The Columbia River Dispute

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The Columbia River is a source of conflict, not only between Canadians and Americans, but between conservationists, irrigators, power men, fishermen and town planners. It is not unique in this respect. All over the Continent the number of undeveloped rivers dwindles annually, and struggles grow fiercer for rights to exploit the remainder. On the Columbia, power is paramount. The rapid economic development of British Columbia, and the American Pacific Northwest, has underlined the necessity and complexity of formulating an efficient, acceptable plan for exploiting the Columbia power potential. The problems are immense: extensive hydrological and topographical data must be gathered and considered; formidable engineering difficulties must be overcome; decisions must be made on allocating water to such uses as domestic consumption, navigation, flood control, irrigation, and power. Yet physical problems, difficult as they may be, are dwarfed by those that involve competing political and economic interests.

The essay that follows focuses on four topics: the basin’s development possibilities; the regulatory machinery set up by Canada and the United States—the International Joint Commission; relevant municipal and international law; and, the significance of international law to ultimate solutions.

Physical Facts

The Columbia is the third largest river in North America. Both the Mississippi and the St. Lawrence discharge more water. The St. Lawrence, for example, discharges an average of 220 million acre feet

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per annum into the Atlantic, while the Columbia discharges an average of 180 million acre feet into the Pacific.\textsuperscript{2} One of the most important aspects of both river basins is hydroelectric power potential. In measuring potential, there are two significant factors: the volume of flow and the height through which the water descends. The St. Lawrence, from source to sea, drops 603 feet, whereas the Columbia drops 2652 feet. Canadian estimates of the installed capacity of the Columbia main stem indicate a potential of 34 million kilowatts, whereas the maximum potential of the St. Lawrence is approximately 7 million kilowatts.\textsuperscript{3} The Columbia's total power potential is at least 15\% of all potential water power in the world.\textsuperscript{4}

The river rises in Columbia Lake near the B.C.-Alberta border; it flows north and west towards the Arctic watershed until it is turned sharply south-west by a union of the Menashee, Selkirk and Rocky Mountain Ranges. From the Big Bend, its most northerly point of flow, it moves south, past the City of Revelstoke, through two flat-slope expansions known as the Arrow Lakes and, after being joined by two large tributaries—the Kootenay and the Pend Oreille—crosses into the State of Washington below Trail, B.C. From there, it flows through the interior of Washington, forms the border between Washington and Oregon and, ultimately, empties into the Pacific at Astoria, Oregon. Its principal tributaries in Canada are the Kootenay, the Pend Oreille, the Okanagan, the Kettle and the Flathead; in the United States, they are the Snake, Willamette, Comlitz, Spokane, Deschutes, Lewis, Yakima, Wenatchee, Chelan and John Day Rivers.\textsuperscript{5}

It has been calculated that geographically only 15\% of the basin is in Canada.\textsuperscript{6} But a substantial portion of the water has Canadian sources. Where it crosses the border, the Columbia carries an average of 62.4 million acre feet per year compared to a discharge at the mouth of 180 million acre feet. That is, over 30\% of the volume originates in Canada. There is a drop of 2650 feet between the source of the river and the sea level, and an elevation of some 1290 feet at the Canada-United States boundary. Thus, almost 50\% of the total potential power "head" is in Canada.\textsuperscript{7}

The chief reason for controversies over apportioning benefits of the basin is the recent expansion of industrial and domestic power

\textsuperscript{2} McNaughton, A. G. L., Statement before The Standing Committee on External Affairs, House of Commons, May 12, 1954, at p. 165.

\textsuperscript{3} Ibid., p. 166.


\textsuperscript{5} Jordan, Len, Statement before a Joint Hearing of the Committee on Interior and Insular Affairs and a special subcommittee of the Committee on Foreign Relations, U.S. Senate, Washington, 1956.

\textsuperscript{6} Neuberger, Richard L., Study of Development of Upper Colombia River Basin, Canada and The United States, Report to the Chairman of The Senate Committee of Interior and Insular Affairs, Washington, 1955.

\textsuperscript{7} See Bourne, op. cit., (footnote 4, ante), at p. 90.
consumption, and the certainty of future expansion. In the early years of the century, the main concern of the area developers was the utilization of the river for domestic supplies for frontier communities. There also was concern over the devastating effects of spring floods. Successful irrigation projects were undertaken that turned arid valleys into valuable fruit growing and agricultural areas. Reclamation and conservation of wild life were other problems. These matters still are the subject of study. But with American industrial expansions during the inter-war period, the overriding concern became the availability of hydroelectric power. The U.S. Pacific Northwest developed its most readily available power sites early. At-site power stations were built throughout the lower regions of the basin—Grand Coulee, Rock Island, McNary, John Day, the Dalles, Bonneville, and others. There was, however, a factor that limited these great “natural flow” power developments. The Columbia is an ice-melt river, and its flow fluctuates markedly from season to season and from year to year. In generating electricity, continuity of flow is essential. This means that maximum continuous flow (or minimum flow) sets the limits of hydroelectric production. The water in excess of the minimum flow is waste and will, unless captured and stored for later use, pass to the sea unused.

At first, the maximum continuous flow was sufficient to satisfy the needs of installed turbines and generators. But as demands for power grew, the need for greater continuous flow became evident. Cheap power based on natural flow largely had been exhausted and, to increase productivity by building additional installations, upstream storage had become essential. However, unhappily for the United States, two adverse conditions existed as she entered a period of chronic power shortage in the area. Both conditions, one physical and the other economic, still exist. First, because of the topography (deep, narrow gorges) of the Upper Columbia basin in Canada, virtually all valuable storage sites exist in British Columbia. Secondly, Canada needs her water resources for her own development. The Canadian West is now entering its greatest period of growth. It is estimated that between 1955 and 1975 power consumption in British Columbia will increase by 457%. Both British Columbia and the U.S. Pacific Northwest require cheap hydroelectric power.

Ultimate solutions to the dispute must cope with the basic question: How are power potentials of a river which flows through two states to be equitably apportioned? Power, as mentioned earlier, is the product of volume of flow and height of descent (or “head”). General McNaughton, Chairman of the Canadian section of the International Joint Commission, puts the apportionment problem graphically in this way:

If you take the United States side and you take the heads which belong to the U.S. in their territory and the flows which they can get by reason of the origin of tributaries and reservoirs that they create... it works out

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that roughly three-fifths of the total amount of power is exclusively in the
ownership of the United States. If you look at the same figures for Canada,
we have the headwaters of the river where the flows are smaller, you
find that about one-fifth of the total is ours. The [remaining] one-fifth
represents the flows that can only be caught by creating great works in
Canada controlling the stream in such a way that it is fed down as it is
wanted and used through the heads in the United States. Canada argues that because this additional power (approximately one-
fifth of the basin's total capacity) is created without cost to down-stream
generating plants, the resultant new power should be divided equitably
between the two countries. Because of American unwillingness to accept
this principle, Canada has begun studying the possibility of diverting
surplus flows from the Columbia basin into the Thompson-Fraser
system, wholly within Canada, with a view to developing the unutilized
one-fifth capacity unilaterally. The legal implications will be considered
below. It is now necessary to examine physical aspects of diversion
schemes in detail, and the principal storage plans contemplated.

Proposed Developments

On May 17, 1950, Congress authorized the construction of a dam
at Libby, Montana, under the Flood Control Act, 1950. On January
15, 1951, the State Department filed application with the International
Joint Commission for approval of the project. Located on the Kootenay
in Montana, the proposed dam would require the full flow of that river
from Canada to fill its 5 million acre-feet reservoir. In time, there
would be a flood back that would inundate 15,000 acres in British
Columbia. In the International Joint Commission, the Canadian Com-
missioners held that Canada was entitled to an allocation of power
proportional to the level increase at the boundary multiplied by the
whole flow of the Kootenay above the boundary. This would represent
more than one-third of the total at-site power to be generated at Libby.
The Canadian Commissioners were, however, unable to persuade their
American colleagues even to agree to discuss any recompense for this
use of Canadian resources. The result of the impass was the initiation
of a Canadian study on the possibility of a gigantic two-stage diversion
of the upper waters of the Columbia through an all-Canadian route
to the sea. General McNaughton said:

Now what did we do? We had from the United States this indication that
they were glad to take our water and give us nothing for it. We at once

10 See McNaughton, op. cit., (footnote 2, ante), at p. 166.
11 For complete chronology of the Libby application, see The Transcript of
Evidence of the Joint Hearings before the Committee on Interior and Insular
Affairs and a special subcommittee of The Committee on Foreign Relations,
United States Senate, 72nd Session, 84th Congress, March 22, 26, 28 and May 23,
1957, at p. 175.
12 I.J.C. Docket No. 65 and 69, summarized in The Activities of the Interna-
13 Jordan, op. cit., (footnote 5, ante), at p. 34.
14 McNaughton, op. cit., (footnote 2, ante), at p. 120.
15 See McNaughton, Statement before the Standing Committee on External
Affairs, House of Commons, March 9, 1955, at p. 34.
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turned the attention of our engineers on the possibility of the use of those waters in Canada. When the Kootenay is high, some of the water flows across Canal Flats into the Columbia so that by building a dam below that point we could get five thousand cubic feet per second on the average over the year out of the Kootenay and put it into the Columbia where at least we could have the benefit of nearly five hundred and seventy feet or more of head than we otherwise would. . . . I then invited our engineers in the study of the Mica reservoir to examine the Monashee Mountains from cellar to attic, so to speak . . . to ascertain if there was in fact any possibility of taking these waters through those mountains—or some portion of them—to use the two thousand odd feet of head in the Fraser Basin and so generate power and get some return.16

After studies were made by Canadian engineers, General McNaughton presented to the Commission three alternative development plans:

(a) A plan involving no diversion at all. This envisages that the Kootenay would continue to flow in a loop through Montana in Idaho, dropping 570 feet en route, and making possible the Libby project. Canadian waters from the Columbia would continue to flow into U.S. plants in unaltered quantity. Under this scheme, however, Canada proposed to build two large storage reservoirs north of the border: one at Mica Creek, near the Columbia's Big Ben, and one at Murphy Creek, just north of the B.C.-Idaho border. As a result of these installations, 14.5 million acre feet, stored for cyclical release, could provide a potential service to installed U.S. interests worth approximately fourteen billion kilowatt hours annually.

