

THE TEACHING OF THE MOST HIGHLY QUALIFIED PUBLICISTS AS A SUBSIDIARY SOURCE OF INTERNATIONAL WATER RESOURCES LAW

By Bernard J. Wohlwend

The Author: Bernard J. Wohlwend, LL.M., is a former international civil servant who, since 1962, has worked for one year in the Natural Resources Division of the U.N. Secretariat and has served for four years as Assistant Resident Representative of UNDP in Afghanistan, for four and a half years as ESCAP/UNDP Legal Adviser to the Mekong Committee in South East Asia and for nine years as Legal Officer and, then, Chief of the Land and Water Law Section in the FAO Legal Office in Italy. For the last twenty years, the Author has undertaken various consultative missions in water, health and natural resources law for a number of UN Agencies and NGOs. He is a member of the Swiss Section of the ILA, a member of the International Water Law Association and has served as a consultant to the Water Resources Committee of the ILA (For bibliographical references see: Biography-Bibliography under: <http://www.bjwconsult.com>).

The opinions expressed in this Article are those of the author and do not necessarily reflect the views of the institutions quoted herein nor of their authorized commentators.

Abstract

At the dawn of the XXIst Century, it is opportune to review the history of water law and to take stock of the means currently available for the implementation of integrated water resource management. From traditional customary law which, for millennia, has governed and still governs water resources management in vast areas of our World, concepts and practices have since a few centuries been made the subject of man-made legislation promulgated under the aegis of different legal systems. In parallel, the transfer from the historical Kingdoms and Empires into modern political States has called for the development of international law the concepts which, as far as water resources are concerned, have largely been borrowed from domestic law. At the same time, it is international law that has produced the most advanced legal principles aiming at governing integrated water resources management as evidenced by the doctrine and as stated in the 1966 Helsinki Rules developed by the Water Resources Committee of the International Law Association. If they have defined the conceptual framework, these Rules have however failed to institutionalize the material instrument required for their implementation: the Integrated Water Resources Management Plan as the term of reference for the allocation and administration of equitable water rights.

CONTENTS

I.	INTRODUCTION	1
II.	THE EVOLUTION OF THE DOCTRINE	2
	1. The ' <i>Institut de droit international</i> ' - 1911	2
	2. The League of Nations – 1921 & 1923	3

3.	The International Conference of American States - 1933	5
4.	The United Nations Economic Commission for Europe – 1954 & 1957	5
5.	The Inter-American Bar Association - 1957	6
6.	The International Law Association – 1954 through 1966 & 1996	7
7.	The Council of Europe – 1967	9
8.	The Afro-Asian Legal Consultative Committee - 1973	9
9.	The Intergovernmental Working Group of Experts on Natural Resources Shared by One or More States - 1978	10
10.	The International Water Resources Association – 1988	10
11.	The International Law Commission of the United Nations – 1997	11
III.	EQUITABLE UTILIZATION	12
1.	The Drainage Basin	12
2.	Equitable Utilization	12
3.	The International Drainage Basin Plan	13
	Notes	14
	Selected Annotated Bibliography	19

I. INTRODUCTION

According to Article 38 of the Statute of the International Court of Justice which has been ratified by a very large number of members of the international community, the sources of international law are: a) international conventions, whether general or particular; b) international custom as evidenced by a general practice accepted as law; c) the general principles of international law; and d) judicial decisions and the teaching of the most highly qualified publicists of the various nations, 'as subsidiary means for the determination of rules of law'.

If the two first sources of international law do not raise any particular query, the third and fourth sources do require some qualification.

Aside from the fundamental principles of 'law and justice', the third source, or the general principles of international law, incorporates in fact mere moral precepts such as the obligation to respect signed treaties (*pacta sunt servanda*) or the so-called no-harm clause (*sic utere tuo ut alienum non laedas*) and its corollary at water law expressed as the 'natural flow' doctrine the respect of which is left in practice to the free will of sovereign States. Indeed, even if a State is recognized in breach of any such principle by the International Court of Justice, enforcement of the Court's sentence is left to the traditional remedies at international law, i.e., retorsion measures such as embargo, or war.¹

As to the fourth source, or judicial decisions and the teaching of the most highly qualified publicists, and although labeled 'subsidiary', it has undoubtedly considerable weight in identifying what may be called the 'consensus' of the community of nations, which consensus is not without having a determinant coercive power over individual States.

Considering that the sources of international law are listed according to the way in which the International Court of Justice is to consider them when attempting to resolve an international dispute, it may be argued that those sources, in essence, comprise but:

- a) customary rules as evidenced by international treaties and conventions; and
- b) judicial decisions and the teaching of the most highly qualified publicists, as a subsidiary source.

If the application of court decisions as a subsidiary source of international law does not require qualification, the matter of how to consider the teaching of the most highly qualified publicists, i.e., the doctrine, deserves some comment.

Such recent works as the Helsinki Rules of the International Law Association,² the Bellagio Draft Treaty³ or, to a certain extent, the Convention of the International Law Commission (ILC) of the United Nations⁴ do fall into this category as do all studies, books and articles in Law Journals and other similar publications contributed by scholars of international law.

The work of the Anglo-American International Law Association undertaken as from 1954 in continuation of that initiated by the European '*Institut de Droit International*' in 1911 and which produced the 1966 Helsinki Rules, as complemented and supplemented through 1996, is commonly labeled 'codification of international law', a term which may be misleading.

Indeed, to the Civil Law lawyer, 'codification' has the meaning of 'making law', a function which is definitely not that of the doctrine. To the Common Law lawyer, however, 'codification' may mean making law by writing out recognized Common Law rules into a Code of laws; it may also mean, simply, 'stating the law', i.e., declaring what the law is, or should be.

II. THE EVOLUTION OF THE DOCTRINE

The origin of what may be called modern international water resources law can be traced back to the development of international waterborne commerce in the XVIth century and to the internationalization of navigable rivers and waterways in Europe.⁵ This was done by means of treaties between the Great Powers of the time such as, for example, the 1535 Treaty between the Ottoman Empire and France which established the freedom of navigation on the Danube for the riparian States.⁶ Although numerous scholars of international law have since analyzed and progressively formulated those principles and rules of law applicable to international watercourses and their navigational use, only those works produced by non-governmental and public international law associations and institutions will be analyzed here as such works can rightly be said to encompass all leading individual opinions prevailing at the time of their formulation.

