Public International Law and Water Quantity Management In a Common Drainage Basin: The Great Lakes

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by Sharon A. Williams*

INTRODUCTION

The Great Lakes Basin is the most important part of the 3,500 mile border that runs between Canada and the United States. It is a fresh water resource shared by Canada and the United States as sovereign nations, and by the component entities of those unions on both sides of the international boundary. It is recognized as an increasingly vital resource due to the water crisis in the western and southwestern states of the United States and western provinces of Canada. The water shortage currently afflicting these areas could cause the "water poor" states of the United States to demand to share in the resources of the "water rich" states of the Great Lakes Basin.

The Great Lakes are the largest single supply of fresh water in the world. As one author illustrates:

The combination of Lakes Superior, Michigan, Huron, Erie and Ontario covers an area of 95,000 square miles, holds enough water to flood the entire United States to a depth of ten feet, and contains ninety-nine percent of the fresh surface water in the United States and twenty percent of the world's supply.

These waters are international: approximately, fifty-nine percent is Canadian. Even though the diversion of some of the water out of the Basin could help solve the drought problems in the west, the Great Lakes States and the Provinces of Ontario and Quebec are concerned by the suggestion of diversion. In the West the problem is water distribution: in the East the problem is water quality.

A critical stage has been reached. A potential confrontation is in the making between the western "water poor" states and the "water

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3 Id.

4 Id. at 938. Dworsky, Francis & Swezey, supra note 1, at 105.

5 These consist of Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, New
rich" states of the Great Lakes region. The "water rich" states are concerned that diversion out of or into the Basin could harm the economic and environmental health of the region. The Great Lakes influence climatic conditions in the midwest producing better agriculture production by providing warmer winters and cooler summers. Changing the levels and flows of the lake could alter this pattern. Diversions also would cause navigational problems and interfere with recreational uses.

A number of issues are pertinent to this potential confrontation. First, whether the U.S. Great Lakes States individually, or as a group, prevent or regulate diversions of Great Lakes water to states outside of the Basin. Second, provided that the Great Lakes States are constitutionally incapable of preventing diversions, would the United States government succumb to political pressure to force diversions upon the "water rich" states. Third, whether the United States government would violate its international obligations to another sovereign state — Canada. The roles can also be reversed. Fourth, provided Canada could divert water from James Bay and feed it into the Great Lakes for consumptive use in the Basin and possible sale to the United States, whether Canada would respond to any U.S. objective.

The third and fourth issues are the most crucial issues. They will be the focal point of any practical debate on this problem. If the United States federal government is held to have the constitutional authority to regulate and divert, the United States Great Lakes States would face grave difficulties absent some political compromise. The prevention of diversions out of the Great Lakes may come only from the fact the waters are international, and from the obligations owed to Canada under the Boundary Waters Treaty of 1909. Similarly, any megaproject proposed by Canada and found to be constitutional under Canadian law could be thwarted by the United States for the same reason.

This paper will not address the constitutional law questions in Canada and the United States; other papers in this symposium will address the constitutional issues concerning the Great Lakes. The aim of this paper is to analyse the following: (1) the impact the Boundary Waters Treaty of 1909 may have on the protection of water quantity in the Great

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6 These are Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, and the Canadian province of Ontario.

7 Tubbs, supra note 2, at 923 note 17 referring to Great Lakes States Seek To Keep Their Water, N.Y. Times, June 13, 1982, at 30, col. 1.

8 Id.

9 This will not be addressed in this paper.

Lakes Basin; (2) the fundamental rules of international law relevant to disputes arising between Canada and the United States concerning diversions out of the Basin in violation of the Boundary Waters Treaty of 1909 or if Canada seeks to divert into the Basin (3) the global international environmental law rules bearing on this issue; and (4) the options available on the international level for the states and provinces located in the Great Lakes Basin.

A. Existing Fundamental Rules Of International Law

Environmental protection appears to be a relatively recent preoccupation of governments and international bodies. However, over the past ten years the topic of environmental protection has occupied an important place in international law. In legal terms, the subject is a novel one; the law is still developing. There are glaring lacunae in the law and the fundamental principles which underlie the law are not easily discerned. Any analysis of international environmental law pertaining to water quality and quantity must begin with existing rules of public international law. Fundamental rules of state sovereignty, territorial integrity, state responsibility and principles of maritime jurisdiction provide the basic framework within which international environmental law has developed.

1. Sovereignty and Territorial Integrity

Sovereignty is sometimes said to be synonymous with independence. Care should be taken, however, as independence is a prerequisite for a claim to statehood, whereas sovereignty is a legal right that flows from it. Sovereignty does not mean that a state is beyond the law, however. Being sovereign, a state has certain rights and corresponding duties. It includes the right to have exclusive control over its territory, its population and its domestic affairs. The corollary is the duty of non-intervention in the affairs of, and territorial sovereignty of, another state. In the context of international environmental law these principles have a decided impact. States will claim that they have the right to allow certain activities to take place on their territory and that other states have no right to interfere. On the other hand a state which is injured by such activities can likewise claim that its sovereignty and territorial integrity have been derogated.

11 S. WILLIAMS & A. DE MESTRAL, INTRODUCTION TO INTERNATIONAL LAW, CHIEFLY AS INTERPRETED AND APPLIED IN CANADA 251 (1979).
12 This principle of maritime jurisdiction will not be addressed in this paper as it relates more to cases of transboundary pollution.
Several questions arise. With the apparent dangers present to environmental well-being, must states be made to limit their sovereignty by accepting as a mandatory obligation, the necessity to take all possible measures to prevent environmental damage? If such has occurred within the territory of another state, must states accept as mandatory the obligation to restore, as far as is possible, the environmental conditions to their former condition? Is there a duty on states to cooperate with one another to prevent environmental damage, to mitigate damage and to exchange information and prevention research data?

2. State Responsibility

State responsibility is a complex area of international law. Many bodies have attempted to codify it. International law has endeavoured to develop certain standards and procedures to enable an injured state to seek redress against the state that has acted in an internationally wrongful manner. There are certain essential characteristics to any claim for redress: there must be an identifiable obligation existing between the states concerned; there must be a breach or non-performance of that obligation that is imputable to the state against which the claim is being made and damage must have resulted. Generally, state responsibility is concerned with injuries suffered by aliens abroad. However, the principles can be extended to cover situations into which the environmental injury cases will fit. Starting from the premise that on the territory of a state certain conditions shall prevail by which the safety of persons and property will be guaranteed, it will be seen that states are under an obligation not to pollute and cause serious damage to the air of an adjoining state. This principle, although simple to articulate, has some problems of practical importance. As stated, the act or omission for which international responsibility is sought must be imputable to the state itself. A state cannot be responsible for acts of private individuals over whom it has no control. Therefore a link must be found to exist between the state and the actor who has in fact acted or omitted to act in such a way that environmental injury has occurred to persons or property in another state. A state, under the general theory of state responsibility, may engage responsibility in a number of ways. It will be responsible for the

15 Id.
acts or omissions of its officials that cause injury to aliens or their property. Under the Draft Articles on State Responsibility drawn up by the International Law Commission, acts or omissions imputable to the state would include those of state organs belonging either to the legislative, executive, judicial or other branch of government, provided the organ was acting as such in the case in question. There would also be responsibility for the conduct of organs of a territorial government or other unit within a federal state. A state may not plead a rule or lack of a rule in its own domestic law as a defence to a claim for state responsibility based on international law.

A state will also be responsible where its officials have failed to act diligently and have not prevented the acts of private individuals which have caused environmental damage abroad. Therefore, the state could be liable for not having acted in a reasonable way to protect aliens or their property by allowing injurious acts by individuals or corporations in their territory.

Responsibility could also arise where, although there is no liability for the actual injury, no action is taken by the state to prosecute the individuals who caused the injuries. It may occur also where there is, inter alia, a denial or obstruction of access to the courts, an unwarranted delay in procedure, a manifestly unjust judgment, or no reasonable possibility of adequate compensation.

Of particular relevance and difficulty is the question of liability and the basis on which it is to be determined. Is it to be based on subjective fault criteria, objective fault criteria or strict or absolute liability? According to many writers it is the objective fault or responsibility prin-

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20 International law has affirmed the liability of a federal state if a constituent member of that state acts in a manner incompatible with international law. See id. art. 6. See also Vienna Convention on the Law of Treaties, U.N. Doc. A/Conf. 39/27, art. 27, (1969) (that a party to a treaty may not invoke the provisions of its international law as a justification for its failure to perform treaty obligations. See also id. art. 46.


22 For the state to incur responsibility, this concept requires there to be individual blame of the person. It is necessary to show either dolus (intention) or culpa (blame). I. VAN LIER, ACID RAIN AND INTERNATIONAL LAW 126-27 (1981).

23 If there is a breach of international obligation that can be imputed to the state, responsibility follows. If the state can show force majeure or an act of a third party it will be exonerated. In this context, provided that agency and causal connection are established, there is a breach of duty by result. See id. at 127; I. BROWNLEE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 436-39 (3d ed. 1979).

24 In strict liability a state would be liable for acts or omissions which result in, for example, pollution on its territory causing injuries in another state, even where it has complied with required standards of care. Acts of God, acts of third parties or force majeure may exculpate the accused
ciple that has been followed by states in their practice, by arbitral tribunals and by the International Court of Justice.\textsuperscript{26} It follows that if in the area of environmental damage fault should play a part, it should only be in the objective sense.\textsuperscript{27}

It has been suggested that the use of strict liability may be still \textit{de lege ferenda}. However, there is some support for it at the present time.\textsuperscript{28} It can be argued that in the \textit{Corfu Channel} case\textsuperscript{29} and in the \textit{Trail Smelter} arbitration case\textsuperscript{30} fault of no kind was established.\textsuperscript{31} Likewise, in the \textit{Gut-Dam} arbitration\textsuperscript{32} the tribunal was not interested in fault or knowledge of prospective injuries by Canada. Canada was held liable. This decision, however, is of less value when it is noted that Canada had accepted the obligation of compensation payment in advance. In the \textit{Lac Lanoux}\textsuperscript{33} arbitration between France and Spain, fault on the part of France was not a requirement. The matter is not addressed in the Stockholm Declaration of June 16th, 1972.\textsuperscript{34} It has been argued that this might negate any requirement for the establishment of fault.\textsuperscript{35} Further, some Organization For Economic Cooperation and Development states (OECD) have argued that a system of strict liability should be introduced in all cases of transboundary pollution, regardless of any safeguard measures that have been taken.\textsuperscript{36}

\textsuperscript{25} In absolute liability there is total responsibility even if applicable standards of care are complied with. Unlike strict liability, there is no exoneration.


\textsuperscript{27} I. VAN LIER, \textit{supra} note 22, at 128.

\textsuperscript{28} See Goldie, \textit{supra} note 24, at 1227.

\textsuperscript{29} Corfu Channel Case (U.K. v. Alb.), 1949 I.C.J. 4 (Judgment of Apr. 9).

\textsuperscript{30} Trail Smelter Case, 3 R. Int'l Arb. Awards 1905 (1941).

\textsuperscript{31} See I. VAN LIER, \textit{supra} note 22, at 128.

\textsuperscript{32} Gut-Dam Arbitration (United States v. Canada), 8 I.L.M. 118 (1968). The United States claimed that Canada had caused damage attributable to the construction and maintenance of a dam in the international section of the St. Lawrence River. In reaching a settlement, Canada paid to the United States a lump sum of $350,000 (U.S. currency) in full satisfaction of all claims. \textit{Id.} at 140.