(b) A diversion of the Kootenay into the Columbia at Canal Flats. A reservoir at Bull River, north of the border on the Kootenay and south of Canal Flats, would impound five thousand cubic feet per second average annual flow on this river. The resulting reservoir, with ultimate capacity of 3.4 million acre feet, would inundate Canal Flats; its waters could be released down the Columbia through power plants at Luxor, Donald Canyon, Mica, Priest Rapids and Little Dalles, thence through the Arrow Lakes to the Murphy Creek power plant, and across the border into the Grand Coulee reservoir, Grand Coulee's existing requirements would still be supplied.17 There would, however, be considerable loss of power potential on the Kootenay in Montana and Idaho. The Libby development as presently planned would not be possible.

(c) A diversion of the Kootenay into the Columbia at Canal Flats, and of the Columbia into the Thompson-Fraser at Eagle Pass. Here, a tunnel would connect the Columbia, north of Revelstoke, with Shuswap Lake and the Fraser River system. By means of the tunnel, stored waters at Mica Creek and at the Luxor-Bull River reservoir would be diverted into the Fraser River system in a total amount of 15 million acre feet per year. This is the estimated flow required for planned hydro development on the Fraser.18 Under this plan, the storage of Mica and Bull River-Luxor could be utilized in Canada. The Fraser

16 McNaughton, op. cit., (footnote 2, ante), at p. 481.
18 See McNaughton, op. cit., (footnote 2, ante), at p. 471.
development would depend on the construction of sites and the diversion tunnel through the Monashee Range. If engineering studies now nearing completion establish the practicality of this scheme there could be a head of 2,000 feet available for power development. Because the Fraser is close to large coastal markets, transmission costs would be much lower than in the case of interior development on the Columbia main stem.

In 1954 a project for developing storage at Arrow Lakes seemed to be nearing realization. A site exists at Castlegar, at the south of the Lakes, which, in the opinion of the British Columbia Government and certain American interests, is suitable for a low storage dam. The dam would have raised the lake levels thirty-two feet, and stored 3.4 million acre feet of water for release to generate power downstream on the Columbia in Washington and Oregon. Arrow Lakes' storage at Murphy Creek was under consideration by the Canadian section of the International Joint Commission. The Castlegar dam would have rendered the Murphy Creek storage impossible. A draft agreement for engineering study at Castlegar was entered into by the British Columbia Government and the Kaiser Aluminum & Chemical Corporation in 1954. The Canadian Government and the International Joint Commission, Canadian section, feared that this ultimately would involve a further substantial and irretrievable commitment of Columbia waters to downstream American developers. Because of this danger, and because they believed that the Kaiser proposal contemplated less than full potential development of Arrow Lakes storage, Parliament enacted the International Rivers Improvement Act. Section 9 purportedly represents a declaration under sec. 92 (10) (c) of the British North America Act; the latter section gives Parliament exclusive jurisdiction over activities which otherwise would be within the competence of the Provincial Government. Under sec. 4, “No person shall construct, operate or maintain an international river improvement unless he holds a valid licence therefor issued under the Act.” The result is that the Federal Government has ensured that planning and development, whether within the International Joint Commission or at the diplomatic level, will not in future be jeopardized by rash local commitments. Federal agencies are now the exclusive bargaining agents for Canada. This ensures that adequate recompense for upstream storage will be exacted.

A 1954 proposal by the Puget Sound Utilities Council to the British Columbia Government, to construct the Mica Creek project also has been shelved. Although the terms of the proposal were less objectionable...
than the Kaiser scheme, it failed to include a comprehensive agreement on recompense for benefits of upstream storage, a condition precedent to Dominion endorsement.

The International Joint Commission

On March 9, 1944, Canada and the United States submitted to the International Joint Commission under Article IX of the Boundary Waters Treaty, 1909, a reference on the Columbia River system. Hence it is material to outline the context in which the Commission functions, its methods and successes in settling trans-boundary problems, and its role in the Columbia dispute.

Negotiating the Treaty: In the forty-nine years of its existence, the International Joint Commission has proved to be an effective means for settling certain types of disagreements between Canada and the United States. As a consequence, it has become, in the eyes of many observers of international affairs, a prototype of practical machinery to facilitate co-operation between neighbouring states. Prior to the signing of the treaty on January 11, 1909, there was no formal agreement between the United States and Great Britain on uses or diversions of boundary waters or rivers crossing the boundary. The first suggestion for creating the Commission dates back to two conferences on irrigation held at Denver and Albuquerque in the 1890's. At Denver, in 1894, a Canadian delegate introduced a resolution urging the United States to appoint:

An International Commission to act in conjunction with the authorities of Mexico and Canada in adjudicating the conflicting rights which have arisen, or may hereafter arise, on streams of an international character.

The resolution was unanimously adopted; it was adopted again at the Conference at Albuquerque in the following year. In 1896 the Government of Canada, through the British Ambassador at Washington, approached the American authorities on the recommendation. The United States Government was not then prepared to act. Two factors influenced the Commission's formation.

International problems had arisen over diversions from the Great Lakes. Under concurrent legislation by Congress and Parliament, a joint commission, known as the International Waterways Commission, was appointed in 1905 to investigate the problems. This Commission recommended, inter alia, that a permanent joint commission, with administrative powers to control the use of boundary waters, be established. One of its reports suggested principles to apply to such uses, recommended a treaty embodying the principles, and a Commission to

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23 See Neuberger, op. cit., (footnote 6, ante), at p. 11, where he points out that the Mica reservoir would have been developed to its maximum capacity and that the Puget Sound Utilities Council would have turned the project and its at-site power potential over to British Columbia.

24 House Committee on External Affairs, Minutes No. 1, March 1, March 9, 1955, Appendix 4, at p. 66.

enforce them. These recommendations were followed closely in the treaty of 1909.26

A second factor was the protracted dispute over water distributions of the St. Mary and Milk Rivers for irrigation purposes. An agreement between both governments had recommended joint control of distribution.27 There also were other diversion problems outstanding:28 (i) proposed diversions by the Minnesota Canal and Power Company of waters in the Birch Lake Basin in Minnesota which flow into Rainy River and Lake of the Woods; (ii) limitations upon diversions from Niagara Falls to preserve scenic beauty; and, (iii) construction by the Chicago Sanitary District of a drainage canal to tap Lake Michigan, by way of the Chicago River, to dilute and force sewage into the Des Plaines River. The more or less satisfactory resolutions of these questions are of no immediate interest.

With the exception of the proposed Milk River diversion in Canada, abandoned because of cost, the three major diversion problems at the time the Boundary Waters Treaty was negotiated, concern American attempts to divert waters within American territory and Canadian objections thereto.

The negotiations leading to the treaty were commenced on Canada's behalf by Mr. George T. Gibbons (later Sir George), then Chairman of the Canadian section of the International Waterways Commission, in a letter of April 6, 1906, to Mr. George Clinton, one of the U.S. Commissioners, on diversions of the Niagara. The American Secretary of State, Mr. Elihu Root, was anxious to achieve an overall settlement of outstanding disputes and, in response to Mr. Gibbons' letter, he appointed Mr. Chandler Anderson, a New York attorney, and Mr. Charles Walcott, the Director of the U.S. Geological Survey, to negotiate for the United States. During the discussions, Mr. Gibbons pressed for agreement on general principles which the body created by the treaty could use to settle disputes referred to it. Mr. Root was extremely reluctant to lay down such principles. Owing to his anxiety that the matter be settled quickly, Mr. Gibbons and Mr. Clinton were requested to submit a draft treaty.