1. The '*Institut de droit international*'

Created in 1873, the '*Institut de droit international*' issued a first Resolution entitled "International Regulation on River Navigation" in Heidelberg, Germany, on 9 September 1887.⁷ This was followed by a declaration on the "International Regulation regarding the Use of International Watercourses for Purposes other than Navigation" known as the Madrid Declaration of 20 April 1911,⁸ by a resolution entitled the "Regulation governing Navigation on International Rivers" known as the Paris Resolution of 19 October 1934,⁹ by a further resolution entitled the "Resolution on the Use of International Non-Maritime Waters" issued in Salzburg, Austria, on 11 September 1961¹⁰ and, finally, by a Resolution on the "Pollution of Rivers and Lakes and International Law" formulated in Athens, Greece, on 12 September 1979.¹¹

Of particular significance is the famous Madrid Declaration of 1911. It distinguishes between contiguous and successive watercourses and lakes and recognizes the following principles and rules :

- (i) where a watercourse or lake forms the boundary between two States, neither State may, without the concurrence of the other State, effectuate or allow modifications of the watercourse or lake that would be harmful to the bank of the other State; and

- (ii) where a watercourse successively crosses the territory of two or more States, a) the point of crossing may not be altered by one State without the concurrence of the other State, b) any harmful alteration of the waters and any discharge of harmful substances therein is prohibited, c) no in-stream use of the waters may be such as to cause a severe modification to the quality of those waters when reaching the territory of the downstream State; d) a valid title to navigation may not be violated by any other water use; e) a downstream State may not construct or let impounding works be constructed which could cause retro-flooding; f) the same rules apply in the case of lakes from which streams discharge into other States; and g) the constitution of joint permanent commissions is recommended to the States concerned in order to decide, or at least, recommend on planned works or modifications to existing works likely to have a significant impact on that part of the watercourse located within the territory of another State.

In other words, this Recommendation enounces the no-harm rule and the obligation of prior notification, purports to prevent water pollution and floods, establishes a priority for navigational uses and invites States to establish joint project planning institutions.

2. The League of Nations

The first attempt at the codification of international law in the field of shared water resources was made by the League of Nations in proposing its Convention and Statute on the Regime of Navigable Waterways of International Concern for signature by its Member States in Barcelona on 20 April 1921.¹²

The Statute defines as navigable waterways of international concern “all portions of a waterway being naturally navigable from or to the sea and which separates or crosses different States, as well as all portions of a waterway being naturally navigable from or to the sea which links to the sea such a naturally navigable waterway”¹³ and establishes the freedom of navigation on such waterways for the riparian States.¹⁴

Navigable tributaries have the status of separate waterways and artificial waterways are assimilated to navigable tributaries if so designated by the riparian State or States concerned and are assimilated to navigable waterways of international concern.¹⁵

Subject to higher interests such as the maintenance of the natural flow, irrigation or hydro-electric uses or the construction of more efficient alternative waterways, the riparian States are under an obligation to maintain and, subject to financial arrangements among the riparian States concerned, to improve the navigability of waterways of international concern within their territory.¹⁶

The riparian States are invited to establish by bilateral or multilateral agreement joint permanent commissions to jointly administer navigation on waterways of international concern and, in particular, to draw up navigation regulations, to ensure the exchange of information between their member States, to propose waterworks and to collect navigation fees and charges.¹⁷

Non-riparian States may be invited to join such joint permanent commissions.¹⁸

This Convention and its Statute was ratified, adhered or acceded to by only twenty-one States, mainly the European powers for themselves and for their colonies and possessions. Included under the ratification by the British Empire, India subsequently denounced both the Convention and its Statute.¹⁹

A second attempt at the codification of international law in the field of shared water resources was made by the League of Nations in proposing its Convention relating to the Development of Hydropower of Interest to Several States for signature by its Member States in Geneva on 9 December 1923.²⁰

Having reaffirmed the sovereign rights of States to proceed with hydropower developments within their national territory,²¹ the Convention establishes the rule that hydropower development projects of interest to several States require an international study by agreement taking into account all existing and projected works in order to plan the best possible development for all contracting States.²² In particular, where a planned hydropower development is likely to have harmful effects in the territory of another State, the State planning such a development is under an obligation to negotiate with that other State.²³

Of particular interest is the provision according to which the technical solutions adopted in the agreement are to take into consideration, within the framework of the national legislation of each contracting State concerned, only those elements which would legitimately be taken into account in the case of hydropower developments of interest to one single State, setting aside all considerations relating to political frontiers.²⁴

Also worth noting is the provision subjecting hydropower development to the protection of the interests of navigation on waterways of international concern.²⁵

Unlike the Barcelona Convention, the Geneva Convention does not call for the establishment of joint commissions or other coordinating institutions and, in case of dispute, merely refers the contracting States to the dispute settlement procedures of the League of Nations.²⁶ Provision is however made for the agreement to provide a) for the construction, maintenance and operation of waterworks, b) for equitable financial contributions by contracting States in respect of charges, risks, damages and the apportionment of maintenance costs, c) for the settlement of financial cooperation matters, d) for technical control and the surveillance of public security, e) for the designation of protected areas, f) for the issuance of the water regulations, g) for the protection of third-party rights, and h) for the setting-up of procedures for the settlement of differences arising from the interpretation and implementation of the agreement.²⁷

In this case as well, only eleven States have ratified, adhered or acceded to the Convention.²⁸

3. The International Conference of American States

At its Seventh Conference in Montevideo, Uruguay, the International Conference of American States issued a Declaration known as the Declaration of Montevideo of 24 December 1933.²⁹

This Declaration relates to the use of the hydropower of international waters for agricultural and industrial purposes. Agricultural and industrial uses of the waters of international rivers involving more than one State require studies which, if any one of the territorial States concerned is not willing or interested, may be conducted by the other States.³⁰

The Declaration recognizes the exclusive right of States to exploit the waters of international rivers for agricultural and industrial purposes within their national territory. Any planned development on the bank of one State may however not endanger or cause harm to the bank of another State.³¹ Where a damage has been caused, the States concerned are under an obligation to enter into an agreement providing for the curing of the damage and for adequate compensation.³²