\textsuperscript{33} Lac Lanoux Case (Spain v. Fr.), Special Agreement, 12 R. Int'l Arb. Awards 281 (1937).


On this basis, it can be argued that strict liability may become, in the
not too distant future, the accepted norm with regard to liability in cus-
tomary international law. This argument is justified if the aforemen-
tioned arbitral decisions, declarations and statements by governments
can be seen to indicate the required state practice and opinio juris neces-
sary to form a rule of customary international law.

It is impossible to designate any similar status to the absolute liabil-
ity theory. There is no indication through any of the forms of state prac-
tice or judicial or arbitral decisions that would allow the supposition that
this theory is currently or is imminently on the verge of crystallizing into
a role of customary international law. Unless states agreed to such a rule
of liability in an international agreement, the notion of absolute liability
does not appear to merit practical consideration.

In the context of massive water diversion into or out of the Great
Lakes Basin we would be faced with a clearer-cut situation. It would not
be a question of determining imputability to the federal governments of
the United States or Canada or lack of due diligence leading to state
responsibility towards each other. Rather, it would be an intentional in-
jury and breach of an international obligation owed reciprocally under
the Boundary Waters Treaty of 1909.

In international law the effect of finding of state responsibility is that
the state found responsible to another must make reparation. The
usual type of reparation for a wrongful act or omission is an indemnity
that corresponds to the damage suffered. In the context of environmen-
tal damage caused by transboundary pollution or water diversion, resti-
tution in the majority of cases would not be a possibility. It is impossible
to re-establish the situation as it existed prior to the delinquent act and
hence to wipe out the consequences of the illegality. Therefore, compen-
sation in monetary terms and formal apologies, statements of consid-
eration or intent for the future might be in order. It has been suggested
by one author that international tribunals may impose injunctions to re-
strain pollution activities in the future. It is submitted that this could
also apply to diversion cases. Also the International Court of Justice
may grant interim measures to prevent further damage ensuing during

37 I. VAN LIER, supra note 22, at 129; Goldie, supra note 24, at 1231.
38 See North Sea Continental Shelf Cases (W. Ger. v. Den. and Neth.), 1969 I.C.J. 3 (Judgment
of Feb. 20) (Note the requirements laid down by the I.C.J.).
39 It should be noted that the only cases in which absolute liability has been used are those
arising under conventions that concern nuclear activities. See I. VAN LIER, supra note 22, at 129.
13).
41 Id. at 47.
42 I. VAN LIER, supra note 22, at 131.
the conduct of an action before it.43

B. The Emerging International Environmental Law

Article 38(1) of the Statute of the International Court of Justice44 has become known as the most authoritative statement as to the content of the sources of international law.

1. Treaties

Articles 38(1) of the Statute of the International Court of Justice does not speak of "treaties". Rather, it refers to "international conventions." The word "convention" in this context means treaty. Treaties are not only the first source under article 38(1). They represent the most modern method of creating international law. New global legislation is needed in many spheres to avert chaos and conflict. Treaties have become of paramount importance in international relations. It must be understood that the mere fact that a treaty has been signed and ratified by a requisite number of states45 and has thereby come into force does not mean that it will bind non-parties.46 On the other hand, where a treaty is merely a codification of existing customary international law, non-parties will be bound by the customary rule. Bilateral treaties or treaties between groups of states on a particular matter constitute law as between the parties. In the Canada-United States context, therefore, the Boundary Waters Treaty of 1909 is the law appertaining to water quantity in the Great Lakes and provides for the mutual obligations of the parties. The two federal states are responsible for any breaches of the Treaty that are imputable to them. A sufficiently large number of bilateral treaties on the same topic containing similar provisions would provide evidence, however, of a rule of customary international law, as they would indicate uniformity in state practice.

2. Customary International Law

The customary rules of international law may have a bearing on the problem under consideration. Clearly the Boundary Waters Treaty of 1909 and any other bilateral agreement have primacy in any Canada-United States dispute. However, should the relevant bilateral agreements between Canada and the United States be silent on a matter then the

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44 Statute of the I.C.J.

45 Treaties generally stipulate the number required for ratification. See Vienna Convention on The Law of Treaties, supra note 20, art. 11.

46 For an illustration, see North Sea Continental Shelf Cases, 1969 I.C.J. at 27.
rules of customary international law would stop the gap. Secondly, should the Boundary Waters Treaty of 1909 be terminated or repudiated then the rules of custom will be the source of international law that the governments or any adjudicator would have to turn to.

In any society rules emerge that dictate the allowable modes of behavior. An unwritten code of conduct will govern the members of the group that has produced it. Custom originates and continues to evolve through such a process. Generally, in international law, custom has been the centrepiece, until recent years, when a large number of global law-making treaties has resulted in a decline in its importance as a source of international law.

In order to determine whether a rule of customary international law exists, it is necessary to look to the actual practice of states. Custom must be felt to be obligatory by those states that follow it. Therefore, in the context of international environmental law, with particular reference to water diversion, it is necessary to identify state practice and the requisite _opinio juris_ on the part of states, to see whether such an unwritten code operates.

Evidence of customary law may be deduced from several possible sources. First, from statements and declarations made by government officials to their legislatures, opinions of legal advisors to their governments, press releases by governments and published extracts from relevant articles. Second, from similar articles in bilateral or regional treaties. Third, from the writings of international jurists and the decisions of both national and international courts and tribunals. Fourth, with the proviso that they do not always attempt to represent existing international law and are evidence only that those states voting in favour have accepted them, resolutions or declarations adopted by international organizations. Fifth, unilateral state action which follows a uniform pattern.

It has been forcefully argued that customary international law prohibits a state from using its territory in a manner which does not take into consideration the legitimate rights and interests of other states. Three important international decisions support this view. The arbitral tribunal in the _Trail Smelter_ case between Canada and the United States held that:

> under the principles of international law, as well as the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties of persons therein, when the case is of serious consequence and the injury is established by clear and

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The case has been considered as the *locus classicus* of international environmental law. However, it should be noted that what the Tribunal said as to liability can be considered as *obiter dicta*, due to the fact that Canada had admitted liability for damage suffered in the United States resulting from sulphur dioxide emissions from the Cominco smelter at Trail, British Columbia. The Tribunal’s function was only to assess the nature and extent of the compensation to be paid Canada. Also, the principle of international law stated by the Tribunal can be questioned as it would be difficult to say that in 1931-41 there was sufficient state practice and *opinio juris*. The Tribunal referred also to the law of the United States. Reference to domestic legal systems and decisions by national tribunals is valid as a subsidiary source of international law. Nevertheless, the bold principle it was propounding should have found support in more than a few United States municipal air pollution cases, as well as to analogies with water pollution. These criticisms aside, it is clear the holding of the Tribunal has today become an integral part of international environmental law and can be said to have widespread acceptance by states.

In the *Corfu Channel* case the International Court of Justice was called upon to deal with the question of state responsibility for damage to the United Kingdom that had emanated from Albania’s jurisdiction. The Court held that it is: “every State’s obligation not to allow knowingly its territory to be used for acts contrary to the right of other states.”

Although this decision did not concern environmental damage, some of the Court’s statements can be interpreted as an affirmation of state responsibility from which it can be inferred that states are under an obligation not to allow pollution or other forms of environmental damage, that might reasonably be prevented to injure foreign nationals.

The arbitral tribunal in the *Lac Lanoux* case stated:

> When one examines whether France, either during the discussions or in her proposals, has given sufficient consideration to Spanish inter-

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51 It was directed to apply United States law by Article IV of the Special Agreement. Trail Smelter Case, 3 R. Int’l Arb. Awards at 1908.
53 *Corfu Channel Case*, 1949 I.C.J. at 22.
ests, it must be stressed how closely linked together are the obligation
to take into consideration, in the course of negotiations, adverse inter-
ests and the obligation to give a reasonable place to these interests in
the solution finally adopted. A State is...relieved from giving a reason-
able place to adverse interests in the solution it adopts simply because
the conversation has been interrupted even though due to the intransi-
gence of its partner. On the other hand, in determining the manner in
which a scheme has taken into consideration the interests involved, the
way in which negotiations developed, the total number of the interests
presented, the price which each Party was ready to pay to have those
interests safe-guarded, are all essential factors in establishing the mer-
its of the scheme . . . .

(i) Equitable Utilization or Participation

This theory of equitable utilization, currently described as equitable
participation is clearly accepted by States and can be designated today as
a rule of customary international law.

This theory was the basis for "equitable apportionment" in the case
of Kansas v. Colorado and was adopted as "equitable utilization" by the
Helsinki Rules on the Uses of the Waters of International Rivers adopted
by the International Law Association in 1966. The phrase "equitable
participation" can be found in the draft articles on the Law of the Non-
Navigational Uses of International Watercourses adopted by the Interna-
tional Law Commission.

Article IV of the 1966 Helsinki Rules provides that:

[E]ach basin state is entitled within its territory to a reasonable and
equitable share in the beneficial uses of the waters of an international
drainage basin.

Under these rules, basin states include all states whose territories contrib-
ute to the international drainage basin, whether or not they are "ripari-
ian" states. Thus, it is recognized in the Helsinki Rules (which although
not a binding agreement between states, but rather a document produced
by a non-governmental organization seeks to state the rules of customary

55 Lac Lanoux Case, 12 R. Int'l Arb. Awards at 315.
56 See Bourne, Canada and The Law of International Drainage Basins in CANADIAN PERSPEC-
TIVES ON INTERNATIONAL LAW AND ORGANIZATION 468, 475 (McDonald, Morris & Johnston
eds. 1974) [hereinafter cited as McDonald, Morris & Johnston].
58 INTERNATIONAL LAW ASSOCIATION, REPORT OF THE FIFTY-SECOND CONFERENCE, HELS-
INKI 484 (1967) [hereinafter cited as Helsinki Rules].
60 See Helsinki rules, supra note 58, art. IV.
international law)\textsuperscript{61} that underground waters may contribute to an international drainage basin. Article IV is illustrative of the key principle of the Rules, which is that every basin state in an international drainage basin has the right to reasonable use and an equitable share of the waters of the basin. The Rules reject outright the "Harmon Doctrine" of unlimited sovereignty.\textsuperscript{62} This rejection is based on state practice.\textsuperscript{63} A basin state is obligated to look to the rights and needs of other states\textsuperscript{64} and each is entitled to an equitable share. This latter concept is to provide the maximum benefit to each basin state from the waters in question, along with a minimum of detriment.

