requisite actions.

It is up to the individual Danube countries to integrate actions proposed under the Strategic Action Plans into the larger environmental framework identified in the National Environmental Action Plans. The NEAPs deal with the overall environment, including, inter alia, air pollution and solid waste disposal, whereas the Strategic Action Plans deal primarily with the water environment. Although a primary

and the Ukraine. Green Globe Yearbook of International Co-operation on Environment and Development 163 (1995).

60. The EAP was endorsed by the European environmental ministers at a follow-up meeting to Dobris Castle, in Lucerne Switzerland (Apr. 28-30, 1993).

61. The funders are the World Bank (through the Global Environment Facility or GEF), the European Community, the United States Agency for International Development (USAID), the European Bank for Reconstruction and Development (EBRD), the United Nations Development Programme, the United Nations Environment Programme, and the governments of Austria and the Netherlands. Collectively they have committed \$35 million for an initial four years, most of which is designated for baseline studies, strengthening institutional capacity for environmental management and preparing national action plans. Hinrichsen, *supra* note 30, at 43.

motivation is to attract western assistance, at present the OECD countries have committed only limited resources to the EAPs. In fact, the Environmental Program has been described as a "paper programme, which sets out a wish list and priorities rather than an actively engaged environmental programme."⁶²

The more narrowly focused Danube Program anticipates somewhat better chances at recruiting western funds. Still, there is little doubt that the enormous expenses necessary for significant environmental improvements of the Danube River will not be forthcoming. The Danube Program nevertheless fulfills the politically strategic role of supporting a regime for Danubian affairs within the political context of the European Union. Without directly challenging the Belgrade Convention and the authority of the Danube Commission with its limited scope of navigation, the Danube Program establishes the foundations for an alternative institutional structure based on an alternative mission-environmental protection and sustainable development.

This structure clearly diminishes the role of the Russian Federation. While there has been no formal designation of what constitutes a Danubian state, participating countries in the Danube Environmental Program include nine of the ten riparian countries (excluding Serbia), as well as the Czech Republic and Slovenia. The Czech Republic, which lies fully in the Danube basin, and Slovenia, which has over 80 percent of its territory in the basin, are the only non-riparian, basin countries included as Danubian states. All the other basin countries, however, have less than 2 percent of their territory in the basin⁶³. The only exception is Macedonia, which has been excluded because of the conflicts in the former Yugoslavia.

In contrast with the more formal institutional arrangements for managing the Danube set out in the Belgrade Convention, this management regime began as a loose and decentralized network of scientists, government authorities and NGOs.⁶⁴ This form of governance is increasingly viewed as appropriate for resolving the tensions between the centralizing or hierarchical imperatives of ecological interdependence, the decentralizing or more market-oriented imperatives of national sovereignty and demands for more egalitarian and participatory management styles.⁶⁵ However, along side this style of governance are

62. The World Conservation Union, *supra* note 58, at 82.

63. Apparently, the idea of excluding countries with less than 2% of their territory in the basin from the Danube Program evolved as an informal, internal policy. Interview with David Rodda, Danube Programme Coordination Unit, Vienna (Oct. 13, 1996).

64. See Linnerooth, *supra* note 43.

65. L.P. Gerlach, *Global Thinking, Local Acting*, 15 *EVALUATION REVIEW*, 120-48 (1991); Steve Rayner, *Governance and the Global Commons*, *DISCUSSION PAPER NO. 8*, at 5 (The

tendencies to formalize and centralize the management of the Danube, as well as to build more decentralized and democratic structures to address the broader agenda of sustainable development.

An important step in formalizing and centralizing the current Danubian regime, as well as narrowing its agenda and endorsing official, western decision-making routines, has been recently taken in the form of the Danube River Protection Convention.⁶⁶ This Convention, by focusing mainly on protecting surface and groundwater, controlling hazardous accidents, and reducing pollution loads to the Black Sea, has set a far narrower agenda than that of sustainable management of the basin. There is also a clear distinction in the management style. Whereas the Danube Program and accompanying Strategic Action Plan follow the governance trend in international environmental affairs characterized by "soft law" initiatives, the absence of formal legal instruments and broadly-based networks, the Danube Convention follows the tried-and-tested environmental law approach to water management cooperation by establishing a formal decision hierarchy. For example, NGOs are members of the Task Force and were involved in the preparation and signing of the Strategic Action Plan, but were not given a participatory role in the Convention. Rather, the Contracting Partners of the Convention are the Ministers of the Environment.⁶⁷ Although the Danube Convention is aimed at achieving sustainable and equitable water management, a corresponding agenda, or what has been described as a guiding policy of the Convention,⁶⁸ is promoting European integration through close cooperation between the European Union and the Danubian countries. In fact, the European Union is a party to the Convention.

Perhaps the most important, centralizing aspect of the Danube River Protection Convention is its provisions to establish an International Commission to provide a framework for regional cooperation.⁶⁹ It is envisaged that the Commission will be actively engaged in the planning activities as well as the channeling of funds for all phases of

Centre for the Study of Global Governance, London School of Economics, 1994).

66. Convention of Cooperation for the Protection and Sustainable Use of the Danube River, signed June 29, 1994. This Convention will come into force on the 90th day after ratification by the ninth country. STRATEGIC ACTION PLAN, *supra* note 32, at 2.

67. Bo Wingard, Water Protection Management in the Danube Basin, Danube Symposium at 5, Krems, Austria (June 1-2, 1995) (this was a paper presented at the symposium).