Gibbons-Clinton Draft of the Treaty: The first draft was submitted to the United States and Canada in September, 1907. It used the expression "boundary waters" to cover Lakes Superior, Michigan, Huron (including Georgian Bay), St. Clair, Erie, and Ontario, the connecting and tributary waters of these lakes, the River St. Lawrence from its source to the ocean, the Columbia River, and all rivers and

28 For an excellent Study, see Simsarian, op. cit. (footnote 25, ante), who through permission of Mrs. Chandler P. Anderson, examined the private records of Mr. Anderson, one of the principal treaty draftsmen.
streams which cross the boundary line between Canada and the United States, and their tributaries.29

Anderson Draft of the Treaty: The Gibbons-Clinton draft was submitted by the Department of State to Chandler P. Anderson in October, 1907, for his comments. Mr. Anderson objected to having the term “boundary waters” include waters tributary to major bodies on the boundary and waters flowing across the boundary. He distinguished the latter from boundary waters on the basis of the Harmon doctrine.30 He pointed out that if tributary waters and trans-boundary waters were separated from boundary waters, the right of exclusive control over them would be lost, and Canadian consent would be required to American diversions of them. After conferring with Mr. Gibbons, the Canadian negotiator, Mr. Anderson compiled a new draft that differed from the Gibbons-Clinton draft. “Boundary waters” were defined in the Anderson draft as the waters from shore to shore of lakes, rivers and connecting waterways through which the international boundary passes, excluding the waters of rivers flowing across the boundary or tributary waters which in their natural channels flow into such lakes, rivers and waterways, or waters flowing from such lakes, rivers and waterways. It is ironic, in view of current disputes over the Columbia, that the eventual solution to the diversion deadlock should have been enunciated by State Department counsel. In his opinion, Mr. Anderson observed:

Taking everything into consideration, the only satisfactory solution to the difficulty seems to be to eliminate from the scope of this Treaty all those matters which lie wholly within the control of the respective Governments on their own side of the boundary line.31

The Canadian negotiators reluctantly concurred, and Article II of the Treaty was born.

Early Interpretations of the 1909 Treaty: After the signing of the Treaty, in 1909, the Senate Committee on Foreign Relations invited Secretary Root to appear before it. He pointed out that the first paragraph of Article II would substitute the decisions of municipal courts for prolonged diplomatic negotiations.32 He submitted to the Committee the memorandum prepared by Mr. Anderson. This memorandum contained the following provision:

(6) The right of action for damages provided for in Article II applies to private or individual interests in distinction from public or governmental interests. Any question on this point is set at rest by use of the words “injured parties”. Whenever the word party is used in the Treaty referring to the High Contracting Parties, a capital “P” is used, so that the absence of the

29 Because of Canadian criticism relating to the St. Lawrence, it was amended to include not the entire river but only the portion from its source to the 45th parallel.
30 See below.
31 This was based on the Harmon doctrine propounded in 1895 on the interpretation of Article VI of the Treaty of Guadalupe Hidalgo, 1848, (21 A.G. Op. 274). See below.
32 Quoted in Hearings before Sub-committee of Senate Committee on Foreign Relations, on Senate Resolution 278, 72 Congress, 2 Session, p. 1005.
capital in the use of the word in the plural indicates that it can refer only to individuals.

The purpose of this provision of Article II is to permit parties who are injured on the other side of the line to secure the same damages, as if the injury had been done within the same jurisdiction where the cause of the damage originated; but their claim is subject to the laws of the jurisdiction where the cause of the damage arises, and they must come into the courts of that jurisdiction and prove their case on exactly the same footing as if the property injured was within that jurisdiction.33

The following exposition of the effect of Article II was made by the Hon. W. Pugsley, Minister of Public Works, at the time the Treaty was tabled in the House of Commons:34

I may say that (Article II) is simply an affirmance (sic) of what has always been contended by the United States to be international law, and of what I do not think has been disputed by jurists of this country, that is to say, that so far as the waters which are wholly situate within the country are concerned that country may make a diversion of these waters and prevent them from flowing into the boundary waters. . . .

The United States has contended that it is a principle of international law. . . .

After referring to the right-to-redress paragraph in Article II, he continued:

Therefore, Hon. gentlemen will see that as to all future cases the citizens of either country are placed in exactly the same position as a riparian proprietor lower down the stream would be placed in regard to any diversion of water by a private riparian owner further up the stream by which his rights would be interfered with.

Whereupon the leader of the opposition, Mr. Borden, posed this question:

. . . Stripped of unnecessary words, the clause would read: It is agreed that any diversion from their natural channel of such waters shall entitle the injured parties to the same legal redress as if such injury took place in the country where the diversion occurred. . . . For example, suppose diversion takes place in the United States of waters in which the people of Alberta are interested. What are you going to do about that? . . . I understand the suggestion. A citizen of Alberta will go into the United States courts, I presume in Montana, and bring an action; but suppose the diversion has been authorized by a statute of the United States?

Mr. Pugsley replied:

. . . It would be the duty of both countries to make provision for the payment of any damages.

Mr. Borden protested:

. . . There is nothing in the Treaty to that effect. . . . (The United States) can pass such a statute as I have alluded to without apparently infringing the terms of this Treaty. . . . Then the citizen would not have the same rights as he would have if the diversion had taken place in Alberta. . . .

Mr. Pugsley summed up the result of this portion of the Treaty:

. . . The result might be to deprive a Canadian living lower down the stream upon the Canadian side of the boundary of water which would be very necessary for the purpose of irrigation. Before this Treaty, that could be done and he could not say a word, but under this Treaty he can complain through this government, I take it, to the authorities of the United States. . . .

33 Quoted by Len Jordan, Chairman United States Section International Joint Commission, in testimony before Senate Committees on Interior and Insular Affairs and Foreign Relations, March 22, 1956.

During the debate, Mr. Borden insisted that the true rule of international law was not that enunciated by U.S. Attorney-General Harmon; and it would seem that current international jurisprudence vindicates his analysis. So forcefully had this position been pressed by the United States that Sir George Gibbons, one of the Treaty draftsmen, stated, as late as 1916, that:

Before the adoption of this treaty there was no rule of International Law which called upon any nation to recognize riparian rights outside of its own territory. Every nation had a perfect right, as long as it did not interfere with public rights of navigation, to divert the waters of boundary streams without regard to the injury inflicted upon private interests beyond the boundary line.  

The U.S. Senate ratified the Treaty on March 3, 1909, and on May 5, 1910, ratifications were exchanged at Washington.

Clauses of the Treaty: The preliminary article defines boundary waters as: "the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers and waterways, or the waters of rivers flowing across the boundary". Obviously, the Columbia, being a river that flows across the boundary, is not a "boundary water".

Since interpretations of Article II by draftsmen and modern lawyers are dealt with below, it is sufficient here to point out that the article does apply to the Columbia.

Article III provides that, apart from special agreement,

... no further or other uses or obstructions or diversions, whether temporary or permanent, of boundary waters on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority of the United States or the Dominion of Canada within their respective jurisdictions and with the approval, as hereinafter provided, of a joint commission, to be known as the International Joint Commission. ...

Similarly, Article IV provides that apart from special agreement, the two countries

... will not permit the construction or maintenance on their respective sides of the boundary of any remedial or protective works or any dams, or other obstructions in waters flowing from boundary waters or in waters at a lower level than the boundary in rivers flowing across the boundary, the effect of which is to raise the natural level of waters on the other side of the boundary unless the construction or maintenance thereof is approved by the aforesaid International Joint Commission.

It is because of Article IV that the United States was obliged to seek the Commission's approval of its proposed dam at Libby.

35 Papers relating to the Work of the International Joint Commission, Ottawa, 1929, at p. 12.
36 For an article-by-article discussion by the present Chairman of the Canadian Section, see Proceedings before the Standing Committee on External Affairs, Minutes No. 2, March 10, 1955, House of Commons, Second Session, pages 76 to 81; for Canada's implementing legislation see (1911) 1-2 Geo. V. 28, amended (1914) 4-5 Geo. V., c. 5.
When Articles III and IV are read together, it is seen that all constructions altering the level of boundary or transboundary waters must receive the Commission's approval, except the one category into which the proposed Columbia diversions fall, i.e., upstream constructions diminishing the level of transboundary rivers at the border. This significant omission dovetails with the provision in Article II that each country reserves exclusive jurisdiction and control over the use and diversion of all waters on its own side of the boundary which flow across the boundary.

The Commission is established by Article VII, and Article VIII provides principles by which it is to be guided in passing upon questions requiring its approval under Articles III and IV:

The High Contracting Parties shall have, each on its own side of the boundary, equal and similar rights in the use of waters hereinbefore defined as boundary waters.

The following order of precedence shall be observed among the various uses enumerated hereinafter for these waters, and no use shall be permitted which tends materially to conflict with or restrain any other use which is given preference over it in this order of precedence:

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.

The foregoing provisions shall not apply to or disturb any existing uses of boundary waters on either side of the boundary. Since neither use (1) or use (2) will be affected by the proposed developments, the scheme of precedence is not applicable even if it could be argued that an analogy should be made to the approval required under Articles III and IV.

In addition to its compulsory jurisdiction in granting or refusing approval for projects under Articles III and IV, the Commission has a voluntary jurisdiction under Articles IX and X:

IX . . . questions or matters of difference arising between them involving the rights, obligations, or interests of either in relation to the other or to the inhabitants of the other, along the common frontier between the United States and the Dominion of Canada, shall be referred from time to time to the International Joint Commission for examination and report, whenever either the Government of the United States or the Government of the Dominion of Canada shall request that such questions or matters of difference be so referred.

X . . . Any questions or matters of difference arising between the High Contracting Parties involving the rights, obligations, or interests of the United States or of the Dominion of Canada either in relation to each other or to their respective inhabitants, may be referred for decision to the International Joint Commission by the consent of the two Parties. . . .

The reference of March, 1944, placing the Columbia question within the Commission's jurisdiction, was a reference under Article IX.

How does the Commission reach a decision, and what is the effect of its decision in the case of: (a) an application for approval under

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37 The Commission has acquired jurisdiction in the Columbia controversy only by virtue of the reference under Article IX.

38 It is fair to say that the last paragraph quoted above applies solely to uses existing on January 11, 1909.
Article III or IV; (b) a reference under Article IX; and (c) a reference under Article X?