The determination of what is a reasonable and equitable share is to be determined "in the light of all the relevant factors in each particular case."\textsuperscript{65} Naturally, rights which are "equal in kind and correlative with those" of co-basin states will not necessarily mean that the share in the uses of waters are identical.\textsuperscript{66} This will depend upon the weight given to relevant factors.\textsuperscript{67} The rules consider the reasonable uses of international drainage basins.\textsuperscript{68}

Article V provides a non-exhaustive list of eleven factors:

(a) the geography of the basin, including in particular the extent of the drainage basin in the territory of each basin State;
(b) the hydrology of the basin, including in particular the contribution of water by each basin State;
(c) the climate affecting the basin;
(d) the past utilization of the waters of the basin, including in particular existing utilization;
(e) the economic and social needs of each basin State;
(f) the population dependent on the waters of the basin in each basin State;

\textsuperscript{61} See S. Williams, supra note 52, at 247.
\textsuperscript{62} See Helsinki Rules, supra note 58, at 486 (commentary to article IV).
\textsuperscript{63} Id. The commentary to article IV states that virtually all states which have considered the question of the "Harmon Doctrine" have rejected it. For further discussion of this Doctrine see J. Barros & D. Johnston, supra note 54, at 28.
\textsuperscript{64} The economic and social needs of co-basin states must be considered.
\textsuperscript{65} See Helsinki Rules, supra note 58, art. V. This article provides a nonexhaustive list of relevant factors. These guidelines are meant to be flexible and each factor is weighed against the other factors. None are pre-eminent.
\textsuperscript{66} See id. at 487 (commentary to art. IV). See also Handl, Balancing of Interests and International Liability for the Pollution of International Watercourses: Customary Principles of Law Revisited, 13 Can. Y.B. Int'l L. 156, 184 (1975).
\textsuperscript{67} Handl, supra note 66. A conclusion will be reached on the basis of an evaluation of all the factors taken together. The weight given to each factor is to be determined in comparison with the other factors. See Helsinki Rules, supra note 58, art. V, para. 3.
\textsuperscript{68} Helsinki Rules, supra note 58, arts. VI-VIII.
(g) the comparative costs of alternative means of satisfying the economic and social needs of each basin State;
(h) the availability of other resources;
(i) the avoidance of unnecessary waste in the utilization of waters of the basin;
(j) the practicability of compensation to one or more of the co-basin States as a means of adjusting conflict among uses; and
(k) the degree to which the needs of the basin State may be satisfied without causing injury to a co-basin State.69

Each of these factors deemed relevant must “aid in the determination or satisfaction of the social and economic needs of co-basin states.”70

Consider the following scenario:71 In the case of a common drainage basin where state A, the lower “co-basin” state, uses the waters for irrigation purposes but state B, the upper “co-basin” state, wants to produce hydroelectric power from the shared waters, the question arises as to whose use is preeminent. The two uses are certainly partially at odds as the storage period for the hydroelectric power may overlap with the growing season of crops in state B when the water is needed for nourishment. A number of elements would be crucial to a resolution of this dilemma. State A has always used the inundation method of irrigation. An objective study indicates that the use of the water of the basin for hydroelectric purposes would be more valuable than irrigation methods. The dam would allow flow control of seasonal flooding and economically speaking would in the long term result in reasonable agricultural productivity. However, it would not be as high as that before the dam was built. Even though the population of state A for many centuries depended upon the agriculture in the basin area of state A, this is not now the case. Alternative sources for food are present, but not enough to completely rule out the need for the old produce area. A survey in state A indicates that there are substantial underground waters in state A. The new hydroelectric production from the basin would benefit several hundred thousand people in state B. Power obtained from other resources would cost much more.

The following factors, based on article V would appear relevant: (1) an existing reasonable use; (2) the relative dependence on the waters; (3) the population; (4) the climatic and weather conditions; (5) alternative sources of food in state B; (6) inefficient utilization of water in state B and (7) the financial status of the two co-basin states.72

An analysis of this situation would probably show that although

69 Id. art. V.
70 Id. at 489 (commentary to art. V).
71 See id.
72 Id. at 490.
state A has an existing reasonable use, irrigation, the other competing factors militate for some modification of that use.\textsuperscript{73} State A has other sources of food and is using an antiquated method of irrigation which could be replaced with a system that wastes less of the basin's water. This replacement would be within state A's economic capacity. The potential use of the water for hydroelectric purposes is very valuable.\textsuperscript{74} A balancing here of all the factors would lead to a conclusion that modification of A's utilization and accommodation of state B's is desirable.

Reconciliation of the problem between states A and B would seem to lie in state A either changing its system of irrigation for a more water-efficient method, using alternate food supplies, using its underground water, or any combination of all of these options. However, state B might be required to help bear the costs involved in developing, for example, the new system of irrigation, or alternative food supplies.\textsuperscript{75} Compensation might be required should state A have to abandon any permanent installations or parts thereof.\textsuperscript{76}

If no combination of the above suggested solutions is agreeable to both states, then one of the uses, existing irrigation or new hydroelectric power will prevail with the other use being impaired or stopped.\textsuperscript{77} At that juncture, the state deprived of its use would undoubtedly seek compensation.\textsuperscript{78}

Basin states\textsuperscript{79} therefore must share the waters equitably. This principle is illustrated further by the international jurisprudence\textsuperscript{80} and by analogy to the new Law of the Sea Treaty of 1982.\textsuperscript{81}

(ii) The "Harmon Doctrine"

This is the most extreme view of plenary territorial jurisdiction. Broadly speaking, in the context of this study, this doctrine states that the upper state may divert at will and with no restraints imposed, with-

\textsuperscript{73} Id.
\textsuperscript{74} Id.
\textsuperscript{75} Id.
\textsuperscript{76} Id.
\textsuperscript{77} Id.
\textsuperscript{78} Id.
\textsuperscript{79} In the I.L.C. Draft on Non-Navigable Uses, these are called "system states."
out regard being paid to the interests of the lower basin.\textsuperscript{82}

The "Harmon Doctrine," which stemmed from a dispute in 1895 over the right of the United States to divert water from the upper Rio Grande at a point where the river was totally within the territory of the United States, was based upon the legal opinion of Attorney General Judson Harmon in response to questions put to him by the Secretary of State of the United States. He was asked, \textit{inter alia}, whether the diversions in the Rio Grande were contrary to the principles of international law entitling Mexico to be indemnified for any injury suffered. He responded as follows:

\begin{quote}
[I]t is evident that what is really contended for is a servitude which makes the lower country dominant and subjects the upper country to the burden of arresting its development and denying to its inhabitants the use of a provision which nature has supplied entirely within its own territory.\textsuperscript{83}
\end{quote}

However, in refuting this contention he opined:

The fundamental principle of international law is the absolute sovereignty of every nation, as against all others, within its territory. Of the nature and scope of sovereignty with respect to judicial jurisdiction, which is one of its elements, Chief Justice Marshall said (\textit{Schooner Exchange v. McFaddon}, 7 Cranch, p. 136):

\begin{quote}
'The jurisdiction of the nation within its own territory is necessarily exclusive and absolute. It is susceptible of no limitation not imposed by itself. Any restriction upon it, deriving validity from an external source, would imply a diminution of its sovereignty to the extent of the restriction, and an investment of that sovereignty to the same extent in that power which could impose such restriction. All exceptions, therefore, to the full and complete power of a nation within its own territories must be traced up to the consent of the nation itself. They can flow from no other legitimate source.'\textsuperscript{84}
\end{quote}

This doctrine could have been ignored.\textsuperscript{85} However, it was not. The United States adhered to it firmly. As one author has stated:

Whether or not the Harmon Doctrine was an accurate statement of the law, it was at that time and for many years thereafter the view adhered to by the United States at least when its utilization was questioned by other states.\textsuperscript{86}


\textsuperscript{84} Id. at 281-82.

\textsuperscript{85} Austin, \textit{supra} note 82, at 408.

\textsuperscript{86} Bourne, \textit{supra} note 56, at 472.
The International Law Association took the view in 1966\textsuperscript{87} that the "Harmon Doctrine" never had a wide acceptance among states and went so far as to state that virtually all states which have had occasion to speak on the matter have rejected it.\textsuperscript{88}

Thus, it is important that in the twentieth century we have seen the gradual acceptance of the principle that where two or more states share a common resource due regard must be given to the interests of all parties. Article X of the Helsinki Rules 1966,\textsuperscript{89} although dealing with pollution, is reflective of the general limitation placed by international law upon state action that would cause injury to another state. It demonstrates what was stated earlier in the \textit{Corfu Channel} case.\textsuperscript{90} Further, the Secretary General of the United Nations has said "there has been general recognition of the rule that a state must not permit the use of its territory for purposes injurious to the interests of other States in a manner contrary to international law."\textsuperscript{91} This reflects the principle of law contained in the latin maxim \textit{sic utere tuo ut alienum non laedas}.\textsuperscript{92} This is arguably today a general principle of law recognized by civilized states which is the third source of law to be applied by the International Court of Justice under article 38(1)(c) of its statute.\textsuperscript{93} This principle can be seen to run through a number of state to state relationships as demonstrated in the caselaw. For example, in the \textit{Lac Lanoux}\textsuperscript{94} arbitration between France and Spain the principle was favourably referred to. In the \textit{Trail Smelter}\textsuperscript{95} case the tribunal used this principle and in the Italian case of \textit{Société Energie Electrique v. Compagnia Imprese Elettriche Liqui} the Court of Cassation stated:

\textsuperscript{87} Helsinki Rules, \textit{supra} note 58.
\textsuperscript{88} Bourne, \textit{supra} note 56, at 486.
\textsuperscript{89} Helsinki Rules, \textit{supra} note 58.
\textsuperscript{92} You should use your property in such a way as to not injure that of another person.
\textsuperscript{93} Statute of the I.C.J., art. 38, para. C(1). \textit{See} L. OPPENHEIM, \textit{INTERNATIONAL LAW} 346 (Lauterpacht ed. 8th ed. 1955) (maintains this position). This would not be at variance with Article 38(2) of the Statute, which states that a matter is not to be decided \textit{ex aequo et bono} unless the parties agree. Principles of equitable user would not fall into this category. \textit{See} Handl, \textit{supra} note 66.
\textsuperscript{94} Lac Lanoux Case, 12 R. Int'l Arb. Awards at 281.
\textsuperscript{95} 3 R. Int'l Arb. Awards at 1905.
If this [state], in the exercise of its sovereign rights is in a position to establish any regime that it deems most appropriate over the watercourse, it cannot escape the international duty . . . to avoid that, as a consequence of such a regime, other (co-riparian) states are deprived of the possibility of utilizing the watercourse for their own national needs.96

This being said, the equitable utilization theory, or limited sovereignty approach, even though gaining ground to the point where it has attained the status of customary international law, is not a panacea. As suggested earlier, what is equitable depends upon each individual state of geographical and economic affairs.97

(iii) Riparian Rights

In the common law the doctrine of domestic riparian rights has been stated thus:

Every riparian owner may divert the water of a stream for purposes in connection with his land, or for other purposes; but he is bound to return the water . . . substantially undiminished in volume and unaltered in character; for a lower riparian owner, subject to the rights of the upper owner, is entitled to have the water . . . come to him unaltered in quality or quantity.98

This principle clearly allows reasonable use as of right by the upper riparian. However, it has been argued99 that in international law there is no such upstream right. Accordingly, "upstream states could not utilize the waters of the basin without the consent of the downstream states . . . ."100 During the negotiations leading to the Boundary Waters Treaty of 1909 between Canada and the United States, this was the position adopted by Canada.101 However, as will be seen, the United States did not accept it.