The remaining provisions of the Declaration establish the priority of navigation over agricultural and industrial uses, calls for States wishing to implement waterworks likely to have an impact on the territory of other States to duly notify such States and, in the event such other States have comments or objections, for the States concerned to establish a Mixed Technical Commission to jointly decide on such works.³³ Failing agreement, the States concerned are called upon to settle their dispute in accordance with the conciliation and arbitration procedure established by the Convention of the Hague on the peaceful settlement of international disputes.³⁴

4. The United Nations Economic Commission for Europe

In May 1954, the United Nations Economic Commission for Europe (ECE) adopted a Recommendation known as Recommendation No. 4 of the Committee on Hydro-Electric Power aimed at favouring the hydro-electric development of successive rivers in Europe.³⁵

Accordingly, a State planning to establish on successive rivers hydro-electric installations likely to affect the territory of upstream or downstream States is required to inform such States and to supply them with appropriate documentation to enable them to value the planned installations and comment thereon or object thereto.³⁶

Rather than calling for a general convention, the ECE recommends that the States concerned negotiate and enter into a specific agreement aiming at the best economic development of the river system.³⁷

Although the expression “river system” is not defined, it is the first time that the concept of the mainstream-cum-tributaries unit is alluded to.

This Recommendation was followed in October 1957 by another Recommendation of the ECE known as Recommendation No. 2 of the Committee on Hydro-Electric Power aimed at favouring the hydro-electrical development of contiguous rivers and lakes.³⁸

In its preamble, this Recommendation draws the attention of States to the opportunity of introducing in their agreements relating to the development of hydro-electric installations provisions to the effect that a) the States concerned should consider any such installations as if they were constructed on their own territory irrespective of the effective location thereof, b) to exonerate the required construction materials from customs, import, export and other local taxes, and c) to grant entry/exit and work permits to the personnel engaged in the construction and operation of such works.³⁹

This Recommendation is comprised of three specific points dealing with (i) the construction, (ii) the operation of the installations and (iii) with the legal status of the common concessionaire.

As regards construction, the States concerned are invited to establish a Mixed Commission to select the best site on purely technical considerations and irrespective of the frontier line. Such a Commission should also control the equitable and rational apportionment of the materials and work among the States concerned.⁴⁰

The operation of the installations should be such that power allocated to one State but generated within the territory of another State be exempted from any and all taxes, levies and charges to the effect that such power may be transported freely as if it had been produced within the territory of that same State.⁴¹

Finally, the common concessionaire company should be exonerated by the States concerned of all double taxation, that double taxation agreements should be entered into by the States concerned if not yet in existence, and that their prevailing exchange control regulations be lifted in respect of their respective construction and operational personnel.⁴²

5. The Inter-American Bar Association

At its Tenth Conference in Buenos Aires, Argentina, in 1957, the Inter-American Bar Association issued a five point Declaration known as the Declaration of Buenos Aires.⁴³

In its first point, this Declaration purports to state the “general principles of international law in respect of waterways, river systems or lakes (non-maritime waters) crossing or separating the territory of two or more States”, such waters being defined as an “international river system”.

Such principles are stated to include i) the right for States to use the waters of that part of an international river systems within their territory subject to the concurrent right of the other States concerned; ii) based on the principle of equality of rights, the obligation for such States to recognize the rights of the other States concerned to share in the benefits of the system, to maintain their existing beneficial uses, to share in the benefits of any future development subject to the respective needs of the other States and, failing amicable settlement, to refer any dispute to an international court or arbitral commission; iii) failing

a prior agreement to this effect or an international court or arbitral commission decision to the contrary, the obligation to refrain from altering the regime of those waters in a way susceptible of causing harm to the beneficial uses by another State or States; and iv) this without prejudice to the exclusive right of States to enjoy beneficial uses of the system within their territory.⁴⁴

The second point provides for the establishment of a Permanent Committee of the Inter-American Bar Association to examine more in depth the legal principles governing the utilization of international watercourses.⁴⁵

The third point enumerates the items to be further examined by this Permanent Committee, namely i) the possible rights of non-riparian States to international river systems; ii) the question of the indemnification and of the prevention of illegal acts of utilization of international river systems likely to cause irreparable damages and to threaten the peace; iii) the sharing of development, operation and maintenance costs within an international river system; iv) pollution and flood control; v) the priorities in the utilization of the waters of international river systems; vi) the different interpretations of the ownership and use rights within international river systems; vii) the possible systematization of existing implementing regulations for the most beneficial use of the waters of international river systems; viii) the possible differences of application of the general principles of international law to contiguous and successive international river systems; and ix) the establishment of commissions or international or regional tribunals to facilitate the optimal use of the waters and to settle disputes relating to the regime of international river systems.⁴⁶

The fourth point calls for a study of worldwide precedents relating to the utilization of international waters.⁴⁷

Finally, the fifth point calls for States having interests in international river systems to collect and exchange physical and economic information required for the planning and implementation of the rational utilization of international waters.⁴⁸

The specific interest of this Declaration resides in the fact that, for the first time, a legal definition is given to shared international water resources and that such principles as State sovereignty, equality of rights and reciprocity are clearly stated along with the obligation to exchange information, to negotiate and conclude agreement, to establish joint planning and control institutions and to prevent and settle international water disputes, not to mention the concept of equitable sharing in the beneficial use of the waters of international river systems.

6. The International Law Association

By establishing its International Rivers Committee in 1954,⁴⁹ the International Law Association (ILA) embarked in the first ever systematic and comprehensive survey of the principles of international law applicable to shared water resources. It has produced a number of Resolutions over the years which have culminated in the formulation and adoption by the ILA of the now famous Helsinki Rules in 1966.

Comprised of a number of independent scholars and specialists of international water resources law with a worldwide representation, the International Rivers Committee of ILA has researched those principles of international law present in water resources treaties and conventions as well as in the prior doctrine with a view to underlining those which may be considered as general principles of international law (*de lege lata*) and those of international law 'in-the-making' (*de lege ferenda*) or 'soft law' applicable to shared water resources, their multiple beneficial uses, harmful effects and quality protection requirements, not to mention joint international water resources institutions and procedures for the prevention and settlement of water disputes. It may this be stated that, in this sense, the work of the ILA up to 1966 constitutes the paradigm of doctrinal thought until then.