(a) An application under Article III or IV:
The majority of the Commissioners shall have power to render a decision. In case the Commission is evenly divided upon any question or matter presented to it for decision, separate reports shall be made by the Commissioners, on each side to their own Government. The High Contracting Parties shall thereupon endeavour to agree upon an adjustment of the question or matter of difference, and if an agreement is reached between them, it shall be reduced to writing in the form of a protocol, and shall be communicated to the Commissioners, who shall take such further proceedings as may be necessary to carry out such agreement.

In short, the decision is final and without appeal but, if the Commissioners are unable to agree, resort is had to normal diplomatic negotiations.

(b) Reference under Article IX:
The International Joint Commission is authorized in each case so referred to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

Such reports of the Commission shall not be regarded 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.

The Commission shall make a joint report to both Governments in all cases in which all or a majority of the Commissioners agree, and in case of disagreements the minority may make a joint report to both Governments or separate reports to their respective Governments.

In case the Commission is evenly divided upon any question or matter referred to it for report, separate reports shall be by the Commissioners on each side to their own Government.

In short, under such a reference the Commission has no authority to decide anything; it merely investigates, studies and reports.

(c) Reference under Article X:
In each case so referred, the said Commission is authorized to examine into and report upon the facts and circumstances of the particular questions and matters referred, together with such conclusions and recommendations as may be appropriate, subject, however, to any restrictions or exceptions which may be imposed with respect thereto by the terms of the reference.

A majority of the said Commission shall have power to render a decision or finding upon any of the questions or matters so referred.

If the said Commission is equally divided or otherwise unable to render a decision or finding as to any questions or matters so referred, it shall be the duty of the Commissioners to make a joint report to both Governments, or separate reports to their respective Governments, showing the different conclusions arrived at with regard to the matters or questions so referred, which questions or matters shall thereupon be referred for decision by the High Contracting Parties to an umpire chosen in accordance with the procedure prescribed in the fourth, fifth, and sixth paragraphs of Article XIV of the Hague Convention for the Pacific settlement of international disputes, dated October 18, 1907. Such a umpire shall have power to render a final decision with respect to those matters and questions so referred on which the Commission failed to agree.

The Commission's authority under Article X is similar to that under Articles III and IV in that its decision is final. Unlike cases on applications for approval, where the Commissioners are equally divided, and unable to reach a decision, the question is not returned to nego-
The arbitrator's decision is referred to an arbitrator for final decision. Perhaps this explains why there has never been a reference under Article X.

Although the treaty provides for cancellation, it is unlikely that the United States would take this step merely to avoid the consequences of Article II in the Columbia controversy. On the other hand, the threat to cancel could be used to avoid enforcement of strict Treaty rights. Provision was made for settlements of the power diversions at Niagara Falls and the irrigation diversions on the St. Mary's and Milk Rivers.

Aspects of the Commission's Work

Between 1909 and 1956, the Commission received jurisdiction as follows: 17 applications for approval under Article III (the last of which related to the St. Lawrence Seaway); 14 applications for approval under Article IV (the last of which concerned Libby Dam); 2 series of hearings under Article VI (relating to apportionment of the waters of the St. Mary and Milk Rivers); 17 references under Article IX (including the Columbia River reference); 1 reference under the 1950 Niagara treaty; no reference under Article X.

It has dealt chiefly with the following matters: (a) applications for approval of dams for power, flood control, reclamation, or irrigation purposes, which involve flood-backs across the border; (b) applications for approval of power dams and navigation works on boundary waters, particularly the Great Lakes system; (c) investigations of lake levels; (d) investigations of water and air pollutions and, (e) applications for approval of minor works, location of log booms in transboundary rivers, small appropriations of water, dredging works, etc.

All decisions which the Commission has delivered have been unanimous, with two exceptions. Under Article VI, the Commission was charged with apportioning the waters of the St. Mary and Milk Rivers for irrigation on both sides of the border. In 1921 it delivered its order and subsidiary recommendations. In 1927 the U.S. Government requested that the matter be reopened. The Commission divided equally on national lines on the question of reopening, and separate reports were sent to each Government in 1932. Under Article IX, the Commission was requested to report on the water requirements, further uses and apportionments, of the Waterton and Belly Rivers. The two sections were unable to agree upon recommendations, and separate reports were sent to the Governments in 1955. Both breakdowns exhibited these characteristics: they concerned transboundary rivers in regions where the premium on water is high; they dealt with apportion-

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39 This is the treaty's only vestige of the popular nineteenth century provision for the appointment of an arbitrator to render final decision.
40 Article V. These provisions have been altered by Canada Treaty Series, 1950, No. 3.
41 Article VI. See also speeches of C. A. Magrath, later Chairman of the Canadian section, House of Commons Debates, Session 1910-11, pp. 9102-9123.
ment of waters, and the major uses involved were consumptive uses which would not permit the return of the waters to their natural channels. The similarity of these cases to the Columbia problem (in particular the diversion aspect) suggests that the Commission may not be able to resolve competing claims.

The Commission has had considerable success in resolving the claims of downstream dam builders and upstream landowners whose property is flooded. This problem usually concerns the adequacy of compensation, and is susceptible of solution by the application of municipal laws of expropriation. A number of “flood-back” projects have been approved on the Columbia-Kootenay system. One of the most closely negotiated was the power dam at Corra Linn, which would have backed up the waters of the Kootenay across the border into Idaho. The Canadian application was made in 1941, and the proposed dam received approval shortly thereafter but was the subject of subsequent supplementary orders, the last of which expired in April, 1954. Three reclamation dams have since been approved for the same portion of the Kootenay River between Kootenay Lake and the Idaho border, all with little controversy. Canada also applied for, and received approval of, a power dam at Waneta on the Pend Oreille River. In assessing American comments upon this decision as a precedent, it must be borne in mind that the dam resulted in the flooding of 3 acres in the State of Washington. The enormous power and irrigation dam planned by the United States at Grand Coulee on the main stem of the Columbia received approval in 1941, and compensation satisfactory to Canadian interests was provided. The Commission’s order provided for the establishment of the International Columbia River Board of Control as a permanent body to supervise the storage and flooding at Grand Coulee. This Board may be given further responsibilities under a settlement of the Columbia controversy.

An unusual solution was achieved when Seattle sought to raise the level of the Skagit River. This involved flooding 5,475 acres in British Columbia. Approval was given in 1942, subject to agreement between Seattle and British Columbia on compensation. Temporary agreement on a yearly basis was reached in June, 1954, and the water was raised. The agreement was extended to March 31, 1956. But such a piecemeal solution is difficult to apply when an upstream country agrees to construct storage installations in return for compensation from the downstream country. Once the upstream country regulates flow to generate downstream power, it may find it impossible to divert the waters to another watershed in the event that agreement cannot be reached on compensation. On the other hand, it is always open to the upstream

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43 I.J.C. Dockets Nos. 27, 39, 43, 47 and 59.
44 I.J.C. Dockets Nos. 23, 29, 30, 34, 48, 62 and 70.
45 I.J.C. Docket No. 66.
46 I.J.C. Docket No. 44.
47 I.J.C. Docket No. 46.
country in a floodback situation, such as Grand Coulee, to require removal of the waters in the event of failure to agree on compensation.

Only one application under Article IV has been refused. But the latest American application has been held in abeyance pending determination of the Columbia question. In January, 1951, the State Department filed an application for approval of a dam at Libby, Montana, with a capacity of 5,985,000 acre feet, which would inundate the Kootenay Valley for 42 miles (17,500 acres) north of the Canadian border. Because of objections by conservationists, the application was withdrawn from the Commission in April, 1953. A new application, amended to overcome the objections, was submitted in May, 1954. Both the Canadian Government and the Government of British Columbia filed Statements in Response stating that they were not able either to consent to or oppose the granting of approval until additional research showed whether more advantageous use could be made of the Kootenay waters. They indicated that approval was being withheld until the possibility of a Kootenay diversion at Canal Flats was fully explored. When, at the time of the first application, the Canadian Commissioners suggested that, in addition to paying damages for flooding, the United States should make recompense for the utilization of the head and flow resources of the Canadian waters in the Kootenay, the American Commissioners refused to discuss the subject. In the American Statement of Reply to the Canadian Statements in Response relating to the second application, the American position was more conciliatory:

The Government of the United States is prepared to consider equitable recompense to Canada, through the sale of power or otherwise, for the value which the Canadian natural resources would have for the production of power taking into account the extent to which the project will result in compensatory benefits in Canada.

The Commission has been quite successful in negotiating agreements on joint undertakings upon boundary waters which result in equal benefits through shared costs, e.g., diversions at Niagara Falls for power purposes, construction of a dam in the St. Mary's River at the outlet from Lake Superior, regulation of lake levels, and the development of power and seaway projects on the St. Lawrence River. It has also done excellent work of an investigatory nature, e.g., studies on pollution of boundary waters, reports on costs of major engineering studies, and a study of air pollution.