(iv) Prior Appropriation

The doctrine of prior appropriation is an articulation of the view that "first in time, is first in right."102 The doctrine has been analysed in

97 See supra notes 56-80.
98 33 Halsbury's Laws of England (2d ed. 1939) at 559. In the overwhelming majority of United States jurisdictions, this natural flow doctrine is not the law.
100 Id.
101 This was also the position of Pakistan regarding the Indus River Dispute with India. India was asserting the Harmon Doctrine. Id.
102 Bourne, supra note 99, at 119.
this way:

In order to constitute a valid appropriation in this sense a bona fide intention is necessary to apply the water to a beneficial purpose, followed by a diversion of water by means of an artificial installation and its application to a beneficial purpose within a certain period. Such an appropriator has a right as against all later claims to the exclusive use of water to the extent of his actual appropriation.\(^{103}\)

This doctrine first developed in the United States. However, in the Reference by the governments of Canada and the United States to the International Joint Commission, concerning the waters of the Columbia River System,\(^{104}\) Canada contended that “the doctrine of prior appropriation has no place in . . . Canadian law.”\(^{105}\) Clearly, the doctrine favours those states quickest off the mark in industrialized use of the waters of the basin. It has been suggested that the upper basin states reject this notion of prior appropriation as lower basin states, in most cases, have always seemed to develop ahead of them.\(^ {106}\)

This doctrine would clearly be inconsistent with the “Harmon Doctrine”\(^ {107}\) and with article II of the Boundary Waters Treaty of 1909, as it envisages exclusive jurisdiction and control for the upper basin state.\(^ {108}\)

It appears that this doctrine does not have the status of a rule of customary international law. The practice of states would not seem to be virtually uniform and the *opinio juris* seems lacking.\(^ {109}\) Even in the bilateral Canada-United States situation there does not seem to be consistent use of this theory so as to create a regional rule of international law.

Preexisting uses, however, are not to be swept aside as unimportant. Rather, they relate to the principle of equitable utilization.\(^ {110}\) Prior use


\(^{105}\) Id. at 169.

\(^{106}\) Bourne, supra note 99, at 120.

\(^{107}\) See supra text accompanying notes 100-101.

\(^{108}\) See McDougall, *The Development of International Law With Respect to Trans-Boundary Water Resources*, 9 Osgoode Hall L.J. 261, 275 (1971). Note that the doctrine was part of the United States contention in the Souris River Reference, I.J.C. Docket No. 41 (1940), and in the Sage Creek Reference, I.J.C. Docket No. 54 (1941). In both of those instances the U.S. was the lower state. In the Waterton-Belly Rivers Reference, I.J.C. Docket No. 57 (1948), it was invoked by Canada, in that case the lower state. The I.J.C. did not make any specific recommendations on this question.


is one of the factors to be weighed in assessing reasonable and equitable participation.

(v) Prevention of Injury

So far the discussion has centered around serious or substantial injury being caused to another state. From the international cases examined it is clear that a duty to prevent, before injury occurs, is not envisaged explicitly. Nevertheless, it is not going too far to suggest that if a state is justified in being free from serious damage according to Trail Smelter, and if a state must not knowingly allow its territory to be used contrary to other states' rights, according to Corfu Channel, then states are obliged in international law to prevent serious damage occurring from cross-border activities. The Helsinki Rules provide, in article X(i) for the prevention of any new form of water pollution or any increase in the degree of existing water pollution in an international drainage basin that would cause substantial injury in the territory of a co-basin state. This is consistent with the concept of equitable utilization. The documents concerning air pollution do not refer to prevention per se.

There is substantial international commitment towards prevention to be found in international conventions dealing with, for example, maritime pollution. The new Law of the Sea Treaty would be the most recent example. Likewise, the Nordic Convention is an example of a regional prevention obligation. It appears that this is the direction that the law should take, prevention of harm necessarily being better than reparation after the damage has been done.

(vi) Notification

Lastly, is there a principle which requires a state to notify potential victims of activities concerning a common shared resource? It is helpful to an analysis of the diversion question to look by way of analogy to environmental pollution, for assistance. There is certainly no treaty provision concerning air pollution, although there is in the area of maritime pollution. The 1982 Law of the Sea Treaty provides such an obligation, as do a number of bilateral and regional treaties. It would seem to follow reasonably from these documents and from the principle of equitable utilization of a shared resource that data should be collected and

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111 Law of the Sea, supra note 81.
114 Law of the Sea, supra note 81.
115 I. VAN LIER, supra note 22, at 119.
notice given to the other concerned states in cases of proposed diversions or consumptive use.

State practice, particularly in Europe,\textsuperscript{116} indicates that there is exchange of detailed documentation on such matters. This practice seems to be accompanied by the requisite \textit{opinio juris}. Certainly, among states who practice such notification and feel it obligatory, a regional rule of customary law has emerged here.

There are several recommendations and resolutions that may evidence a general rule of customary international law here. For example, the thirty-three recommendations of the Action Plan for the Human Environment\textsuperscript{117} and the United Nations General Assembly Resolutions of December 15, 1972\textsuperscript{118} on cooperation in the field of environment encourage exchange of information. The Charter of Economic Rights and Duties of States\textsuperscript{119} provides for a system of information and prior consultations concerning the exploration of natural resources. The ECE Convention\textsuperscript{120} stipulates that states parties shall exchange information, consult and develop strategies to combat air pollutants discharge. The OECD in its recommendations on principles concerning transboundary pollution\textsuperscript{121} had recommended that before the initiation of work that may cause a risk of transboundary pollution, information should be provided to the countries that may be protected.

The Helsinki Rules of 1966 recommended:

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

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

3. A State providing the notice referred to in paragraph 2 of this Ar-

\textsuperscript{116} \textit{Id.}

\textsuperscript{117} Report of the U.N. Conference on the Human Environment, \textit{supra} note 34, at 28. There was no inclusion of such an obligation in the Stockholm Declaration itself.


\textsuperscript{120} Convention on Long-Range Trans-Boundary Air Pollution, opened for signature Nov. 13, 1979, \textit{reprinted in} 18 I.L.M. 1442.

\textsuperscript{121} O.E.C.D. Doc. C (74) at 224.
ticle should afford to the recipient a reasonable period of time to make an assessment of the probable effect of the proposed construction or installation and to submit its views thereon to the State furnishing the note.

4. If a State has failed to give the notice referred to in paragraph 2 of this Article, the alteration by the State in the regime of the drainage basin shall not be given the weight normally accorded to temporal priority in use in the event of a determination of what is a reasonable and equitable share of the waters of the basin.122

This article is only a recommendation; however in paragraph four, failure to notify has a legal effect. In 1982, the International Law Association made notice a legal requirement.123 The 1982 Resolution provided that:

[B]asin states shall . . .
(b) notify other states concerned in due time of any activities in their own territories that may involve a significant threat of, or increase in, water pollution in the territories of those other states; and (c) promptly inform states that might be affected, of any sudden change of circumstances that may cause or increase water pollution in the territories of those other states.124

At present, it is not clear whether a rule of custom of general application has emerged. However, the trend demonstrated especially by the 1982 International Law Association Resolution and by the various other resolutions would indicate that perhaps this is in the offing. As with the other areas discussed, what is needed are guidelines for states to follow as to when information must be given.

(vii) Negotiation

The duty cast upon states in a common resource situation to negotiate is beyond doubt. From state practice and opinio juris it is clearly a rule of customary international law. In the International Law Association's Helsinki Rules of 1966, article XXX stated:

In case of a dispute between States as to their legal rights or other interest, . . . they should seek a solution by negotiation.125

This is clearly in keeping with article 33 of the United Nations

122 Helsinki Rules, supra note 58, at art. XXIX.
123 INTERNATIONAL LAW ASSOCIATION, REPORT OF THE SIXTIETH CONFERENCE, MONTREAL, 1982, art. 5, at 5 [hereinafter cited as I.L.A. REPORT]. Note also that the Institute of International Law has made notice a rule: see Resolution on the Pollution of Rivers and Lakes in International Law, 58 ANN. INST. DROIT INT'L 201 (1950) [hereinafter cited as The Athens Rule].
124 I.L.A. REPORT, supra note 123.
125 Helsinki Rules, supra note 58.
Charter which calls upon the states parties to "seek a solution by negotiation" in the first instance. This power may be looked at as a prerequisite to third party determination of the problem. In effect adjudication must be an absolute last resort. Where two or more states share a common drainage basin the maximum utilization of that basin to the overall benefit of all parties can only occur where joint planning has taken place. Cooperative management has to be the answer.

If the states are constantly in a state of friction, only management chaos will result, perhaps with the deterioration effect on both water quantity and quality.

This desirability to produce an agreement between the concerned co-basin states was emphasized by the "Rau Commission" in 1941 with regard to the dispute between Sind and Punjab over the waters of the Indus River Basin. The Commission states: "The most satisfactory settlement of disputes of this kind is by agreement, the parties adopting the same technical solution of each problem, as if they were a single unified community undivided by political or administrative frontiers." Article XXXI of the Helsinki Rules recommends that if a question or a dispute arises between co-basin states which concerns the present or future utilization of the waters of an international drainage basin, the states should refer the question or dispute to a joint agency. The joint agency should survey the basin situation and formulate plans or recommendations for the fullest and most efficient use of the waters that will be in the interest of all the parties.

In international state practice, much use has been made out of such joint bodies. The best example is the International Joint Commission which was established pursuant to article VII of the Boundary Waters

126 U.N. Charter, art. 33, para. 1.
127 See Helsinki Rules, supra note 58, commentary to art. XXX, at 522.
128 Note that in a domestic interstate dispute the U.S. Supreme Court said in Colorado v. Kansas, 320 U.S. 383, 392 (1943) that:
  The reason for judicial caution in adjudicating the relative rights of States in such cases is
  that, while we have jurisdiction of such disputes, they involve the interests of quasi-sovereigns,
  present complicated and delicate questions, and, due to the possibility of future change of
  conditions, necessitate expert administration rather than judicial imposition of a hard and fast
  rule. Such controversies may appropriately be composed by negotiation and agreement, pursuant
  to the compact clause of the Federal Constitution. We say of this case, as the court has said of
  interstate differences of like nature, that such mutual accommodation and agreement should,
  if possible, be the medium of settlement, instead of invocation of our adjudicatory power.
129 See Helsinki Rules, supra note 58, commentary to art. XXX, at 522.
130 Id. at 523.
132 Helsinki Rules, supra note 58.
133 Id.
Treaty of 1909. Article IX of that Treaty provides for the reference to the Commission of "any other question or matters of difference arising between them involving the rights, obligations or interests of either in relation to the other." It should be noted that the Treaty between the United States and Canada relating to Co-operative Development of the Water Resources of the Columbia River Basin of 1961 was largely based upon a report prepared by the International Joint Commission.

Practice abounds also in other regions of the world. In 1957, Cambodia, Laos, Thailand and Viet Nam set up a Commission for Coordination of Investigations of the Lower Mekong River. The International Law Association in 1966 also cites as examples of mixed commissions for cooperation and settlement of differences those set up between Italy and Switzerland for the regulation of Lake Lugano; Italy and France for the utilization of the Roja River; Switzerland and France for the Doubs River and the Emsosson Hydro-Electric Development; Switzerland and Austria for the Inn River; and the Federal Republic of Germany and Switzerland for the Upper Rhine Development.

This duty to negotiate has recently been reinforced by the International Law Association in 1982 and by other international organizations. The caselaw of the International Court of Justice that deals with shared maritime resources also is indicative of this position.