A first 'Statement of Principles' was presented by the International Rivers Committee before the 1956 ILA Conference in Dubrovnik;⁵⁰ it was followed by an extensive report on 'Principles of Law and Recommendations' presented before the 1958 ILA Conference in New York.⁵¹ If the Dubrovnik Statement of Principles referred to the 'River Basin' and to the principle of 'equitable apportionment', the New York report was determinant in first defining the 'Drainage Basin' as the object of international water resources law⁵² and in relinquishing the principle of equitable apportionment in favour of the now prevailing principle of 'equitable utilization'.⁵³

Additional principles and rules were presented to subsequent ILA Conferences on such issues as procedural matters and pollution (1960 Hamburg),⁵⁴ the settlement of disputes (Brussels 1962)⁵⁵ and on navigation and floating (Tokyo 1964).⁵⁶

Having completed its mandate, the International Rivers Committee presented its final report to the 1966 ILA Conference in Helsinki which adopted the proposed principles and rules, known as the 'Helsinki Rules', comprising definitions and articles on equitable utilization, pollution, navigation, floating and a procedure for the prevention and settlement of disputes together with, in an annex, rules for the constitution of a conciliation commission for the settlement of disputes.⁵⁷

At that Conference, the Executive Committee of ILA also adopted the recommendation of the International Rivers Committee that further work was required on the subject and appointed a new 'International Water Resources Committee' (the 'WRC') for that purpose.⁵⁸

Since 1966, the WRC, comprised originally of the same members having served on the International River Committee, has produced a series of additional and supplemental principles and rules on flood control and on marine pollution of continental origin (1972 New York),⁵⁹ on navigation (1974 New Delhi),⁶⁰ on water resources and installations in times of armed conflict and on the administration of international water resources (1976 Madrid),⁶¹ on the regulation of the flow of water (1978 Manila),⁶² on the relationship of international water resources with other natural resources and the environment and on the regulation of the flow of water (1980 Belgrade),⁶³ on water pollution (1982 Montreal),⁶⁴ as well as complementary rules to the Helsinki Rules addressing substantial injury to co-basin States, the installation of works or the use of water resources in the territory of co-basin States and notification procedures, and a set of rules on international groundwater (1986 Seoul).⁶⁵

With the presentation of its report to the Seoul Conference, the WRC recommended,⁶⁶ and the ILA Executive Committee approved in November 1990, that it be re-established in order to further study a number of remaining significant problems of international water resources law. Since then, the WRC has presented to the ensuing ILA Conferences two reports containing draft principles and rules on cross-media pollution (1994 Buenos Aires),⁶⁷ on private law remedies for transboundary damage in international watercourses, and supplemental rules on pollution (1996 Helsinki).⁶⁸ In addition, the ILA adopted a resolution of the WRC concerning its participation in the consideration of the 1994 Draft Articles on the Law of the Non-Navigational Uses of International Watercourses prepared by the International Law Commission of the United Nations (ILC).⁶⁹

As had been proposed in January 1996 already,⁷⁰ the WRC has since been working on a consolidation of the Helsinki Rules and subsequent rules which culminated in the so-called 'Campione Consolidation of the ILA Rules on International Water Resources (1966-1999)' which were presented to the Sixty-Ninth Conference of the ILA in London in July 2000 but which was not approved. As a matter of fact, since 1997 the membership of the WRC changed as a majority of environmentalists issuing from the defunct ILA Committee on the Environment replaced retired and deceased former members of the WRC and undertook to produce a revision of the Helsinki Rules even before the attempted consolidation is approved.

Although, most regrettably, the consolidated rules may therefore never be approved in their final form, it nevertheless remains that the core of the Helsinki Rules, namely the definition of the Drainage Basin and the principle of Equitable Utilization, can be said to have been widely adopted by the international community.

7. The Council of Europe

Although not the produce of scholars of international water resources law, the European Water Charter adopted by the Council of Europe in 1967⁷¹ contains a number of fundamental principles which should underlay international water resources treaties and conventions.

Such principles enounce in particular that water is life (I), water resources are not infinite (II), water quality must be preserved (IV), existing water uses should not compromise the quality of water for future uses (V), adequate water resources management requires a plan adopted by the competent authorities (VIII), water constitutes a 'common patrimonium' which everyone is under an obligation to save and use carefully (X), water resources should be apprehended within the framework of their natural basin rather than within that of administrative or political boundaries (XI) and, as water resources know of no boundaries, they require international cooperation (XII).

8. The Afro-Asian Legal Consultative Committee

The Afro-Asian Legal Consultative Committee adopted a set of Proposals on General Rules of the Law of International Rivers in 1973.⁷² Notwithstanding its title, these Proposals do enounce rules governing the utilization of the waters of an international

drainage basin in the absence of the contrary provisions of a convention, agreement or custom binding on the basin States.

Largely repeating the general provisions of the Helsinki Rules, the said Proposals depart however therefrom by restating the principle of good neighbourliness and the prohibition a basin State to undertake works or utilizations likely to have detrimental effects in another basin State (Proposal IV), and by establishing a priority of water utilization for plant, animal and human consumption (Proposal V).

In addition, these Proposals contain a good definition of water pollution (Proposal VIII. 2) and rightly re-instate the principle of State responsibility (Proposal IX).

9. The Intergovernmental Working Group of Experts on Natural Resources Shared by One or More States

Organized by the United Nations Environment Programme (UNEP) in Nairobi in 1978, this intergovernmental expert group produced Draft Rules of Conduct in the Field of the Environment for the Orientation of States with Respect to the Conservation and Harmonious Utilization of Natural Resources Shared by One or More States.⁷³ Although addressing the environment at large, Principle 3.2 stipulates that the expression ‘in the field of the environment’ as used in the Draft Rules applies to the ‘harmonious conservation and utilization of shared natural resources’ which, therefore, include water resources.

Of particular interest is the statement in Principle 1 that the cooperation sought between States sharing international natural resources is to be exercised ‘on a footing of equality and taking into account the sovereignty, the rights and the interests of the States concerned’.

Conversely, besides the usual recommendations on cooperation, the exchange of information, the entering into appropriate agreements, the establishment of joint development institutions, the formulation of environmental impact statements and the submission to the prevailing rules on the prevention and settlement of disputes, Principle 12 correctly re-states the principle of State responsibility for acts causing damages in the territory of other States.