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49 I.J.C. Docket No. 31.
49 I.J.C. Dockets Nos. 65 and 69.
50 I.J.C. Docket No. 69.
51 See testimony of McNaughton before House Committee on External Affairs, Minutes No. 1, March 9, 1955, at p. 33.
52 See testimony of McNaughton before House Committee on External Affairs, Minutes No. 7, May 12, 1954, at p. 170.
53 Statement in Reply, I.J.C. Docket No. 69.
54 I.J.C. Docket No. 64.
55 I.J.C. Dockets Nos. 6 and 8.
56 See, for examples, I.J.C. Dockets Nos. 3, 6, 3, 20, and 67.
57 I.J.C. Dockets Nos. 17 and 68.
58 I.J.C. Dockets Nos. 4, 53, and 55.
59 I.J.C. Docket No. 60.
60 I.J.C. Docket No. 61.
The Commission's least successful work relates to rivers crossing the boundary, particularly diversions. There have been seven of these, including the Columbia reference: two have resulted in splits in the Commission and separate reports to the Governments; 61 two have been satisfactorily settled; 62 three are still in progress. 63 The two settled questions were not difficult. In 1949, the United States proposed that the waters of the Pine River in Manitoba be diverted slightly so as to cross the border five miles further west to irrigate a wildfowl refuge on the American side. 64 In effect, this was an American diversion which could be more advantageously effected north of the border: the unusual situation of an upstream diversion at the downstream request. The waters remained within the same watershed. The Commission recommended approval, which was given in 1950. The second diversion concerned a small-scale private dispute. 65

The three references still officially in progress are the Souris River reference, 66 the Columbia River reference, 67 and the Souris-Red Rivers reference. 68 The Souris River reference in 1940 requested the Commission to study the use and flow of the river and its tributaries, and to recommend apportionments. The Commission was only able to recommend interim measures that allowed the continued use of established appropriations and other small uses, all to be supervised by an International Souris River Board of Control. Interim orders were made in 1941, 1942 and 1943. Two approvals of small appropriations were granted in 1949 and 1956. Three applications are presently being held in abeyance pending further investigation. In 1948 a further, partially-related reference, the Souris-Red Rivers reference, requested the Commission to conduct a study of the uses and apportionments of waters of the transboundary rivers between the Lake of the Woods watershed and the eastern boundary of the Milk River basin, and to make recommendations. The study is being pursued.

Chronology of the Columbia River Reference: The Commerce Committee of the U.S. Senate passed a resolution in 1943 directing the Corps of Engineers, in co-operation with other interested federal and state agencies, to review reports on the Columbia "with a view to determining whether any modification of existing projects or recommended comprehensive plans of improvement should be made at this time." 69

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61 The St. Mary and Milk Rivers; the Waterton-Belly controversy; see above.
62 I.J.C. Dockets Nos. 26 and 54.
63 The Souris River reference (I.J.C. Docket No. 41); the Columbia River reference (I.J.C. Docket No. 51); and the Souris-Red Rivers reference (I.J.C. Docket No. 58).
64 I.J.C. Docket No. 26.
65 I.J.C. Docket No. 54.
66 I.J.C. Docket No. 41.
67 I.J.C. Docket No. 51.
68 I.J.C. Docket No. 58.
69 September 24, 1943.
It was apparent that a comprehensive study of the basin must include the Canadian portion of the river, and that the study would have to be undertaken by an international authority rather than the Corps of Engineers. Accordingly, the U.S. Secretary of State commenced negotiations to settle the terms of a reference to the International Joint Commission. In March, 1944, the reference was forwarded by both Governments to the Commission. The work under the reference has been prosecuted by the Commission and its International Columbia River Engineering Board, composed of two Canadian members and two United States members. The Board was created by the Commission to direct the essential engineering studies.

The American portion of the Columbia had already been the subject of considerable research. At the time of the 1944 reference, the Bonneville Dam had been in operation for six years and Grand Coulee for three. As early as 1925, Congress had requested the Army Engineers to conduct a study of the Columbia; this was presented to Congress in 1922 as House Document 103. The International Columbia River Engineering Board used much of this research. The Canadian portion of the Columbia, however, was largely unexamined\(^7^0\) and a major engineering study had to be undertaken. Meanwhile, the American study under the 1943 Senate Resolution was presented to the Senate in 1950 in House Document 531.\(^7^1\)

The difference of views on rights in, and uses of, transboundary rivers, particularly the Columbia, which obtained in the Commission, and eventually became irreconcilable, was apparent early. In 1945, certain Canadian agencies constructed a small irrigation system at the Cawston Benches on the Similkameen River, diverting a mere 5,000 acre feet of water. Downstream interests in Washington objected to this diversion of a tributary of the Okanagan River, and the matter was included in the Commission's discussions under the Columbia reference. Minor revisions of the diverters' licences under the B.C. Water Act enabled the irrigation to proceed without injury to downstream interests. However, during the investigations, the United States interests asserted that they had acquired "vested rights" in the waters of the Similkameen which, in total, far exceeded the flow of the river in the irrigation season.\(^7^2\) On the other hand, when the Canadian section later forwarded its Columbia proposal that United States interests should, apart from the cost of storage installations on the upper Columbia, make a payment to Canadian interests for the use of Canadian natural resources, the American Commissioners refused to discuss the subject. Thus, within the Commission, positions were taken which ultimately became entrenched. During the formal discussions of the Libby

\(^7^0\) See testimony of McNaughton before House Committee on External Affairs, Minutes No. 1, March 9, 1955, at pp. 35-36.

\(^7^1\) It was on the basis of this Report that the U.S. Corps of Engineers prepared the plans which resulted in the Libby Dam applications of 1951 and 1954. See above.

\(^7^2\) See McNaughton, op. cit., (footnote 70, ante), at pp. 45-46.
Application in 1954, the United States indicated that it was prepared to take "a favourable attitude towards provision of equitable recompense to Canada, through sale of power or otherwise, for the value which Canadian natural resources would have" but subsequent explanations in the I.J.C. made it clear that recompense was to be based upon the natural flow of the Kootenay only.

This unsatisfactory stand led the Canadian section to study the possibility of diversions on the Kootenay and Columbia which would appropriate excess waters to the all-Canadian watershed of the Thompson-Fraser basin. Strenuous objection was taken by the Chairman of the American section, Len Jordan, former Governor of the State of Idaho. In the interim, however, partly as a result of the report of Senator Richard Neuberger to the Senate Committee on Interior and Insular Affairs, Mr. Jordan was replaced as American Chairman by Douglas Mackay, former Governor of Oregon. Subsequently, increasing interest in Canada's contentions have been shown by the Americans. At the semi-annual meeting of the Commission on October 4, 1956, it was agreed that Canadian diversion studies, at least on the Canal Flats diversion, should be included in the investigations of the International Columbia River Engineering Board. Diplomatic negotiations were begun late in 1956 and have continued to date. As a result, the I.J.C.'s role has changed to that of technical adviser.

The Harmon Doctrine

The position of the United States at the time the 1909 Treaty was signed conflicts dramatically with its present stand. In 1895, a case arose between Mexico and the United States in which the latter's right to divert the Rio Grande was in issue. The land around El Paso, on the Mexican side, depended for its fertility on waters from the Rio Grande. In American territory, a vast irrigation project, developed by diverting part of the river, rendered arid large sections of Mexico. Mexico alleged that this constituted a violation of international law. The question was submitted to the U.S. Attorney-General for his opinion. He advised that:

The fundamental principle of international law is the absolute sovereignty of every nation as against others within its own territory. Of the nature and scope of sovereignty with respect to judicial jurisdiction, which is one of the elements, Chief Justice Marshall said in Schooner Exchange v. McFadden, 7 Cranch, 136: "The jurisdiction of a 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

73 See (1955), 33 Department of State Bulletin, at p. 980 ff.
74 Joint Hearings before the Committee on Interior and Insular Affairs and a Special Sub-Committee of the Committee on Foreign Relations, U.S. Senate, 84th Congress, 2nd Session, March 22, 26, 28 and May 23, 1956, Washington, 1956.
75 See McNaughton before House Committee on External Affairs, Minutes No. 6, Dec. 12, 1957, at p. 249.
76 Ibid., p. 250.
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 to the consent of a nation. They can flow from no other legitimate source. It would be entirely useless to multiply authorities. So strongly is the principle of general and absolute sovereignty maintained, that it has been asserted by high authority that admitted international servitudes cease when they conflict with the necessities of the servient state (Bluntschli, p. 212; see criticism by Creasy p. 258).

The immediate as well as the possible consequences of the right asserted by Mexico show that its recognition is entirely inconsistent with the sovereignty of the United States over its national domain. Apart from the sum demanded by way of indemnity for the past, the claim involves not only the arrest of further settlement and development of large regions of country, but the abandonment in great measure at least of what had already been accomplished.77

This was the official American view at the beginning of the 20th century. In 1909, the concept of utilizing river basins for power purposes was in its infancy. Navigation was a more important use. Canada primarily was concerned with providing remedies for injured downstream parties because in most material cases she was threatened by injury from upstream development. In this ironically inverted bargaining position, the Laurier Government argued that it had gained a sizeable concession by ensuring, in Article II, the right of injured downstream parties to seek compensation in the courts of the forum where the interferences occurred. Equally ironic, in view of Canada’s present position in the Columbia question, was the opposition expressed by the Conservative Party. It argued that Canada had sold out to the Americans; that Article II embodied a principle which was contrary to international law. The leader of the opposition, Mr. Borden, quoted from Oppenheim to the effect that:

A state is, in spite of its territorial supremacy, not allowed to alter the natural condition of its own territory to the disadvantage of a neighbouring state; for instance, to stop or divert the flow of a river which runs from its own territory to a neighbouring territory.