C. Binational International Law — Canada And The United States

The existing fundamental rules of international law and the emerging international environmental law principles discussed in the first two sections of this paper apply as customary international law to Canada

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137 Helsinki Rules, supra note 58, commentary to art. XXXI, at 526.
139 I.L.A. REPORT, supra note 123, art. VI, at 541.
140 See Eversen Report, supra note 59; and The Athens Rule, supra note 122. See also Bourne, Procedure in the Development of International Drainage Basins, 10 CAN. Y.B. INT’L L. 212 (1972).
and the United States, unless the two states have agreed to a different formulation. However, the rules of customary international law and the general principles of law may still be of relevance where a treaty is silent or where it is in need of interpretation. States will be presumed to be acting in accordance with accepted principles of international law. Should a treaty be repudiated or terminated, it will necessarily be to the sources of custom and general principles that the parties in their negotiations or litigation will have to turn. Both states have endeavoured to utilize the commonly shared waters between them in an orderly fashion.\textsuperscript{142} One author states that “on January 1, 1983, some twenty-seven treaties and other agreements dealing with boundary waters were in force between the two countries.”\textsuperscript{143}

For the regulation and management of the Great Lakes Basin it is therefore necessary to turn to the agreements and treaties between Canada and the United States. As a practical matter only sovereign states have the international legal personality to enter into treaty arrangements. The component states of the United States and provinces and territories of Canada do not have that capacity in international law unless their respective constitutions give this power. Neither the Canadian nor the United States constitutions do so. From this perspective, even though the Great Lakes States and Ontario and Quebec signed the Great Lakes Charter\textsuperscript{144} to provide for consultation and long term cooperative management and to “conserve the levels and flows of the Great Lakes and their tributary and connecting waters [and] to protect and conserve the environmental balance of the Great Lakes Basin ecosystem,” the Charter cannot have the force of law as an international agreement because the states and provinces have no capacity to sign international treaties. Nevertheless, as will be discussed later, this Charter may still provide one avenue of approach in gaining federal support in both states for water quantity and quality management in the best interests of the Great Lakes.

1. The Boundary Waters Treaty of 1909

The Boundary Waters Treaty of 1909 signed by Great Britain (on behalf of Canada) and the United States is still the most important bilateral treaty on the subject of management of the shared fresh water re-


\textsuperscript{143} Bourne, \textit{supra} note 142.

\textsuperscript{144} \textit{Great Lakes Charter}, \textit{reprinted in GREAT LAKES GOVERNORS TASK FORCE, COUNCIL OF GREAT LAKES GOVERNORS, FINAL REPORT AND RECOMMENDATIONS ON WATER DIVERSION AND GREAT LAKES INSTITUTIONS} 40 app. III (1985).
source between the two states today.  

The preamble to the Treaty details its purpose as being:

[i]o prevent disputes regarding the use of boundary waters and to settle all questions which are now pending between the United States and the Dominion of Canada involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along their common frontier, and to make provision for the adjustment and settlement of all such questions as may hereafter arise . . . .

The preliminary article defines boundary waters as the waters that stretch from main shore to main shore of the lakes, rivers and connecting waterways through which the international boundary passes. It does not include tributary waters which "in their natural channels would flow into such lakes, rivers or waterways . . ." or waters flowing from such. The Treaty provides in article II that the purpose enunciated in the preamble was to be achieved by granting parties injured by one state's use or diversion of the tributary waters the same legal remedies as if the injury took place in the country where such diversion or use occurred. Secondly, the Treaty sets up a joint commission, known as the International Joint Commission, with the requirement that the Commission give approval before uses, obstructions or diversions, temporary or permanent, of boundary waters that affect the natural level or flow of the waters taken place. The International Joint Commission was given the power to examine, report and make recommendations.

Under articles III and IV the International Joint Commission has a quasi-judicial role in that it may approve or disapprove of any use, obstruction or diversion of boundary waters or waters that flow from boundary waters or in waters at a lower level than the boundary in rivers that flow across the boundary, if such would have the effect of raising the water level on the other side of the boundary, unless agreed to by the states' parties. Conditions of approval may be imposed. Such a condition could be, for example, that injured parties be compensated.

145 Space does not permit a detailed background to the Boundary Waters Treaty of 1909, but see Bourne, supra note 56, at 469-71; and L. Bloomfield & G. Fitzgerald, supra note 104, at 1-37.

146 Boundary Waters Treaty, supra note 10, preamble.

147 Lake Michigan is an example. See O. Piper, The International Law of the Great Lakes 94 (1967).

148 Boundary Waters Treaty, supra note 10, art. II.

149 Id. art. III. Under art. VII, the membership of the I.J.C. was set down: three Canadian Commissioners and three from the United States.

150 Id. The parties can agree to do so by authority of the United States or Canada within their respective jurisdictions.

Under article IX the Commission has an investigative and advisory role. It may examine and report on any questions that are referred to it by either the United States or Canada. It may then follow up with conclusions and recommendations. Although, the two states could act alone in referring a matter to the Commission, this has not occurred in practice. The reports made are not considered "as decisions of the questions or matters so submitted either on the facts or the law, and shall in no way have the character of an arbitral award." Where both parties consent, the Commission may act as an arbitration panel with a binding power of decision.

The Commission is given the authority by article XII to employ technical staff, such as engineers and clerical assistants, to conduct open hearings, take evidence on oath, compel the attendance of witnesses and adopt rules of procedure that are in accordance with justice and equity.

Trends before the Commission indicate that although originally the majority of its cases concerned approval under article III and article IV, in recent years it has been dealing with references under article IX.

The Commission takes note of Canadian and United States statutes but has never considered itself bound by them. It has not applied the doctrine of stare decisis.

The Commission has had success in the area of adjudication and advisory opinions. However, it does have some drawbacks, notably that it is confined by the 1909 Treaty itself and by the appointment of its Commissioners by the two governments. The United States and Canada can limit the references made to the Commission. Having said this, practice seems to show that the Commissioners have handled matters with neutrality. As one Commissioner himself noted the International Joint Commission "recognizes neither geographical nor political divisions."

Generally speaking, as one author indicates:

the Commission has had a remarkable record of success . . . . In

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153 There may be a minority as well as a majority report.
154 Boundary Waters Treaty, supra note 10, art. IX.
155 Id. art. X. See Wex, supra note 151, at 291 (he states that this power has not yet been used).
156 Boundary Waters Treaty, supra note 10, art. XII.
157 Jordan, supra note 152, at 527.
159 Id.
160 Id.
over eighty cases dealt with, it was divided on national lines or failed to reach an agreement in only three. More importantly, the manner of its disposition of the questions submitted to it has earned it the confidence of the governments and citizens of both countries.\(^\text{162}\)

This being said, it must be realized that in the context of a proposed large scale water diversion into or out of the Great Lakes, the national ties of the six Commissioners might well come to the fore. Should either state propose such a project and the other strenuously object, it would remain to be seen whether the International Joint Commission is as impartial as its record appears to indicate.

(i) Equitable Utilization and the I.J.C.

The Boundary Waters Treaty of 1909 provides for priority of utilization. Article I states that "navigation of all navigable boundary waters shall forever [be] free and open for the purposes of commerce to [both countries] . . . equally . . . \(^\text{163}\)

At the time the Treaty was entered into, equitable utilization was not the only principle adhered to by states. It had its competitor, the already discussed "Harmon Doctrine."\(^\text{164}\) Although Canada did not favour the "Harmon Doctrine" of unlimited territorial sovereignty, the United States did. For this reason, a compromise was struck in the negotiations and article II of the Boundary Waters Treaty of 1909 was the end result. Article II provides:

Each of the High Contracting Parties reserves to itself or to the several State Governments on the one side and the Dominion or Provincial Governments on the other as the case may be, subject to any treaty provisions now existing with respect thereto, the exclusive jurisdiction and control over the use and diversion, whether temporary or permanent, of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary waters; but it is agreed that any interference with or diversion from their natural channel of such waters on either side of the boundary, resulting in any injury on the other side of the boundary, shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs; but this provision shall not apply to cases already existing or to cases expressly covered by special agreement between parties hereto.

It is understood, however, that neither of the High Contracting Parties intends by the foregoing provision to surrender any right, which it may

\(^{162}\) Bourne, supra note 56, at 493.

\(^{163}\) Boundary Waters Treaty, supra note 10, art. I. The same principles are applied to Lake Michigan.

\(^{164}\) See supra text accompanying notes 88-109.
have, to object to any interference with or diversions of waters on the other side of the boundary the effect of which would be productive of material injury to the navigation interests on its own side of the boundary.165

The compromise is clear. Tributary waters are under the plenary jurisdiction of the state wherein they are located. Unilateral conduct is thus allowable under the Treaty, but is subject to legal remedies in the courts of the country causing the injury. However, the remedy is dependent upon the *lex loci delicti*. This is not that effective a remedy as the diversion or use will presumably be lawful in that place. This procedure has yet to be utilized or an attempt made which is indicative of its shortcomings.

The provisions for tributary waters are to be contrasted with those relating to boundary waters. Article III states that without the approval of the International Joint Commission, the natural level and flow of boundary waters cannot be altered. This provision is based on the need for joint co-operation and neutral acknowledgment of interests. This is subject to the proviso that approval need not be obtained when the proposed use of boundary waters is for domestic or sanitary purposes.

Would a large scale diversion of waters out of the Great Lakes Basin by the United States to flush sewage fall within this exception? One author166 suggests that this would not be a reasonable interpretation of article III. Also if it would materially injure Canadian navigation it would fall within the prohibition of article II. Bourne states:

If other interests were affected, Article II would give Canada only the right to sue for damages or an injunction in the courts of the United States, provided that the injury was not caused by a diversion already existing when the BWT was entered into. It is evident that difficult questions of fact would be involved.167

Canada has on several occasions claimed that she had the right pursuant to article II to divert waters that flow into the United States from Canada.168

Neither Canada nor the United States appear to have taken the unilateral route but both have come to accept that in a shared resource situation, equitable utilization or participation is a norm of customary international law.169 Having said this, it is apparent that article II of the

165 Boundary Waters Treaty, *supra* note 10, art. II.
166 Bourne, *supra* note 142.
167 *Id.* In particular, note the dispute between Canada and the United States over the diversion by the City of Chicago to flush sewage into the Mississippi River which began in 1948.
169 *See* *supra* text accompanying notes 64-90.
1909 Treaty is still on the books. Should one or the other of the two states invoke the article, it would be the governing rule. The Treaty obligation would displace the customary source.

This article has been a source of controversy since the Treaty was negotiated. Wilfred Laurier, the Canadian Prime Minister, held that it was contrary to international law. There was a temptation to reject the Treaty on account of this, but considerations regarding the overall use of the Treaty and its desirability prevailed. George Gibbons, the Canadian negotiator, stated categorically that article II was a proper interpretation and statement of international law. The Joint Commission, in references to it under article IX, has taken the equitable utilization route. This would indicate that in practice this is the accepted position.

As one author has argued:

It is not clear however, whether the American negotiator, Chandler P. Anderson, viewed . . . article [II] as an expression of the Harmon Doctrine or whether he viewed it as a justified distinction between boundary waters and tributary waters. The difficulty with the article is that it attempts to impose a simple legal formula upon a complex physical situation. Some waters are wholly within the territory of one or the other of the treaty parties, yet they are all part of the same watershed, and events in any one part of the watershed may affect the whole.

Article VIII of the Boundary Waters Treaty of 1909 is helpful here in that it provides, inter alia, that the two parties “shall have, each on its own side of the boundary, equal and similar rights in the use of the waters . . . defined as boundary waters.” This is similar to the approach taken by the Helsinki Rules of 1966 as long as “equal” in the Treaty is synonymous with “equitable” in the Rules.