10. The International Water Resources Association

Based on the need to resolve problems of underground water use in the US-Mexico border area, a US-Mexico Transboundary Resources Study Group was convened in Mexico in 1977 to prepare ‘black letter’ rules in the form of a Draft Treaty that would serve as a model for States wishing to enter into shared water resources agreements.⁷⁴

A first draft was prepared in 1985 and submitted for discussion at an international conference of experienced practitioners and scientists convened in Bellagio, Italy, in the spring of 1987. The final Draft Treaty, known as the Bellagio Draft, was then presented to

the Sixth Congress of the International Water Resources Association in Ottawa in May 1988.⁷⁵

The Bellagio Draft Treaty constitutes a most interesting attempt at making a specific practical experience available to the international community in a ready-made treaty format. Considering that its two original authors have been active members of the ILA Rivers Committee which produced the Helsinki Rules, this effort could have been expected to yield most rewarding results.

Unfortunately, if the Draft Treaty can no doubt serve as a useful tool in the specific field of transboundary underground waters, and although earnest attempts have been made in the commentary to try and make it applicable to both surface and underground waters, this effort, as stated by the authors themselves, will have fallen short of expectations due to the same situation as was later to be faced by the ILC Draft Convention: after it was submitted to a large political debate, the original draft suffered a complete revision. As the authors of the Draft Treaty themselves report: 'Some of the substantive changes made do not meet fully the expectations and suggestions of our several contributors and advisers. Remaining inaccuracies and errors of judgment can be attributed only to the final revisers'.⁷⁶

The Bellagio Draft Treaty has nevertheless the merit of addressing such matters as Enforcement and Oversight Responsibilities (Article IV), Comprehensive Management Plans (Article VII), Planned Depletion (Article X) and Inquiry in the Public Interest (XIII) which constitute appreciable novelties.

Notwithstanding the terminology however, all these arrangements have but reduced the principle of equitable utilization to fall back on an effective quantitative apportionment of the waters shared among their contracting basin States.

11. The International Law Commission of the United Nations

Consistent with the predicament of the Statute of the International Court of Justice according to which the doctrine constitutes a subsidiary source of international law, the International Law Commission of the United Nations (ILC) in 1994 felt the need to prepare a Draft Convention intended to be submitted to Member Nations for ratification.⁷⁷ This fact in itself evidences the ILC's implied position that, in the absence of a general convention, or of a great number of specific treaties evidencing a rule of customary law, there is no international law.⁷⁸

It may be that the initiative of the ILC was to try and attract support to the recognition of the Helsinki Rules as, in fact, the contents of the Convention adopted on 11 April 1997 add little or nothing thereto.⁷⁹ Unfortunately, by having gone through the international political debate, the outcome is most disappointing in that the terminology carefully carved out, and the logical sequence engineered, by the ILA in drafting the Helsinki Rules have been totally lost to the effect that, notwithstanding the large representation of States in the various ILC sessions, very few ratifications, if any, should be expected.⁸⁰

III. EQUITABLE UTILIZATION

If the Helsinki Rules, no matter how imperfect, can be said to effectively state what the principles and rules of international law in the field of share water resources do provide and/or should provide, their far-reaching implications are not always fully understood.

1. The Drainage Basin

Of paramount importance is the definition of the Drainage Basin which, on the one hand, allows water to fall within the realm of a 'legal thing', a status it never had heretofore and, on the other hand, dispenses fully with political and administrative boundaries within its natural limits. And if there will always be upstream and downstream States geographically speaking, it can be considered that, as the Minister of Irrigation of Egypt stated before the ESCWA Expert Group Meeting on Legal Aspects of the Management of Shared Water Resources in Sharm El-Sheikh, Egypt, in June 2000 : "when looking at that common terminus [of the Drainage Basin], we are all upstream riparians"⁸¹.

Another fundamental departure from historical principles is the fact that, apprehended as an integrated whole, an international drainage basin constitutes a common territory in respect of which there is no longer room for such claims of absolute territorial sovereignty or absolute territorial integrity. Within a drainage basin, each Basin State enjoys full sovereignty over its national portion of the Basin and assumes full liability for acts causing damages within the national portions of the Basin located within the other Basin States. Hence the obligation to notify, negotiate and come to agreement.⁸²

2. Equitable Utilization

The other essential feature of the Helsinki Rules is the principle of Equitable Utilization sometimes referred to as 'reasonable and equitable utilization'. Assuming that what is equitable is by definition reasonable, the simple expression 'equitable utilization' is therefore appropriate. It is further to be underlined that the principle of equitable utilization negates fully the former principle of equitable apportionment, let alone that of prior appropriation. Indeed, if 'apportionment' implies a 'quantitative' share, 'utilization' connotes a 'qualitative' share determined by the various factors enumerated in Article V of the Helsinki Rules and which have to be considered in respect of each particular utilization and by reference to past, current and future uses within a Drainage Basin.

All additional rules governing beneficial uses, harmful effects, water quality protection, the international administration and the procedure for the prevention and settlement of water disputes cover no more than matters of implementation of the concept of the Drainage Basin and of the principle of Equitable Utilization.

In promoting such concepts and principles and in setting-up mechanisms for the administration of international water resources and for the settlement of disputes, the Helsinki Rules have however omitted to institutionalize the necessary instrument to convert the still subjective principle of 'equitable utilization' into an objective term of reference for integrated water resources management: 'the integrated water resources management plan'.

3. The International Drainage Basin Plan

There is no need here to elaborate on the planning function and its intrinsic technical, economic and social parameters which have been amply developed by the water resources engineer, economist and planner. What needs to be stressed, however, is that international water resources management will always remain a highly political affair in the hands of sovereign States and that the only way to limit political intolerance in water affairs is by obliging States to make their decisions based on the evidence of bare, technical facts and of prevailing economic realities and social imperatives.⁸³

As a matter of fact, the same holds true at the national level when considering conflicts of power within the government administration at the central, regional and local levels. Water resources should be managed as a 'family affair' in which the government units concerned should act as a 'good family father' and with the active participation of the water users and of their associations.

It is noteworthy as well that, if the definition of the Drainage Basin encompasses the whole of the surface watershed and underground waters flowing into a common terminus, it similarly applies to each tributary of a given mainstream. If planning by drainage basin is needed and if basin plans require integration into the national water resources management plan, development will generally initiate at the level of tributaries so that the basin plan will in fact consist essentially of the aggregate of those sub-basin plans engineered for tributaries, which plans will then leave little or nothing to add beyond river training works in terms of mainstream management.