68. Wilhelm Kittinger, Management in the Danube River Basin, Symposium on Water Protection at 2, Danube Protection Week, Krems, Austria (May 29-June 2, 1995) (this was a paper presented at the symposium).

69. An Interim International Commission is already functioning in Sofia and the headquarters of a Permanent Secretariat is planned in Vienna.

implementing the Danube Convention. Whether the International Commission will be only an implementing body for the Danube River Protection Convention or whether it develops into a supranational body with legislative powers cannot be predicted at this time.

The creation of this International Commission clearly competes with any plans to expand the competence of the existing Danube Commission beyond that of navigation. The possibility for coexistence with both the Danube Commission and the Black Sea Commission is apparent, but this will be decided by the planned Diplomatic Conference on Danubian Cooperation.⁷⁰

The Danubian states, as defined in the Danube Program, have also recently adopted a more participatory style of management in the form of the Danube River Basin Environmental Declaration,⁷¹ which formally endorses the approach, principles and targets of the Strategic Action Plan. An even more strikingly environmental-activist initiative has been taken in the form of the Danube "Ecological Convention", which is currently being prepared under the auspices of the Hungarian government. The draft convention is remarkable for its breadth, taking a holistic approach to the environmental management of the Danube River basin. Its stated goals are to protect human health and safety, air, water, soil, climate, landscape, flora, fauna and living communities, including their biological diversity, as well as other environmental systems such as sub-surface water resources⁷². It embodies the ideals of sustainable development by calling for the safeguarding of future generations by not placing them in a worse situation than the present.

The Ecological Convention, which follows from the Danube Program and Danube Convention, addresses both the changed political realities of the Danube basin and the changed paradigm of river management. From these perspectives, it is illustrative to compare it with the Bucharest Declaration that was passed ten years earlier. Of the signing parties of the Bucharest Declaration,⁷³ only three countries in their same national identity will be signatories of the Ecological Convention. The other striking comparison is the scope of the two agreements. Whereas the Bucharest Declaration was aimed at pollution of the river, and mainly with regard to radioactive and dangerous substances, the Ecological Convention takes a far broader approach aimed at sustainable development of the basin.

70. See Rodda, *supra* note 66.

71. This declaration was adopted in Bucharest, Romania, Dec. 1994. Bo Wingard, *supra* note 69, at 6.

72. The World Conservation Union, *supra* note 58, at 78.

73. The signatories include: the Soviet Union, Romania, Bulgaria, Yugoslavia, Hungary, Czechoslovakia, Austria and West Germany.

CONCLUDING REMARKS

With the end of the Cold War, an era of Danubian politics characterized by the East-West ideological split and lack of attention to the region's ecology also comes to an end. An opportunity for truly effective cooperation among the Danubian countries to promote the economic, cultural, and ecological conditions of the basin presents itself. Unfortunately, this opportunity has been seriously hampered by ethnic and nationalistic conflicts, as well as by the economic deterioration in the former socialist countries of the Danube. On the positive side, there is a recognized need for building institutions that can genuinely contribute to the integrated management of the river and a more sustainable development of the basin.

The dramatically changed geopolitics of the region since 1989, where eight of the thirteen basin countries have changed their political status, is leading to major, yet still evolving, institutional changes for managing the Danube River. Russia, which is no longer a Danube riparian country, is supporting reforms to the 1948 Belgrade Convention that will expand the membership of the existing Danube Commission to include the Black Sea countries. The Russian interest is primarily in maintaining rights of navigation, although an expanded scope of the Commission is also on the agenda for a Diplomatic Conference to reform the Belgrade Convention.

The chances for a revamped Danube Commission with membership including the Black Sea Countries and an extended mandate beyond navigation appears, however, unlikely in view of the aspirations of at least six of the current Danubian states to join the European Union. A competing regime, therefore, is emerging in close connection with the European Union and quite separately from the Danube Commission. The focus of this regime, which is backed by international funding agencies, is on the sustainable use of the river and development of the basin. Solidifying western alliances and promoting European integration is serving as a powerful *raison d'état* for this western interest in sustainable development of the region. The ambition of European unity is a powerful force for resolving conflicts and promoting dialogue in the region, as is witnessed by the current lessening of tensions between Hungary and Slovakia with respect to the Gabčíkovo-Nagymaros dispute.

The Danube Environmental Action Program has been created as a center for this new regime, which began as a loose and decentralized network of scientists, governmental authorities and NGOs. This form of Danubian governance has recently become more formalized, and less participatory, by the Danube River Protection Convention with its narrowly focused agenda on river water quality. This Convention establishes an International Commission that directly competes with

aspirations to expand the scope of the currently existing Danube Commission.

At issue, ultimately, is whether the control of the Danube will be exclusively in the hands of the present basin countries or include the countries of the Black Sea, or, alternatively, whether more pan-European institutions will emerge in close connection with the European Union. The issue of the rights and control of navigation will likely be the test issue for a diplomatic resolution of this broader question. Eventually, and most importantly, the institutional structures for integrating the commercial uses of the river with the ecological imperatives of sustainable development of the region must be put into place.

A first step in establishing a cooperative Danubian organizational structure, therefore, appears to be reconciling the East-West interests in the post-cold war era as well as resolving the conflicts in the region. The opportunities for cooperative Danube development and the urgent environmental issues are a strong motivation for this cooperation. The sustainable development of the region will hopefully be a goal that eventually transcends the region's existing nationalistic and ethnic conflicts. The intensity of recent efforts to form working networks and to legislate cooperative programs for the region's environment is an encouraging beginning.