(ii) The Question of Levels and Flows

Article III of the 1909 Treaty provides that the natural levels and flows of boundary waters cannot be subjected to alteration without the authority of Canada or the United States, whichever is appropriate, and

170 O. Piper, supra note 147, at 77.
171 Id. See also Hansard, XC VIII House of Commons Debates 911 (1910-11).
172 O. Piper, supra note 149, at 77 and n. 18.
173 Id. at 78.
175 Helsinki Rules, supra note 58.
176 B. Chauhan, Settlement of International Water Disputes in International Drainage Basins 236 (1981). Chauhan seems to think otherwise. He suggests that “equal sharing” has its roots in sovereign equality, whereas the Helsinki Rules of 1966 approach of “equitable sharing” emphasizes that in spite of sovereignty, equality does not mean an equal division of waters. Id.
must have the approval of the Joint Commission. Article IV prohibits the backing up of waters which would raise the natural level of waters on the other side of the boundary unless approved by the Joint Commission.

The Treaty, coupled with customary international law, thus provides for protection in this context. If injury results in violation of these norms, responsibility by one party to the other state party would follow. Naturally, should there be a consent validly acquired, there could be no responsibility and automatic reparation. This would be most relevant to diversions into the Great Lakes Basin.

(iii) The Great Lakes Water Quality Agreement of 1978

Even though pollution control was a vital concern at the end of the last century and leading up to the Boundary Waters Treaty of 1909, it was addressed almost as an after-thought in article IV which states: "It is further agreed that the waters herein defined as boundary waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other." 177 Charles Bourne has commented: "This commandment 'Thou shalt not pollute the waters' was the only utterance in the treaty on the subject; it has been the international law governing the pollution of Canada-United States international water resources for 75 years." 178

Article IV has been referred to in a number of instances. For example, the International Joint Commission in the Garrison Diversion Unit Plan Report stated that if the plan were to be implemented, it would violate article IV. 179 Notwithstanding article IV, pollution has occurred. To try to ameliorate the problem and balance conflicting interests, Canada and the United States entered into the Great Lakes Water Quality Agreement in 1972 which was subsequently amended in 1978. It does not abrogate article IV of the 1909 Treaty but rather supplements it.

It is not within the scope of this paper to discuss water quality. However, in terms of future options it is to be queried whether there is a sufficient meeting of the minds between Canada and the United States to negotiate and ratify a Great Lakes Water Quantity Agreement.

(iv) Hierarchy of Priorities

As has been addressed earlier in this paper, 180 there is no specific automatic preference given of one use over another in customary interna-

177 Boundary Waters Treaty, supra note 10, art. IV.
178 Bourne, supra note 56, at 486.
179 Id.
180 See supra text accompanying notes 64-90. Note that such a rule of automatic preference would not be feasible in practice. The issue, of necessity, must depend upon all the circumstances of the case.
tional law. Nevertheless, article VIII of the 1909 Boundary Waters Treaty, as emphasized, does fix an order of preference: uses that are for domestic and sanitary purposes; uses for navigation and uses for power and irrigation purposes. This list does not apply to or disturb uses existing in 1909. It has been argued that this article is outmoded in the 1980's. It does not reflect modern conceptions of environmental protection and is a handicap on the International Joint Commission when it is trying to function under articles III and IV. Customary international law here is more modern and relevant today. True as this is, it unfortunately will not be preferable to the present Canada-United States position which is governed by the Treaty. An amendment to the 1909 Treaty or an entirely new agreement is needed to bring the water quantity issue in the Great Lakes Basin into the 1980's and beyond into the next century. Should this be the plan of action, it is the view of this writer that stress should be put upon the customary international law rule of equitable utilization or participation.

D. Options For The Future

In the event of a proposed large scale diversion into or out of the Great Lakes Basin, what would be the options for Canada or the United States directly, or indirectly, for the group of United States Great Lakes States and the Province of Ontario? This basic question can be viewed from a number of perspectives and two scenarios can be visualized. First, the United States federal government proposes to divert water for the Great Lakes on a large scale to the western United States, and Canada objects. Secondly, Canada proposes to implement a Quebec project to divert water from James Bay and send its river-fed fresh water into the Great Lakes which will be used as a reservoir. Canada proposes to send this water on to the western provinces and states. Both of these scenario projects would cost a phenomenally huge amount of money. There would be definite practical problems in terms of geography, engineering, and economics as well as domestic and international politics. Both would cause major alterations to the ecological balance and could have long term environmental consequences, that are as yet still unknown.

1. Unilateral Action and Protest

(i) Transboundary Tributary Waters

As illustrated in the last section, article II of the Boundary Waters Treaty of 1909 allows for unilateral diversion of transboundary tributary

181 Cohen, supra note 142, at 225.
182 Bourne, supra note 142.
waters. The United States and Canada could use this provision concerning such waters. The article provides for entitlement to legal remedies for the "injured parties" as if the injury occurred in the diverting state. What does this mean for Canada? Could Canada seek such a remedy? The United States in the past has claimed that legal remedies in the diverting state are only open to "injured parties." Parties is written with a small "p," meaning private parties and does not refer to the states' parties to the Treaty who are designated "High Contracting Parties." On this basis the injured state is not to be limited to the redress provided in article 11.183

Canada has agreed, however, in the context of the Columbia River diversion, that as the legal remedies are available to the "injured parties" they are therefore restricted to private persons and a state party would have no remedy here, 184 or elsewhere. This line of reasoning would keep Canada effectively out of court in the United States.

The right to object to any interference with or diversions of waters on the other side of the boundary that would produce material injury to the navigation interests of the objecting state is preserved in the last paragraph of article II. Canada could object if any diversion or other use of the tributary transboundary waters produced or would produce "material injury" to Canadian navigation interests. This is a very weak response, it is submitted. The terms in which this recourse is concluded would not seem to be in the nature of an effective bar to United States unilateral action. 185 No guideline is given as to what is meant by "material." There is no obligation imposed upon the state against which the objection is levied to heed the objection. In 1909 Canada agreed to this watery compromise and is unfortunately bound by its strictures unless the Treaty is amended or terminated.

(ii) Boundary Waters

With respect to boundary waters, on the other hand, the United States could not divert out of, obstruct or otherwise use these waters, whether temporarily or permanently, where such would affect the natural level or flow on the other side of the line, unless it obtained the approval of the International Joint Commission. One writer has suggested that the legal problems of adding water rather than taking away have not been touched upon to any extent and that in the absence of consent the legal solutions in the absence of specific treaty provisions will lie in the

183 L. BLOOMFIELD & G. FITZGERALD, supra note 104, at 47.
184 Id. at 48. As the United States insisted in 1909 on this inclusion of the "Harmon Doctrine" it is surprising to see this overextension of the compromise struck.
185 O. PIPER, supra note 147, at 79.
The Boundary Waters Treaty of 1909 addresses the issue of flooding in article IV, and article III prohibits as indicated above that the unilateral raising of levels and flows within the consent of the International Joint Commission is prohibited. It goes no further than this but this writer is of the view that these provisions would cover the situation.

It should be noted that article III specifically excludes the necessity of obtaining the other state’s consent by the use of the word “or.” No such order concerning boundary waters shall be given “except by authority of the United States or the Dominion of Canada . . . .”187 It would seem unlikely that, should Canada object, the Commissioners could in reality sit as impartial adjudicators and not as government appointees. Should the three Canadian Commissioners object to the proposal then a stalemate would result. Under article VIII it would then be up to Canada and the United States to try to reach an agreement. If such an agreement is reached it would then be communicated to the Commissioners who would take further steps to see to the carrying out of the agreement.

There is the possibility that Canada and the United States could utilize the procedure laid down in article X, whereby any questions involving, inter alia, the rights, obligations or interests of the United States or Canada in relation to each other, may be referred to the International Joint Commission by the consent of the two states. The terms of reference will dictate the mode in which the International Joint Commission will operate. Under this article the International Joint Commission acts as an arbitral tribunal. This has yet to be utilized. The jurisdiction of the Commission is clearly not compulsory, the words of article X stating that “matters of difference . . . may be referred for decision . . . .” Reference is made by the United States by and with the consent of the Senate and on that part of Canada with the consent of the Senate and on the part of Canada with the consent of the Governor General in Council.

Article X is couched in stronger terms than article IX, which authorizes the Commission to examine and report upon the facts and circumstances of the particular question, together with conclusions and recommendations as seem appropriate, when a matter is referred to it by either of the states’ parties. Article X provides for a power to make a “decision” and not simply a report or recommendation. Here, however, the consent of both states is mandated.

In a referral for decision under article X, should the Commission be divided equally or is, for some other reason, not able to render a decision on the particular question or matter, the Commissioners are duty bound to make a joint report to both the Canadian and United States govern-

186 Bourne, supra note 56, at 484.
187 Boundary Waters Treaty, supra note 10, art. III.
ments, or, if this is not agreeable to the Commissioners, separate reports to their respective governments. This report or reports will indicate the different conclusions arrived at. Thereupon, the two states will refer the question or matter to an umpire chosen in accordance with article XLV, paragraphs 4, 5, and 6 of the Hague Convention for the Pacific Settlement of International Disputes of 1907. This umpire has the power to render a final decision with respect to the matters and questions referred upon which the Commissioners of the International Joint Commission failed to agree.

In theory this procedure outlined in article X would appear to offer a method for solving a dispute between Canada and the United States over water quantity questions in the Great Lakes Basin. However, both states must have the will to use this method and be bound in good faith by the final decision. The use of the Treaty provisions for investigative work and reporting on factual matters provided by article IX is one thing, but the use of the article X mechanism is another. It necessitates that the two states, having failed to settle a controversy by diplomatic negotiation, use an impartial arbiter. It remains to be seen whether the International Joint Commission and the umpire method is the route to take.

To date this role as arbiter has not been utilized. Still, as has been pointed out by two authors:

If the Commission does not, at the moment, appear to have any prospects of acting as an arbitral tribunal under article X, this should be a cause for rejoicing because it would mean that the other processes of consultation between Canada and the United States have functioned so well that no recourse to arbitration has been necessary.188

Only the next few years will tell whether these consultative processes will work in this acutely controversial and important area.

(iii) Conclusions on Unilateral Action

Clearly, the United States or Canada could act unilaterally and be within the terms of the Boundary Waters Treaty of 1909 if any interference or division relates solely to transboundary tributary waters. However, boundary waters are protected by the mechanisms of the Treaty needing the approval of the International Joint Commission. If approval is refused or a stalemate reached and the other state unilaterally goes ahead, this would violate the provisions of the Treaty and would result in state responsibility.189 Such a material breach would also terminate the Treaty if the other party so wished.190

188 L. BLOOMFIELD & G. FITZGERALD, supra note 104, at 61.
189 See supra text accompanying notes 16-43 for the principles of state responsibility.
190 See infra text accompanying notes 204-208.
2. Interpretation of the Boundary Waters Treaty of 1909

Article VIII of the Boundary Waters Treaty of 1909 provides that in cases under articles III and IV where approval of the International Joint Commission is required, the Commission in passing upon such cases shall be governed by rules or principles adopted by the parties. These rules, which are also contained in article VIII are as follows: first, the states have equal and similar rights in the use of boundary waters on their respective sides of the boundary; secondly, the Commission in making its consideration shall observe the following order of preference among the various uses of such boundary waters:

1. Uses for domestic and sanitary purposes,
2. Uses for navigation, including the service of canals for the purposes of navigation,
3. Uses for power and for irrigation purposes.