He continued:

But what is the position of the government? It is that we were absolutely within the power of the United States because the United States were capable of authorizing within their own territory the erection of a work which would divert that river. We were, I submit, entitled to have our rights determined according to the principles of international law and I deny absolutely that we were in the power of the United States. . . . I have no hesitation in coming to the conclusion that it is not an disadvantageous treaty to Canada.78

The historical irony of the party positions is of more than passing interest: the U.S. Government, committed to a stand based on the belief that national interest could best be served by retaining all rights to utilize waters flowing through her own territory, unsuspectingly acknowledged the same rights to Canada; the Liberal Government reluctantly accepted the American position, and was satisfied with having extracted a provision for compensation if injuries occurred; the Con-

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servative Opposition deplored the government's stand in accepting the American view.

The importance of the above is that it establishes the intention of the parties to Article II. In effect, the article was a codification of America's view of the right to divert, with the added clause on redress. But circumstances have changed respecting the Columbia. Canada no longer is the downstream state. Thus Laurier's words in 1909 become almost prophetic:

In this case whether we liked it or did not like it the United States had taken the position that international law provides that except in matters of navigation the upper power has the right to use the water within its own territory as it thinks best. What were we to do? They might do so, and if they did so they might do it to our injury and we had no recourse whatever. Was it not wiser then under such circumstances to say very well if you insist upon that interpretation you will agree to the proposition that if you do use your powers in that way you should be liable to damages to the party who suffers. At the same time we shall have the same power on our side and if we chose to divert a stream flowing into your territory you shall have no right to complain and you shall not call upon us not to do what you do yourselves. The law shall be mutual for both parties and both parties shall be liable to damages.79

The Harmon doctrine, invoked by the Americans in their disputes with Mexico, and embodied in Article II of the 1909 Treaty, also was relied upon by the U.S. in a dispute over the Allegash River in Maine.80 The Allegash flows from the State of Maine into the St. John River, which forms the boundary between the two countries. Downstream, the St. John is wholly within Canada, so the waters of the Allegash in their natural state flow into Canadian waters. In the 1860's the Maine Legislature authorized the construction of a dam which diverted the waters into the Penobscot, which empties into the sea at Bangor, Maine. As a result, lumbermen sent their logs down the Penobscot, thereby depriving Canadians on the St. John banks of valuable timber processing and manufacturing trades. The Canadian Government protested. American authorities replied that the State of Maine was exercising a well recognized right of sovereignty within its own territory. Recently, the United States has repudiated the Harmon doctrine on the ground that it is ill-suited to meet modern requirements for co-operative international developments of river basins.81 However, the 1909 Treaty still stands and, while there appear to be no doubts as to the original intention of the parties, there are uncertainties about what rights and remedies were created. Most of the controversy centres on Article II. It is important to determine if the article permits Canada to proceed unilaterally in developing the Columbian basin.

**Interpretative Conflicts in Article II**

Article II reads as follows:

Each of the High Contracting Parties reserves to itself or to the several State Governments on the one side and the Dominion or Provincial Gover-
ments 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 the 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 have, to object to any interference with or diversion 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.

It is clear that the article applies to “all waters... which in their natural channels would flow across the boundary or into boundary waters”. In the Columbia system this includes: The Columbia, its tributaries the Similkameen and the Okanagan Rivers; the Pend Oreille River which flows into Canada, joins the Columbia and recrosses into the United States; the Kootenay which flows from Canada into the United States and then recrosses the boundary into Canada before joining the Columbia; Flathead River which flows south from British Columbia into Montana. The central provision in Article II provides that, subject to existing treaties, there shall be reserved to the United States and Canada “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.”

The first point to be decided is whether the article allows diversion by either country. On the face of it, the introductory language is explicit, and within the Commission there has been general agreement that the right to divert exists and may be exercised by either party.92 Controversy, however, exists over what constitutes “any injury”. General McNaughton testified on the point before the Standing Committee on External Affairs on March 10th, 1955. He indicated that there were three principal ways in which interference with natural flow might result in “injury” to downstream interests. First, the upstream state might:

- divert the flow of a river in whole or in part while it remains within its territory. Thus the upstream state under the provisions of Article II of the Treaty is lawfully entitled to do it if it can. If diversion is made and injury results in the downstream country the injured parties are given access to the courts of the country where the diversion or other interference with the flow has been made on terms of full equality with the citizens of that country. Obvious examples are diversions of the Kootenay into the Columbia or the Columbia into the Fraser.

Secondly, a downstream country “might build a dam or other obstruction which would have the effect of raising water levels above

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92 See Jordan, Remarks before the Canada–United States Committee, Spring Meeting, 1955, (Bermuda), March 10-11-12, at p. 11.
the boundary”. This is forbidden by Article IV unless approved by the Commission.

Finally, an upstream country might store water and release it in regulated flow. The storage might be beneficial or detrimental to the downstream state. It would be beneficial if its regulated release made additional water available for power purposes in periods of low natural flow. It would be detrimental if it reduced the flow below normal or if it caused damage by flooding. If injury by excessive or deficient flow resulted, redress could be had in the courts of the upstream country. General McNaughton also suggested what remedies are available. But remedies are not fully defined, and many unanswered questions remain.

The most important are: (1) the Possibility of Diversion: What is the nature of the remedy? For instance, does it include an injunction as well as damages? In seeking redress, is the injured party subject to local laws of the state or province in which the injury took place? Is an injured resident of Montana, for example, barred from relief in the Exchequer Court because he does not hold a Water License as required by B.C. statute? What are the Canadian and American views on the physical possibilities of diversion?

(2) The Possibility of Flooding: Two changes occur as a result of flooding at the border: (i) physical damage, for which compensation must be made under Article VIII and, (ii) an increase in the level of the river above the boundary, which creates an additional “head” for power purposes in the downstream country. The question which arises is whether the upstream state is entitled to receive any benefit from the power generated as a result of the additional “head” created by the flooding of its own territory? If so, what will quantum of the benefit be and what form will it take?

(3) The Possibility of Storage: To what extent can the downstream state insist on an undiminished flow of water? This involves consideration of the applicability of the doctrine of “prior appropriation”, and its relevance to international disputes. What is the basis of recompense for benefits accruing downstream as the result of upstream storage? This involves consideration of whether recompense in monetary terms is adequate or whether recompense in terms of power must be provided.

The answers to these questions depend upon facts, laws, policies and economics. It is because the area of agreement is so small that the Commission has reached virtual stalemate. What follows is a survey of Canadian and American views on each question.

Diversion: (a) The nature of the remedy: On a literal interpretation of Article II, “legal remedies” include monetary damages. Both parties agree to this. But what about an injunction? General McNaughton has indicated that an injunction against diversion was not contemplated by the article.83 He contends that if a diversion could be enjoined,
the first part of Article II, which allows diversion, would be meaningless; the core of the article would be negatived. There is evidence that the American section agrees. In a recent case before the Commission, counsel for Montana and the Federal Government contended that the rights of a downstream country only cover payment for damages, not an injunction against diversion. There has never been a court case in which either country or its nationals has claimed the article's remedy. Yet the words are unqualified, and seem to cover injunctions. If this interpretation is accepted it would materially alter the meaning of the article; it then would mean that either country has exclusive control over diversions within its own territory provided the diversions do not result in any downstream injuries.

(b) Jurisdiction and Applicable Law: Questions have arisen in the I.J.C., in the House of Commons Standing Committee on External Affairs, and in the U.S. Senate Committee on Interior and Insular affairs, on the mechanics of enforcing the right of redress in Article II. Who can bring a claim? Where will it be brought? Against whom will it be made? What statutory and common law limitations will apply?

The position taken by the Departments of External Affairs and Justice on Article II and on the corresponding section in the implementing legislation of 1911 is this: an American will have a cause of action in Canada if (i) he suffers injury in the United States as a result of Canadian upstream interference and, (ii) such injury to a Canadian in Canada would be actionable in the Canadian jurisdiction where the interference occurred. This position is significant. By the British Columbia Water Act all rights in rivers are vested in the Province. Mr. F. P. Varcoe explains:

Consequently if a dam is built in the Columbia River, let us say, which diminishes the flow of water for power purposes below the dam then no Canadian can have any complaint because the owner of the power in the province is the Crown. The American would be in no better position than the Canadians. Consequently no compensation would apply by law. McNaughton, on the other hand, indicated that, in his view and in the view of his legal advisors, vested interests have arisen downstream under the doctrine of prior appropriation. Their holders, he assumes, would have an enforceable claim in the Exchequer Court should they be deprived of the water which they have actually appropriated. He says:

Whoever first appropriates water to a beneficial use has a prior right thereto so long as he continues to exercise it. The appropriation must be of a specific amount of water for a specific beneficial purpose and must be perfected in due course by actually constructing the necessary works and putting the water to use.

He observed that this doctrine contrasts with the riparian rights doctrine under which the downstream riparian owner is entitled to an

84 Ibid., p. 84.
85 R.S.B.C., 1948, c. 361.
86 Varcoe, Testimony before Standing Committee on External Affairs, Minutes No. 6, March 18, 1955, at p. 172.
87 McNaughton, op. cit., (footnote 2, ante), at p. 86.
unaltered, undiminished flow irrespective of the use to which he puts it. The latter doctrine, he suggests, while current in some of the United States, never obtained effectively in the west and southwest. But it is clear that in many western states the doctrine has been elevated into statute law. McNaughton, then, relies on his codified water doctrine as the basis of his assertion that any diversion in Canada which would deprive a downstream user of appropriated flow would render the up-stream diverter liable to an action under Article II. This largely explains his concern that proposed Canadian diversions, once they are proven to be possible and politically feasible, be put into effect before vested rights downstream multiply.