Each drainage basin and sub-basin therefore needs one 'banker' to manage its water resources. And like the banker, the water resources manager has to establish the balance sheet of the available water resources, i.e., the quantitative and qualitative inventory of existing water resources, the quantitative and qualitative inventory of existing water uses and the quantitative and qualitative inventory of the water demand in order to compile the balance, which may be positive or negative, of available waters for an equitable allocation, not of the waters themselves, but of corresponding water use rights.

Of paramount importance, however, it is to be recalled that a water resources plan is never complete; it is a dynamic, ongoing technical exercise requiring continued adjustment in accordance with changing hydrologic, economic and social conditions.

Notes

1. As a patent example, it can be shown that notwithstanding World protests and several U.N. Resolutions, Israel acted unilaterally to seize the headwaters of the Jordan in 1967, a situation which still prevails today. See: **Water Disputes in the Jordan Basin Region and their Role in the Resolution of the Arab-Israeli Conflict**, Environment and Conflicts Project (ENCOP) Occasional Paper No. 13, by Stephan Libiszewski, Center for Security Studies and Conflict Research, Swiss Federal Institute of Technology, Zürich, Switzerland and Swiss Peace Foundation, Bern, Switzerland, August 1995, 108 pp. See also: **Application of International Water Law to Transboundary Groundwater Resources, and the Slovak-Hungarian Dispute over Gabčíkovo-Nagymaros**, by Gabriel Ekstein, 19 Suffolk Transnat'l L.R. 67 (1995), which demonstrates that, still today and notwithstanding general expectations, conventional law remains for the International Court of Justice the quasi sole source of international law.
2. For a doctrinal exposition of the 1966 Helsinki Rules, see: **The Law of International Drainage Basins**, edited by A.H. Garretson, R.D. Hayton & C.J. Olmstead, published for the Institute of International Law, New York University School of Law, Oceana Publications, Inc., Dobbs Ferry, New York, 1967, 916 pp.; and for the history and text of the 1966 and subsequent Rules, with commentary, see: **International Law Association Rules on International Water Resources**, edited by Slavko Bogdanovic, Yugoslav Association for Water Law, Yugoslav Branch of the International Law Association in Novi Sad, and the European Centre for Peace and Development (ECPD) in Belgrade, Prometej, Novi Sad, Yugoslavia, 1999, a bilingual publication, 277 pp.
3. **Transboundary Groundwaters: The Bellagio Draft Treaty**, by Robert D. Hayton and Albert E. Utton, International Transboundary Resources Center, School of Law, University of New Mexico, Albuquerque, NM, USA, November 1992, a bilingual publication, 59 pp. [29, Nat. Res. J., Summer 1989, p.663-722].
4. **Convention on the Law of the Non-Navigational Uses of International Watercourses**, as drafted by the International Law Commission of the United Nations (ILC), text in: United Nations (1997b) Report of the Sixth Committee convening as the Working Group of the Whole (A/51/869), 11 April 1997.
5. For a comprehensive study of the history of water resources law, see: **Principles of Water Law and Administration, National and International**, by Dante A. Caponera, A.A. Balkema, Rotterdam, Brookfield, 1992, 260 pp.
6. Text in : 1, NORADOUGHIAN, *Recueil d'actes internationaux de l'Empire Ottoman*, (1897-1903), 83.
7. Text in : *Annuaire de l'Institut de Droit International*, 1887, 535.
8. Ibidem, 1911, Vol. 24, 365.

9. Ibidem, 1934, 713-719.
10. Ibidem, 1961, Vol. 49, II, 381-384.
11. Ibidem, 1979, Vol 58, I, 197.
12. Text in : VII, LNTS, 36.
13. Ibidem, Article 1. (1).
14. Ibidem, Article 3.
15. Ibidem, Article 2.
16. Ibidem, Article 10 (3).
17. Ibidem, Article 14.
18. Ibidem.
19. **Legislative Texts and Treaty Provisions Concerning the Utilization of International Rivers for Other Purposes than Navigation**, United Nations Document ST/LEG/SER.B/17, p. 89, Note ¹.
20. Text in : XXXVI, LNTS, 76.
21. Ibidem, Article 1.
22. Ibidem, Article 2.
23. Ibidem, Article 4.
24. Ibidem, Article 5.
25. Ibidem, Article 8.
26. Ibidem, Article 12.
27. Ibidem, Article 6.
28. **Legislative Texts and Treaty Provisions**, op. cit., ST/LEG/SER.B/17, p. 91, Note ¹.
29. Text in : **Seventh International Conference of American States**, Montevideo, 1933, Plenary Sessions, Minutes and Antecedents, p. 114.
30. Ibidem, Item 1.
31. Ibidem, Item 2.

32. Ibidem, Item 3.
33. Ibidem, Item 8.
34. Ibidem, Item 9.
35. Text in : **Legal Problems Relating the Non-Navigational Uses of International Watercourses**, United Nations Document A/CN.4/274, Vol. II, 25 March 1971, p. 228.
36. Ibidem, first Recommendation.
37. Ibidem, second Recommendation.
38. Text in : **Legal Problems Relating the Non-Navigational Uses of International Watercourses**, op. cit., p. 233.
39. Ibidem, Preamble.
40. Ibidem, Recommendation, 1.
41. Ibidem, Recommendation, 2.
42. Ibidem, Recommendation, 3.
43. Text in : 10, **Inter-American Bar Association Proceedings**, 82, 1957.
44. Ibidem, I.
45. Ibidem, II.
46. Ibidem, III.
47. Ibidem, IV.
48. Ibidem, V.
49. **International Law Association, Report of the Forty-Sixth Conference**, Edinburgh, 1954, p. vii.
50. **International Law Association, Report of the Forty-Seventh Conference**, Dubrovnik, 1956, pp. 244-248.
51. **International Law Association, Report of the Forty-Eighth Conference**, New York, 1958, p. 99.
52. Ibidem, 1. Points of unanimous agreement, § 4.