However, no use shall be permitted where it will materially conflict with or restrain any other use which is given preference over it in the aforementioned order of preference. The Commission has the discretion to make its approval conditional upon remedial or protective works being constructed to compensate as far as possible for the particular proposed use or diversion. It may require that suitable and adequate provision be made for indemnity and protection against injury. The Treaty clearly envisages in article VIII that the Commission may in fact authorize projects that cause damage to the other state party.¹⁹¹

Thus, in exercising its power to approve or disapprove of projects the Commission is bound to follow the regime laid down by the Treaty. However, the question that is apparent is whether in interpreting such words as "equal and similar rights" and "materially to conflict" the Commission could turn to customary international law or the general principles of law to aid it in reaching an interpretation.

A bilateral treaty is a treaty-contract and is a mode of creating special rights and obligations akin to a domestic law private contract. The parties are bound by the principle *pacta sunt servanda* to act in good faith. Treaties, whether bilateral or multilateral law-making treaties of general application, are nevertheless void if they conflict with a rule of custom that is part of the *jus cogens*. *Jus cogens* has been defined as consisting of preremptory norms of international law from which there can be no derogation. In the area of international environmental protection however, there is no argument to be made that the protection of water quality or quantity falls into this category. Therefore, it would be impossible to suggest that *jus cogens* encompasses a state's right to pre-

vent changes in water quantity. 192

(i) International Rules of Treaty Interpretation

According to article 31(1) of the Vienna Convention on the Law of Treaties of 1969, a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and also in the light of [the] object and purpose [of the treaty]. 193

Article 31 further provides:

2. The context for the purpose of the interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes:

(a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty;

3. There shall be taken into account, together with the context:

(a) any subsequent agreement between the parties regarding the interpretation of the treaty or application of its provisions;

(b) any subsequent practice of the treaty which establishes the agreement of the parties regarding its interpretation;

(c) any relevant rules of international law applicable in the relations between the parties.

4. A special meaning shall be given to a term if it is established that the parties so intend. 194

The International Court of Justice in the *Advisory Opinion on the Constitution of the Maritime Consultative Organization* 195 and the European Court of Human Rights in the *Golder case* 196 have reaffirmed the principle of interpretation according to the ordinary meaning rule. This is a codification of customary international law. As Starke comments: "The related rules concerning the intention of the parties proceed from the capital principle that it is to the intention of the parties at the time the instrument was concluded, and in particular the meaning attached by them to words and phrases at the time . . . ." 197 It is to be emphasized that the critical time for ascertaining such intention is the conclusion of the treaty. Starke argues further that "[i]n accordance with the principle of consistency, treaties should be interpreted in the light of existing inter-

192 The only areas where agreement has been shown as to what is encompassed by the *jus cogens* are: wars of aggression, acts of genocide, and other substantial infringements of human rights and fundamental freedoms.

193 Vienna Convention, *supra* note 20, art. 31, para. 1 at 691.

194 Id. para. 2-4 at 692.


197 J. STARKE, INTRODUCTION TO INTERNATIONAL LAW 456 (9th ed. 1984).
Can it therefore be argued that articles III and VIII of the Boundary Waters Treaty of 1909 must be interpreted as conforming to the customary international law rule of equitable utilization? It is submitted that in this regard article 31(3)(b) of the Vienna Convention on the Law of Treaties quoted above is instructive. It stipulates, inter alia, that any subsequent conduct of the parties to a treaty that establishes the agreement of the parties as to its interpretation shall be taken into account.

On this basis it is important to try and document the conduct of the United States and Canada since 1909. It was stated earlier in this paper that Canada had not supported the plenary jurisdiction approach in 1909. Canada’s preference lay in the adoption of the common law rules of absolute territorial integrity or riparian rights. As one author has commented: “Under that Rule, a state cannot lawfully utilize the waters of an international drainage basin in its territory if its doing so will cause injury in the territory of a co-basin unless that co-basin consents to the utilization.” This was in direct opposition to the United States “Harmon Doctrine.” Neither of these two viewpoints has been taken up by the international community and both have been decried. It is the doctrine of equitable utilization or participation that has prevailed internationally.

It has been suggested that the United States has proffered evidence by its conduct that it has “abandoned its adherence to the Harmon Doctrine and now accepts the doctrine of equitable utilization.” This evidence is to be gleaned from various statements made by United States officials over the years. However, as Bourne suggests, the statements do tend to be equivocal and do leave room for a certain amount of doubt. Likewise, Canada has never in an outright fashion espoused equitable participation but rather that “a state is under a legal obligation to take account of the interests of co-basin states and not heedlessly and unreasonably inflict serious injury upon them.”

In their relations over boundary waters since 1909, Canada and the United States have based their arguments and responses upon the 1909 Treaty and other relevant agreements binding upon them. They have not looked to customary international law. Nevertheless, in its statement of

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198 Id. at 457.
199 See supra text accompanying notes 97-99.
200 Bourne, supra note 56, at 474.
201 Id.
202 Id. See also Smith, THE ECONOMIC USES OF INTERNATIONAL RIVERS 8, 145-47 (1931); Bourne, supra note 56, at 475.
203 Bourne, supra note 56, at 475.
204 Id.
205 Id. at 476.
principles concerning the apportioning of benefits from the cooperative use of the Columbia River, the International Joint Commission began by stating that:

"[It] was guided by the basic concept that the principles recommended herein should result in an equitable sharing of the benefits attributable to their cooperative undertakings." 206

This statement certainly supports the argument that the Commission will interpret article VIII as being founded on equitable participation of both Canada and the United States. This would seem to indicate that the "equal and similar" rights of article VIII would be treatment as equal utilization or participation.

One problem remains: will the Commission, in interpreting article VIII, follow the order of preference laid down for the various uses? It was discussed earlier 207 that under article VI of the Helsinki Rules 208 there is no hierarchy of uses. Necessarily, priority of usage has to be flexible to operate successfully in a common drainage basin situation. It depends upon the individual facts and circumstances of the particular case.

In 1909 it was thought by both Canada and the United States that navigation should be given a priority status. Today, arguably, other utilizations have as much benefit to both sides of the border. In addition, article VIII is unclear in its overall meaning. Should Canada or the United States have in clear terms exercised their equal share of the waters could they still turn to the scheme of preferences and say that a further use should have priority over proposals from the other side? It has been suggested that in such a circumstance it would be the equal rights principle that would be dominant and the order of priorities should not be used to derogate from it. 209 It is hoped that in any case of potential conflict that this is the route of interpretation that the Commission would take.

It is evident that these priorities fixed seventy-six years ago are no longer appropriate in these last years of the twentieth century. As Maxwell Cohen has aptly stated: they do not include any statement that would reflect the modern environmental, recreational, quality-of-life, "Stockholm" kind of language, and there is nothing here about fisheries." 210

Bourne 211 argues, and this writer agrees, that the present state of

206 Columbia River Treaty, supra note 134.
207 See supra text accompanying notes 56-80.
208 See Helsinki Rules, supra note 58.
209 See Bourne, supra note 56, at 482.
210 Cohen, supra note 142, at 225.
211 Bourne, supra note 142.
order of priorities handicaps the Commission in the discharge of its responsibilities under articles III and IV of the Boundary Waters Treaty of 1909. The rules of customary international law would be more beneficial.

(ii) Termination of a Treaty

The termination of a treaty may take place in conformity with the provisions of the treaty, or at any time where there is the consent of all the parties after there has been consultation with the other states parties.212

Article XIV of the Boundary Waters Treaty of 1909 provides that the said treaty will remain in force for five years, dating from the exchange of ratifications, and thereafter until it is terminated by twelve months' written notice given by either High Contracting Party to the other.213 Thus, should the United States or Canada want to divert or otherwise interfere with the Great Lakes Basin boundary waters either without getting the approval of the International Joint Commission or having sought it, contravening its refusal to approve, or incapacity to approve, they could then withdraw from the Treaty relationship. To do so, written notice to the other party would have to be given twelve months in advance. Once withdrawn from the treaty relationship and commitment the parties will be bound to abide by the relevant rules of customary international law and the general principles of law.214 The withdrawing state would be bound by the earlier discussed customary rules of international law215 unless in the period of termination and project initiation it has demonstrated that it does not consider itself to be bound by any custom relating to equitable participation.216

If the case were to arise in which the United States unilaterally diverted water out of boundary waters in breach of the 1909 Treaty, this would entitle Canada to terminate the Treaty. If Canada was to unilaterally divert into the boundary waters, likewise the United States would be so entitled. Again there would be a reversion to the rules of customary international law not only as regards boundary waters but also trans-boundary tributary waters.

212 Vienna Convention, supra note 20, art. 54.
213 Boundary Waters Treaty, supra note 10, art. XIV.
214 The Treaty could also be suspended for a period of time agreed upon by the parties.
215 See supra text accompanying notes 56-80.
3. Peaceful Settlement of Canada-United States International Water Disputes

As water as a resource becomes of paramount importance to Canada and the United States, the strictures of the Boundary Waters Treaty of 1909 may become distasteful to both parties. To avoid confrontation what are the possible solutions?

(i) The International Joint Commission

The role of this body has already been addressed. However, it should be noted that in article XIII of the Boundary Waters Treaty of 1909 so-called “special agreements” are possible between the contracting parties. By entering into such, Canada and the United States could agree to a resolution of a potential conflict situation without recourse to the Commission. Article XIII provides further that these agreements need not be direct but also may occur when a mutual arrangement can be identified through concurrent or reciprocal legislation in both countries.217

(ii) Negotiation218

The primary means of settling disputes between states is the time honoured process of negotiation. Its importance cannot be overstressed in international conflict resolution. It is a means of direct contact between states. So common and pervasive is this procedure that those responsible for conflict management, statesmen, diplomats and other public servants involved tend to distrust any other means. It would be a hard task to calculate exactly what percentage of disputes are resolved by negotiation but it would include the vast majority. Today, negotiation as a mechanism of dispute settlement pervades every aspect of international law and it is the primary means of expression and contact between governments.

Despite its all-pervasive character, nothing is more difficult to describe than the negotiation process. It exists in so many contexts and for so many purposes that few generalizations by way of description give a clear picture. There is no precise form of negotiation. On the contrary, different states, different departments of the same government and above all different negotiators develop their own style. The personal element should not be underestimated. Where one negotiator fails another may do very well.

Negotiations are said to take place at different levels according to the people involved. The range is from summit conferences composed of

217 See Cohen, supra note 142.
218 This section is based on S. WILLIAMS & A. DE MESTRAL, supra note 11, at 281.
heads of state, to ministerial meetings, ambassadorial meetings, meetings of particular bureau diplomats and the most popular, working meetings of officials drawn from the respective departments of government having expertise in the particular area. In this latter case the negotiations are usually completed by the attendance of diplomats from the local embassy or envoys from the capitals. Negotiations can be formal or informal depending upon the state of the negotiations or the purpose and importance of the negotiations. Formal negotiations are conducted in a more structured manner and are usually completed by the issuance of a joint communique or by the signature of an understanding or a treaty.

Canada and the United States could certainly agree outside of any existing treaty relationship to divert water out of or into the Great Lakes Basin. Should this be done, the several Great Lakes States of the United States and the Province of Ontario would have no recourse absent any constitutional arguments existing at their respective constitutional levels. This type of negotiated “special agreement” would fall within the provisions of article XIII of the Boundary Waters Treaty of 1909.

(iii) Good Offices, Mediation, Conciliation, Fact-Finding, Notification, and Consultation.

These procedures are an adjunct to negotiation. To a lesser extent they are alternatives to arbitral or judicial settlement. They represent an added degree of formality and structure beyond the negotiating process.

(a) Good Offices

These are lent by a head of state or high international official such as the Secretary General of the United Nations to states involved in a dispute, where an offer is made of personal intervention or the provision of facilities to assist in the resolution of the dispute.