McNaughton does not mention the B.C. Water Act. This may imply a tacit rejection of the views of Varcoe and Werschof. It may, on the other hand, indicate a reluctance to predicate development plans on a theory of water availability which he considers legally uncertain and politically unsound. Varcoe and Werschof are emphatic in admitting that Article II is confusing. Varcoe says: “I find there is no entire agreement amongst lawyers as to what the clause means... it is not a very clear article as a matter of fact.” Werschof says, “the plain fact is that Article II of the Boundary Waters Treaty is pretty difficult to understand.” By their own admissions these law officers concede that other interpretations are as plausible as their own. Varcoe admits the possibility of yet another: that persons who have acquired rights to use downstream water by prior appropriation are in the same legal position as licensed users in British Columbia. Even if this is established, however, the American claimant still will have to show that his right to use was acquired before the right of the diverter who has injured him for, by sec. 10 (1) of the B.C. Water Act, those who are licensed to divert water from the same stream “shall have precedence in law according to the respective priorities of the dates from which the licenses take precedence as set out therein”. As Bourne points out:

The Comptroller of Water Rights, of course, can determine the precedence in the license to the upstream diverter and so defeat any prior rights of a downstream user. But if he does not make such a determination then the user in the United States by showing that he is in the position of a licensed user may have a prior right under Canadian law.

Still another plausible interpretation was suggested by Hon. E. D. Fulton:

Surely then we must look at the question of whether or not it is an injury in the United States under United States law. If, in fact, either in the physical sense or only in the eyes of American law, that person is injured in the States, surely the words of the section mean that he has a right to go into a Canadian Court even though that injury would not have been regarded as an injury under Canadian law, because of the use of the words “any injury” on the other side of the boundary. It does not say

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88 Varcoe, op. cit., (footnote 86, ante), at pp. 181, 193.
89 Ibid., p. 203.
90 Ibid., p. 181.
91 Bourne, op. cit., (footnote 4, ante), at p. 22.
any injury which is recognized by Canadian law but, any injury on the
other side of the border.  

In summation, there seems to be two points in favour of Canada's
right to divert: (i) the introductory words of Article II and, (ii)
documentary evidence of the intention of the parties to the Treaty.

The real dispute concerns the extent to which the right to divert
is qualified by the right to redress in case of injury consequent upon
diversion. There are three main contentions: (i) The view of Werschof
and Varcoe that it is not effectively qualified by the requirement
that the claimant possess a water license under the B.C. Act. There
is something contrived about this position. (ii) The view of McNaughton
and, possibly, Fulton that such a requirement is not a condition pre-
cedent as long as the injured party can show interference with a right
recognized by his own law; if he can do so, he is entitled to compensa-
tion, and he can assert this right in the Exchequer Court. (iii) An
extension of this latter view (which apparently has not been advanced
publicly) that, assuming the existence of a right, the remedy available
includes injunctive relief. The consequences of this view are startling.
It would mean that Article II is internally self-destructive, for if the
right to divert was exercised and the result was even an infinitesimal
deprivation of flow amounting to an injury (for instance, to an irriga-
tion system below the border), such diversion could be prevented.

(c) Views on Diversion in the Commission: Both sections agree
that (i) the doctrine of appropriation is applicable in the area in
question, (ii) the appropriator first in time is first in right and, (iii)
a right is established when the appropriation is made.  But the American
section joins issue with Canada on the interpretation of the “right
to divert” clause. They insist that “with the right to divert goes the
responsibility to accept consequences.”  The consequences relate to
damage actions by injured downstream interests. First, the United
States denies that only those with existing installations on the lower
Columbia may claim damages. They contend that Canada has actual
notice of developments which, though not yet constructed, are con-
templated within the next ten years. They say that Canadian plans
for utilizing upstream waters must be predicated on planned down-
stream developments of which they now have notice. On October 7, 1955,
Jordan stated that:

The United States Government already has substantial investments in exist-
ing power plants in the Columbia Basin amounting to about one and one
half billion dollars; in power plants under construction another billion dollars
plus another estimated two billion dollars for power plants expected to be
built within the next ten years. Wide publicity has been given all of these
projects. Canadian and provincial officials have been given all our engineer-
ing reports. Never at any time has secrecy shrouded our building or our
planning.

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93 Minutes of Proceedings and Evidence, Standing Committee on External
Affairs, March 10, 1955, at p. 204.
95 Ibid.
Secondly, Jordan questions Canada's contention that the diversion of 15 million acre feet from the Columbia water shed into the Fraser River could be made without causing permanent injury to U.S. interests. Here it is necessary to examine McNaughton's position. He contends that maximum American uses of Canadian waters occur at Grand Coulee. There, he says, U.S. rights are more explicitly defined than elsewhere because of a 1941 Commission order stipulating the permissible flood back into Canada from Grand Coulee storage. In any year there is a period when flow requirement operating Grand Coulee at full gate is exceeded. This is when storage all along the Columbia can be carried out. That is, the Grand Coulee storage reservoir needs filling to accommodate its requirements at a later period of low flow at the same period when Canadian reservoirs would be filling for transfer to the Fraser. The critical period is the reservoir filling period, approximately one-third of the year in the Columbia basin.

McNaughton's figures indicate that the needs at Grand Coulee during this critical storage period in an average year amount to 31.6 million acre feet. But hydrographs indicate that some 47.7 million acre feet would be supplied by natural flow to Grand Coulee at this period in an average year. This leaves a surplus of 16.1 million acre feet above the total demand for installed facilities, which is slightly more than the required 15 million acre feet for the Fraser diversion scheme. Thus, in the critical storage period in an average year, although the margin is narrow, there is sufficient natural flow to service both Grand Coulee needs and the Fraser diversion project. However, in the year of lowest recorded flow, Canadian hydrographs indicate a surplus of only 7 million acre feet at Grand Coulee. Thus if the Fraser diversion were in operation, a deficit of 14.3 million acre feet would result during the critical period at Grand Coulee. What is Canada's answer? First, in the critical storage period in the lowest recorded year Grand Coulee appropriated virtually all of the natural flow available. Hence, secondly, sufficient storage must be developed upstream to conserve water in high water years; that is, water must be stored on a cyclical basis so that there is sufficient reserve available in critical years to service the proposed Fraser installations without reducing the flow at Grand Coulee below the minimum requirement. McNaughton also indicates that although the U.S. claims 31.5 million acre feet as appropriated flow at Grand Coulee, it may not be able to prove this quantity as actually appropriated. Nevertheless, there is an obvious need for Canada to act before additional downstream commitments arise.

Jordan has countered with statistics which conflict with McNaughton's. He contends that water requirements for existing turbines at Grand Coulee are 130 thousand cubic feet per second, whereas McNaughton says they are 85 thousand feet per second. Secondly, he says that for more than 10 years of the twenty-year period between 1928

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83 For a full statement see McNaughton, op. cit., (footnote 2, ante), at p. 471.
86 I.J.C. Docket No. 44.
97 Jordan, op. cit., (footnote 93, ante), at pp. 983-984.
and 1948, a surplus of 15 million acre feet was just not available at Grand Coulee. Yet neither of his contentions is fatal to the Canadian position. If McNaughton is wrong in his estimate of the ultimate capacity at Grand Coulee, it merely means that the period during which Canadian storage could be carried out is shorter. Secondly, Canada doubtless is aware that 15 million acre feet would not be available for diversion in some years; but its contention is that sufficient storage facilities could be created upstream to provide both existing American needs and proposed Canadian schemes. It is this claim upon which the Canadian proposal depends for its success. Jordan has not met this argument satisfactorily.

Jordan also points to the wording of Article II claiming that

the injury consequent upon diversion would be suffered by a sovereign—one of the High Contracting Parties—the United States. Obviously therefore the United States as an injured sovereign will not be limited to the redress provided for an injured party (spelled with a small letter “p”) by Article II.98

It is doubtful that there is a real distinction here. The last line of the first paragraph refers to “special agreement between the parties hereto. This indicates that party with a capital “P” and party with a small “p” have been used interchangeably. Even granting that there is a distinction, it is not clear what its consequences would be. Jordan argues further that regardless of whether Canada is entitled to divert under Article II, further study predicated on such a possibility is implicitly barred by the terms of the 1944 Reference, which reads in part:

It is desired that the Commission shall determine whether in its judgment further development of the water resources of the river basin would be practicable and in the public interest from the points of view of the two governments.

Jordan observes that since the United States would suffer “great injury” under the proposed diversion, the U.S. had neither “the authority nor the inclination to engage in joint studies based on acceptance of the theory of diversions which are definitely against the public interest from the point of view of the United States”.99 His last objection concerns diversion effects on salmon fisheries in the Fraser River, where the United States has vested interests under existing treaties.100

The Possibility of Flooding: (a) Compensation: American applications for approval of the Libby Dam Project were suspended. Canada argued that, where, as here there will be flooding at the boundary to a depth of 150 feet and the upstream country holds the interest in the water above the boundary, the upstream country is entitled to receive a share of the power generated at the downstream site. The Canadian share of the power produced at the site should be that proportion which

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98 Ibid., p. 980.
99 Ibid.
100 For probable effects of diversion on salmon fishing in the Fraser, see Minutes of Proceedings and Evidence, Standing Committee on External Affairs, Dec. 12, 1957, Appendix I. For conflicting views see Report of the Chairman of International Pacific Salmon Fisheries Commission (1955), 33 Department of State Bulletin.
The increase in water level at the boundary is to the total "head" at the site. This is the *sine qua non* of Canadian approval. In the case of Libby, it represents more than one-third of the total at-site power. Canada has offered to pay at the going rate.