53. Ibidem, 2. Recognized Principles of International Law, § b.
54. **International Law Association, Report of the Forty-Ninth Conference**, Hamburg, 1960.
55. **International Law Association, Report of the Fiftieth Conference**, Brussels, 1962.
56. **International Law Association, Report of the Fifty-First Conference**, Tokyo, 1964.
57. **International Law Association, Report of the Fifty-Second Conference**, Helsinki, 1966, pp. 484-532.
58. Ibidem, xi, p. 476.
59. **International Law Association, Report of the Fifty-Fifth Conference**, New York, 1972.
60. **International Law Association, Report of the Fifty-Sixth Conference**, New Delhi, 1974.
61. **International Law Association, Report of the Fifty-Seventh Conference**, Madrid, 1976.
62. **International Law Association, Report of the Fifty-Eighth Conference**, Manila, 1978.
63. **International Law Association, Report of the Fifty-Ninth Conference**, Belgrade, 1980.
64. **International Law Association, Report of the Sixtieth Conference**, Montreal, 1982.
65. **International Law Association, Report of the Sixty-Second Conference**, Seoul, 1986.
66. Ibidem, pp. 2236-237.
67. **International Law Association, Report of the Sixty-Sixth Conference**, Buenos Aires, 1994.
68. **International Law Association, Report of the Sixty-Seventh Conference**, Helsinki, 1996.
69. See: **International Law Association Rules on International Water Resources**, op. cit., p. 65.

70. **International Law Association, Report of the Sixty-Second Conference**, Seoul, 1986. p. 237.
71. Text in : **Legal Problems Relating the Non-Navigational Uses of International Watercourses**, op. cit., p. 275.
72. Text in : **Legal Problems Relating the Non-Navigational Uses of International Watercourses**, op. cit., p. 259.
73. Text in : **United Nations Environment Programme (UNEP)**, Document UNEP/IG.12/2, p. 9 & ff.
74. Text in : **Transboundary Groundwaters: The Bellagio Draft Treaty**, by Robert D. Hayton and Albert E. Utton, International Transboundary Resources Center, School of Law, University of New Mexico, Albuquerque, NM, USA, November 1992, a bilingual publication, 59 pp. [29, Nat. Res. J., Summer 1989, p.663-722].
75. Ibidem, Foreword, pp. 665-666.
76. Ibidem, p. 666.
77. **Convention on the Law of the Non-Navigational Uses of International Watercourses**, as drafted by the International Law Commission of the United Nations (ILC), text in: United Nations (1997b) Report of the Sixth Committee convening as the Working Group of the Whole (A/51/869), 11 April 1997.
78. *A contrario*, see: **The completion of the preparatory work for the UN Convention on the Law of International Watercourses**, by Attila Tanzi, in: *Natural Resources Forum*, Vol. 21, No. 4, 1997, pp. 239-245.
79. In fact: ‘The ILC draft articles deal only with groundwater that is part of a river system. Groundwater not associated with rivers is not included.’, quoted from **Transboundary Water Resources in the ESCWA Region – Utilization, Management and Cooperation**, E/ESCWA/ENR/1997/7, 10 September 1997, United Nations, New York, 1998, p. 66.
80. See: **Transboundary Groundwaters: The Bellagio Draft Treaty**, op. cit., Foreword, p. 666,
81. See : **Transboundary Drainage Basins – A New Vision**, by Bernard J. Wohlwend, Consultant, International Water Resources Association, Expert Consultation on ‘Policy and Institutions for Integrated Water Resources Management’, Salvador de Bahia, Brazil, 3-6 September 2000, 33 pp., Note 5.
82. *‘Although the theory of “equitable share” overcomes the two extreme doctrines of absolute territorial sovereignty and integrity, it does not provide a patent remedy to all water disputes. The mentioned factors to be considered in defining ‘equity’ remain*

in part conflicting, and the agreements do not state relative weights or priorities among them.’, quoted from **Water Disputes in the Jordan Basin Region and their Role in the Resolution of the Arab-Israeli Conflict**, op. cit., p. 70.

83. In this sense: *‘International law cannot decide the allocation of waters of the Euphrates and Tigris. Nonetheless, law provides a basis for negotiation. Equitable utilization is inherently flexible. It will not produce definitive solutions and allocations, but will serve as a foundation for negotiation and cooperation. An international watercourse agreement should lay down rights and obligations of riparians more precisely. In addition to the agreement, a joint watercourse institution is necessary to realize cooperation among watercourse States. To reach such an agreement, inventory studies of water and land resources of all the parties must be completed. This will enable them to base their needs on objective criteria, rather than subjective political ambitions.’*, quoted from **The Euphrates-Tigris basin: An overview and opportunities for cooperation under international law**, by Ibrahim Kaya, ARIDLANDS No. 44, Fall/Winter 1998, Conflict Resolution and Transboundary Water Resources, p.8.

Selected Annotated Bibliography

1. **Rivers in International Law**, by F.J., Berber, Stevens-Oceania, London & New York, 1959.

A pre-1966 Helsinki Rules review of international law applicable to international rivers. Prof. Berber has been one of the leading scholars who developed the Helsinki Rules. The ILA Water Resources Committee is in particular indebted to him for his contribution of the Rules on Flood Control and on the Protection of Water Resources and Water Installations in Times of Armed Conflicts.

2. **The Law of International Drainage Basins**, edited by A.H: Garretson, R.D. Hayton & C.J. Olmstaed, published for the Institute of International Law, New York University School of Law, Oceana Publications, Inc., Dobbs Ferry, New York, 1967, 916 pp.

A specialized doctrinal treaties on international law as applicable to the drainage basin with case studies on the Columbia, Nile, Plata, Indus and Colorado Drainage Basins.

3. **International Groundwater Law**, by Ludwik A. Teclaff & Albert E. Utton, Oceana Publications Inc., London, Rome, New York, 1981, 490 pp.

A compendium of doctrinal articles addressing the origin and development of domestic and international law to the management of underground water resources contributed by such leading scholars, among others, as Dante A. Caponera, Robert Emmet Clark, Robert D. Hayton, Ludwik A. Teclaff and Albert E. Utton.

4. **Systematic Index of International Water Resources Treaties, Declarations, Acts and Cases By Basin**, Vol. I & II, Legislative Studies Nos. 15 & 34, FAO, Rome, Italy, 1978, 481 pp., and 1984, 332 pp.

A chronological compilation of some 3700 legal instruments governing international water resources from the early IXth century until 1983, with Tables classifying water resources by country and countries by basin.

For subsequent treaties, see <http://www.fao.org> selecting “Legal Office” - “FAOLEX” - “International Treaties”, FAO’s electronic legislative data base.