(b) Mediation

Where the parties either through a treaty provision or an ad hoc agreement seek a third party, a head of state or a statesman, or an international institution may be invited to mediate. Mediation can involve a variety of forms but usually involves meetings with the mediator and the disputing states parties in the country of either the mediator or the disputants. It is submitted that Canada and the United States are unlikely to follow this course.

(c) Conciliation

By conciliation is meant the process by which the parties to a dispute either agree in advance or by an ad hoc agreement to submit their difficulties directly to a third party in order to be assisted in reaching a solution. The decision, if the parties ask the conciliator to make one, can

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219 Id. at 282-85.
be similar to an arbitral award — with the major difference being that it is not binding on the parties. For this reason, conciliation is not a viable option here. It could go no further than the process of the International Joint Commission.

(d) Fact Finding

This process seeks to use a neutral procedure for fact finding which may be relevant to a dispute. Fact finding may be conducted on an ad hoc basis or may be provided for in an arbitral or judicial procedure such as article 66 of the Rules of Court of the International Court of Justice.220

In the instant case of boundary water disputes, however, we have one of the most renowned examples of the successful use of fact finding as a dispute avoidance method in the International Joint Commission. If the present scheme of dispute avoidance and dispute management techniques under this scheme is not successful in quantity issues, it is not suggested that we should turn to other bodies for this role.

(e) Notification221

This is more applicable to dispute avoidance then dispute settlement.

(f) Consultation, The Duty to Negotiate222

D. Arbitration

Arbitration provides an important means of adjudication of disputes in cases where states do not judge it appropriate to submit their dispute to adjudication by an already existing international tribunal.

Modern adjudication is said to have begun with the Jay Treaty of 1794 between the United States and Great Britain which established three “joint commissions” to resolve disputes concerning North America which had not been settled during the course of negotiations.223

During the nineteenth century, European states had increasing recourse to arbitration as a means of dispute settlement. Arbitration was used either on an ad hoc basis for a single dispute, or provided for in a final articles of bilateral or multilateral treaties in the event of future disputes. Some states such as the United States and Mexico set up permanent arbitral procedures for the settlement of claims against each other. This practice reached its apogee with the creation of the Permanent Court of International Arbitration under the 1899 and 1907 Hague Conventions on the Pacific Settlement of International Disputes. The Court, which exists to this day, is composed of panels of persons named by their

221 See supra text accompanying notes 113-122.
222 See supra text accompanying notes 123-139.
223 See J. STARKE, INTRODUCTION TO INTERNATIONAL LAW 516 (8th ed. 1977).
governments from which arbitrators can be chosen. Arbitration is an important element of the 1928 General Act and has continued throughout this century to be one of the most frequently chosen forms of binding dispute settlement to be included in the final articles of bilateral and multilateral treaties. Arbitration is even more important in settlement of private business disputes. Here there exist important arbitral procedures established by the International Chamber of Commerce, the American Arbitration Association, the All-Union Chamber of Commerce in Moscow and most recently by the United Nations Commission on International Trade Law.

Canada, during the period when the United Kingdom retained responsibility for its foreign affairs and subsequently, has been a party to a number of important arbitrations with the United States. Among these were the 1871 Treaty of Washington Arbitration concerning the Canada-United States boundary in the strait of Juan de Fuca; the Bering Sea Arbitration; the Alaska Boundary Arbitration of 1903; the 1909 North Atlantic Fisheries Arbitration; the Trail Smelter Arbitration to name but the most important.

The procedures of international arbitration do not differ from the basic elements of arbitral procedures existing in domestic legal systems. Unlike judicial procedures, arbitral procedures are chosen by the parties. They may choose an ad hoc basis or they may choose in advance. Even where they choose in advance, it is necessary to form the arbitral question or compromis for submission to the arbitrator. The arbitrator or panel of arbitration can be established in advance as with a permanent arbitral tribunal; usually they are to be drawn from a pre-existing list. It is common for both parties to name an arbitrator and then for their nominees to choose a president of the panel or "umpire." The rules of procedure may be determined in advance by the parties, by the arbitrators if they are allowed this discretion, or may already be established, as is the case with the Permanent Court of International Arbitration.

The fundamental difference between arbitration and conciliation is that the decision or "award" of the arbitrators is deemed to be binding upon the states parties to the arbitration. Failing fraud, duress or some fundamental error of fact or jurisdiction of the arbitrators, the parties are bound to respect the award by virtue of the original commitment to submit to arbitration.

Despite the existence of the International Court of Justice and a number of other dispute settlement procedures, arbitration continues to play an important role in interstate relations. It is thought to be quicker and cheaper than judicial settlement and arbitrators can be chosen either for their expert knowledge of a technical area or simply because the states in question, rightly or wrongly, believe they can trust them. The degree of control exercised by the parties to an arbitration as to timing
and procedure is an added advantage in the eyes of those responsible for the conduct of international relations. As long as statesmen and diplomats fear being "dragged into court," a situation which most regard as being tantamount to political defeat, arbitration will be a popular and useful alternative to judicial proceedings.

This procedure could be a viable option and it would go further than the present Commission mechanism by having the impartial umpire. This, however, would not be beyond that which is confirmed in article X of the 1909 Boundary Waters Treaty.

E. Judicial Settlement

Judicial settlement of international disputes is the most formal of the various methods to be studied. To the surprise of the domestic lawyer, judicial settlement is by no means the most widely employed dispute settlement procedure in international relations. On the contrary, the majority of states have never been parties to an international judicial proceeding and many in principle would refuse to do so if the occasion presented itself. This has led some jurists to conclude that international law lacks genuine sanctions. It is submitted that this conclusion does not flow from the restricted recourse to judicial settlement. First, many other means of dispute settlement exist at the present time, in particular, negotiation. Second, it can be plausibly argued that many disputes arising between states in the present international legal order, while they are subject to solution according to international law, are not necessarily susceptible of judicial settlement. The course of many disputes, especially those involving great political conflicts is not likely to be altered materially by the decision of a remote court of law. Third, the nature of judicial proceedings, the delays, costs and formality are seen, rightly or wrongly, as an obstacle by many states. Fourth, those responsible for the conduct of international relations at the political level regard recourse to judicial proceedings as a political defeat, necessary only when negotiations have failed; at the bureaucratic level, diplomats having the primary responsibility for the conduct of international relations, have a by no means unjustified professional preference for negotiation. Finally and most important, governments fear the absence of flexibility and loss of control inherent in submission to judicial procedures.

For these reasons, the number of disputes settled by judicial proceedings has been relatively small. However, the influence of these decisions have had a profound impact upon the development of international law in this century. Sometimes acting as a check upon expectations, sometimes advancing and formalizing important new rules of international law, the decisions of the Permanent Court of International Justice

224 Id. at 228-90.
and International Court of Justice constitute one of the most significant sources of international law today on such diverse issues as treaty law, the law of the sea, the status of international organizations, nationality and diplomatic protection. Another indication of the value of the judicial process is the very high degree of compliance with the decisions of international courts by states which have submitted disputes to them.

The present International Court of Justice is the direct successor of the Permanent Court of International Justice. Unlike the latter court, the International Court of Justice is an integral part of the United Nations system, being designated as the "principal judicial organ" of the United Nations. By virtue of the Charter, the International Court of Justice is open to all members of the United Nations and other states on conditions laid down by the General Assembly.\textsuperscript{225} According to the Statute of the International Court of Justice, a document annexed to the U.N. Charter, the Court is composed of fifteen "independent judges" qualified for the highest national judicial office. The judges are elected by the General Assembly and the Security Council,\textsuperscript{226} thus ensuring that political and geographical representation also enter into the selection process.

The jurisdiction of the Court is on a voluntary basis either as a result of ad hoc submission by two states of a single dispute or on the basis of general or qualified acceptances of the jurisdiction of the court. Canada was among those states qualifying their acceptance of a general submission to the jurisdiction of the Court. This was withdrawn in September 1985. However, once a United Nations member has agreed to submit to the jurisdiction of the court, it must comply with any decision in any case to which it is a party. The General Assembly or the Security Council may request advisory opinions from the court, as many other organs of the United Nations with the authorization of the General Assembly.

Proceedings before the Court are governed by the Statute and by the Rules of Court. The Court may constitute panels to hear specialized matters or to expedite business. It may appoint assessors to assist in deciding specialized issues and is authorized to "indicate" interim measures of protection where circumstances so warrant.

The recent United States declaration of April 6, 1984 regarding disputes concerning Central American states which is a further reservation to its acceptance of the compulsory jurisdiction of the International Court of Justice, would play no part here.

The original United States declaration of acceptance of the Court's jurisdiction includes a reservation which states that disputes are excluded which relate to matters that are essentially within the jurisdiction of the

\textsuperscript{225} U.N. CHARTER art. 4.
\textsuperscript{226} STATUTE OF THE I.C.J. art. 2.
United States of America as determined by that state. This has been further amended to include disputes of a political character. Clearly, it could be argued that this relates to pollution and by further extension to the water quantity issues being considered here. This exclusion could also be invoked by Canada on the basis of reciprocity.

Canada and the United States have gone recently to the International Court of Justice over the Gulf of Maine case. This would show a will to present the Court with a compromis and abide by the decision. Should this recourse be necessary and no other alternative present itself, there is no reason why it could not be utilized. From the enforcement point of view, much depends upon the will of the parties to comply with the decision. Even though the Security Council of the United Nations may be called upon to enforce the judgments, under article 94 of the United Nations Charter, this would be subject to the use of the veto power by the five permanent members.

F. The American Bar Association-Canadian Bar Association Proposal

In 1979, the ABA and CBA made a proposal that the two governments should ratify two treaties that would facilitate the settlement of disputes between them.\textsuperscript{227} To date they have not been ratified. The two treaties deal respectively with Equal Access and Remedy for Transfrontier Pollution and the Third Party Settlement of Disputes.

4. New Treaty Agreements

One option would be to amend the Boundary Waters Treaty of 1909 to provide for water quantity management on the basis of equitable participation and a compulsory adjudication process put in place to settle any conflicts. Another option is to produce a new treaty, perhaps entitled the Great Lakes Water Quantity Agreement. This new agreement, if ratified by Canada and the United States, could provide for the principles of water quantity management discussed earlier. Such an agreement could provide the framework for settling diversion and consumptive use issues.

No solution will be effective until both Canada and the United States give these issues the high priority that they deserve. Both water planning and control must be improved and a step in the right direction may be to set up a federal water authority in each country. These federal agencies could in turn assist in founding a joint Canada-United States management body for surveillance and mediation functions. It could initiate studies stressing regional and transboundary collaboration and es-

sentially under guidelines established by the two states develop a more systematic approach to the management of the Great Lakes Basin.

There are clearly reciprocal incentives for Canada and the United States to cooperate in this area. Both need the active assistance of the other to achieve good management objectives. If the Great Lakes are to be improved both states must work together for the common good. Nationalism must give way to the optimal utilization that is best in accord with the ecological considerations.

E. Conclusions

In any matter concerning two states the crux of the settlement of the dispute is the will of the parties to be reasonable in finding a solution agreeable to both sides. Enforcement is lacking in the traditional domestic law sense. The sharing of a common resource — water — is a precious task. It must be done with careful management. Canada and the United States have a responsibility, not just to one another as subjects of international law, but to Canadians, Americans and other members of the human race to protect the environment and to reduce to a minimum adverse effects of the utilization of a common indivisible resource.