5. Other FAO Legislative Studies related to water resources law subjects include **A Legal and Institutional Framework for Natural Resources Management** (No. 9), **Legal and Institutional Responses to Growing Water Demand** (No. 14), **The Law of International Water Resources** (No. 23), **International Groundwater Resources Law** (No. 40), **The Freshwater-Maritime Interface: Legal and Institutional Aspects** (No. 46), and **Treaties Concerning the Non-Navigational Uses of International Watercourses – Europe** (No. 50) published between 1975 and 1993.

A set of studies contributed by such authors, among others, as Julio A. Barberis, Guillermo J. Cano, Dante A. Caponera, and Ludwik Teclaff.

6. **Principles of Water Law and Administration, National and International**, by Dante A. Caponera, A.A. Balkema, Rotterdam, Brookfield, 1992, 260 pp.

The bible of the national and international water lawyer. A comprehensive treaties on water law, including a historical and comparative law review of the major customary and codified legal and institutional systems of the World as relate to water resources, and proposing a methodology for the drafting of both national legislation and international treaties together with their respective institutional frameworks and water rights administration procedures.

*A French translation by Bernard J. Wohlwend has been published under the title : **Les Principes du Droit et de l’Administration des Eaux, Droit interne et Droit international**, par Dante A. Caponera, Editions Johanet, Paris, 2000, 349 pp.*

7. **Transboundary Groundwaters : The Bellagio Draft Treaty**, by Robert D. Hayton and Albert E. Utton, International Transboundary Resources Center, School of Law, University of New Mexico, Albuquerque, NM, USA, November 1992, a bilingual publication, 59 pp. [29, Nat. Res. J., Summer 1989, p.663-722].

Originally conceived by two eminent members of the ILA Water Resources Committee, and as subsequently revised by different political fora, the Draft Treaty presents the reader with an extensively annotated international framework agreement for the management of international aquifers based on the recent principles of international water law as applied to the US-Mexico border region.

8. **Water Disputes in the Jordan Basin Region and their Role in the Resolution of the Arab-Israeli Conflict**, Environment and Conflicts Project (ENCOP) Occasional Paper No. 13, by Stephan Libiszewski, Center for Security Studies and Conflict Research, Swiss Federal Institute of Technology, Zürich, Switzerland and Swiss Peace Foundation, Bern, Switzerland, August 1995, 108 pp., available at: <http://www.fsk.ethz.ch/fsk/encop/encop.html>

A comprehensive analysis of the water resources situation in the Middle East, including both surface and underground, and of the role of water in the historical conflicts within the Region using the Jordan Basin as a case study, together with a detailed review of the peace negotiations since the early 1990s and until the 1994 Jordano-Israeli Peace Treaty. Carries a plea for the integration of diplomacy and water management. Contains a very rich specialized bibliography.

9. **Application of International Water Law to Transboundary Groundwater Resources, and the Slovak-Hungarian Dispute over Gabčíkovo-Nagymaros**, by Gabriel Ekstein, 19 Suffolk Transnat'l L.R. 67 (1995), 44 pp.

A thorough examination of international water law as applicable to the physical nexus between surface and underground waters, and of the Slovak-Hungarian Dispute over Gabčíkovo-Nagymaros as a case study.

Slovakia submitted the dispute to the International Court of Justice in May 1994. In October 1997, the Court pronounced its judgment as follows:

The Court found both states in breach of their legal obligations, as established in the treaty of 1977, which concerned the construction of dam structures in Slovakia and Hungary for the production of electric power, flood control and improvement of navigation on the Danube. As may be recalled, in 1989 Hungary suspended and subsequently abandoned completion of the project alleging that it entailed grave risks to the Hungarian environment and the water supply of Budapest. Slovakia denied these allegations and insisted that Hungary carry out its treaty obligations. In addition, it carried out an alternative project on its territory, whose operation had adverse effects on Hungary's access to Danube waters.

In its judgment, the Court found:

that Hungary was not entitled to suspend and subsequently abandon, in 1989, its part of the works in the dam project, as laid down in the 1977 Treaty between Hungary and Czechoslovakia and related instruments;

that Czechoslovakia was entitled to start, in November 1991, preparation of an alternative provisional solution (called "Variant C"), but not to put that solution into operation in October 1992 as a unilateral measure;

that Hungary's notification of termination of the 1977 Treaty and related instruments on 19 May 1992 did not legally terminate them (and that they are consequently still in force and govern the relationship between the parties);

and that Slovakia, as successor to Czechoslovakia, became party to the 1977 Treaty.

As to the future conduct, the Court stated that:

the two parties must negotiate in good faith as to the achievement of the objectives of the 1977 Treaty, and establish a joint operational regime for the dam in Slovak territory, unless they agree otherwise. It further determined that the parties must compensate each other for the damage caused, and that the accounts for the construction and operations of the works must be settled in accordance with the provisions of the Treaty.

Finally, the Court held that:

in order to reconcile development with environment protection, the parties "should look afresh at the effects on the environment of the operation of the Gabčíkovo power plant. In particular, they must find a satisfactory solution for the volume of water to be released into the old bed of the Danube and into the side-arms of the river." (Court's Web Site: <http://www.icj.cij.org>)

In spite of the numerous questions this case raised in respect of transboundary groundwaters and of a much awaited consideration of the applicability of the Helsinki Rules to the case, the Court simply stated that the amount of water to be released should be reconsidered.

(Courtesy communication of Ms Marcella Nanni, Water Law Expert and Alternate Member for Italy, ILA/WRC, Rome, Italy)

10. **Convention on the Law of the Non-Navigational Uses of International Watercourses**, as drafted by the International Law Commission of the United Nations (ILC), text in: United Nations (1997b) Report of the Sixth Committee convening as the Working Group of the Whole (A/51/869), 11 April 1997.

The Convention was adopted on 21 May 1997 by General Assembly Resolution 51/229 with 106 affirmative votes, 26 abstentions and 3 negative votes (Burundi, China and Turkey), United Nations, 1997a, pp. 7-8. The Convention is subject to ratification.

11. **International Law Association Rules on International Water Resources**, edited by Slavko Bogdanovic, Yugoslav Association for Water Law, Yugoslav Branch of the International Law Association in Novi Sad, and the European Centre for Peace and Development (ECPD) in Belgrade, Prometej, Novi Sad, Yugoslavia, 1999, a bilingual publication, 277 pp.

The most up-to-date and trustful publication of the consolidated 1966 Helsinki Rules and Other Rules on International Water Resources Subsequently Adopted by the ILA up to 1996, together with the original commentary.