The Canadian section, in support of this computation, points to an earlier analogous case before the I.J.C.: an application for permission to build a dam at Grand Falls on the St. John River in New Brunswick. The dam would have caused flooding both on the New Brunswick and Maine sides of the river. As part of the "suitable provision for protection against injury", counsel for the United States claimed a share of downstream power proportional to the additional head made available at the site by the increase in level at the boundary multiplied, in this instance, by the U.S. share of these boundary waters; that is, a one-half share. The applicant agreed to make available for purchase in Maine power which approximated the amount claimed. The Commission approved the order subject to the agreement being carried out. However, the Commission disclaimed either acceptance or rejection of the principle advanced by counsel for the United States. This reservation weakens the Canadian argument that a precedent was created.

(b) Downstream Benefits: The basis of claims by downstream interests to continued uses of appropriated flow are traceable to the doctrine of prior appropriation. There is not widespread agreement on the enforceability of the right. But it is agreed that U.S.-Canadian relations would be seriously jeopardized if Canada deprived U.S. interests of already acquired and utilized flow. Thus the Canadian section has proceeded on the assumption that the maximum present use of Canadian water in the United States must not be interfered with, and that future Canadian diversions and storages must insure enough downstream flow to satisfy present commitments. Yet Canada maintains that, in storing water upstream and releasing it in periods of low flow, she is providing a valuable service for which compensation must be made. The Americans concede that because of low flow in certain seasons many plants downstream are necessarily idle, and that the cyclical storage would be beneficial. The disagreement arises over assessing storage values.

What Canada seeks is a monetary payment and a share of the additional power generated downstream. McNaughton's formula for monetary compensation is based on the cost of alternative methods of power generation available to those benefiting from the controlled release. His argument is: the Americans have installed generators with capacities which cannot be utilized fully under conditions of minimum flow. Their average load factor in periods of low flow is 64%. This means that during low flow in an average year, which is a considerable yearly period in an ice melt river, the plants will be idle 36% of the time. Power producers can only guarantee power in the base flow period in the amount of 64% of capacity output. This is called "firm power" because its supply is more or less predictable, and can be sold at fixed

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201 See McNaughton, op. cit., (footnote 2, ante), at p. 83.
races. Obviously, in certain years, flows will be larger and the otherwise idle generators can be used to produce "interruptible power". Because interruptible power is contingent on continued higher flow in normally low flow times, it sells at slightly lower rates. Both "firm" and "interruptible" power are contracted for in advance; the quantity is based on more or less accurate predictions of the flow pattern in the coming year. It follows that in a low-water year the consumer is short of power, and the power producer is faced with prior undertakings. It is to remedy the uncertainties of the situation that storage dams have been built to release flow at seasons of peak demand. Without them, other means of providing power would be necessary. The only feasible alternative is thermal-electric generation—oil, gas or coal driven steam generating plants which, if operated year round, could produce power in the Pacific Northwest for between 5 and 6 mills per kilowatt hour; if used only for the peak periods the cost would rise to between 7 and 8 mills per kilowatt hour. McNaughton's contention is that the price paid by downstream interests for the benefit received should bear some relationship to the cost of obtaining power by the only feasible alternative method.

Hence one factor to be considered in arriving at price is the value to the recipient of the services rendered. The other determining factor is the cost of rendering the service. Here consideration must be given to the interest and operating charges of the dam, fair charges for water rights, transmission costs, rental of property, etc.

The second requirement for agreement on compensation is an acceptable scheme for sharing the extra power produced. The Canadian section argues that the principle of repayment of power for storage services has been internationally accepted, and points to a number of treaties providing for hydro development of international rivers in Europe. Two domestic American precedents are also referred to. The first is the Columbia Interstate Compact. It provides for inclusion in the license authorizing a hydroelectric project on an inter-state river, of a reservation requiring the operator to make available for purchase and use in the upstream state where the project is located, a specified equitable share of the additional power generated in downstream plants as a result of the co-ordinated release of stored water. The second is the Federal Power Act. The United States Federal Power Commission can require any licensed power producer to reimburse the owner of an upstream reservoir, from which a direct benefit is derived, for a portion of the annual charges for interest, maintenance and depreciation on such reservoir.

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102 See testimony of T. M. Patterson, Engineering and Water Resources Division, Department of Northern Affairs, Standing Committee on External Affairs, Minutes No. 7, March 22, 1955, at pp. 227 ff.
103 Reprinted in Minutes of Proceedings and Evidence, May 12, 13, 1954, Standing Committee on External Affairs, House of Commons, Appendix "D".

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The problem of recompense in power for storage services is affected by the present imbalance of needs. Present power needs of the U.S. Pacific Northwest are critical; the situation in British Columbia has not the same urgency. But as McNaughton says: "These immense resources, vast as they are without a shadow of a doubt, will be required by British Columbia within the next two or three decades". The problem is how best to contract for the immediate provision of benefits to downstream plants and still reserve the right to recapture the power as future needs arise. The question was discussed by the Associate Director, Economics Research Division, Department of Trade and Commerce, before the House Committee on External Affairs on March 22nd, 1955:

It will be necessary to develop sales contracts for the prospective output of electricity. It may happen in view of our relatively light development in Western Canada as compared with the United States that immediate sales could be arranged across the border, but in order that these sales not be in perpetuity it might be necessary to arrange for a progressive repatriation of power. The downstream entity would then take on the nature of a contract which was agreed to before the building of the dam, notice served of it, and notice to which it had agreed of the progressive repatriation to Canada or British Columbia of downstream benefits, and there could be no claim for damages as this repatriation took place.\(^\text{105}\)

The different stages of industrialism in the areas; provincial demands for the development of substantial revenues; the provision of future power needs; the reluctance of U.S. developers to contract for water supplies in return for future commitments—these are problems bearing on the question of adequate recompense. It is an intricate and vastly complex question, and its resolution requires much more than "the recognition by the U.S. that there is a legitimate price to be paid for the sharing of a great common resource", as Cohen suggests.\(^\text{106}\) The negotiations have long since passed this primitive stage. The dispute is not concerned with airy generalities; it focuses, within narrowly-formulated factual contexts, on what is the "legitimate" price.

**Legal Considerations**

The doctrine of absolute territorial sovereignty\(^\text{107}\) has been applied to questions analogous to those discussed above. Unaided by conventional controls it lacks the rational limitation inherent in the maxim *sic utere tuo ut alienum non laedas*, which covers riparian owners in many states. As indicated, it was expressed clearly in the Harmon Doctrine. Yet its appearance has been frequent elsewhere.\(^\text{108}\) For example, it now is being argued by East Punjab in the Indus con-

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\(^{105}\) Minutes of Proceedings and Evidence, No. 7, at p. 237.  
troversy.\textsuperscript{109} Seldom, however, has it achieved the prominence accorded to it in the 1909 treaty.

The riparian rights doctrine has been argued in national\textsuperscript{110} and international cases.\textsuperscript{111} In the United States, particularly, it has competed for acceptance with the prior appropriation doctrine.\textsuperscript{112} Although it provides an initial means of reconciling interests of local land owners, newly recognized factors, such as erosion, industrial water needs, polution, and population growths, have made legislative intervention necessary to impose priorities. A simple transfer of the riparian doctrine to the international forum has not occurred, and would in fact be unsatisfactory.

Prior appropriation and equitable appointment doctrines are those most strongly relied upon in relevant disputes. Internationally, the prior appropriator's rights are less extensive than they are municipally; he is not entitled to all the water that he has appropriated. The equitable appointment rule, sometimes accepted by municipal courts\textsuperscript{113} and commentators\textsuperscript{114}, requires that a division of benefits be made on the basis, \textit{inter alia}, of economic, geographic and efficiency factors. The principle is vague because the principal problems involved are not legal problems. Resolution of river disputes requires compromise at political levels. When courts adjudicate such matters they act in effect as arbitrators, their judgments representing agreements for the litigants. The Dubrovnik Conference of the I.L.A. went on record as urging that, when dealing with rivers within their own boundaries, states should exercise control with due consideration for the effects upon riparian states.\textsuperscript{115} For this purpose, the Conference found the following factors to be material: the right of each state to a reasonable use of the water; the extent of the dependence of each state upon the waters of that river; the comparative social and economic gains accruing to each and to the entire river community; pre-existent agreements among the states concerned; pre-existent appropriation of water by one state. The Conference Comment states that "this is an effort to make understandable the doctrine of equitable apportionment . . . some guides must be provided for balancing benefits against injuries. It is impossible to establish a scale of priorities, for they vary with the situation, but these factors should help to establish priorities.


\textsuperscript{111} See Smith, op. cit., (footnote 108, ante), chap. 6.

\textsuperscript{112} See G. F. White, River Basin Development, (1957), 22 Law and Contemp. Probs. 159.

\textsuperscript{113} See, for example, Nebraska v. Wyoming, 325 U.S. 589.

\textsuperscript{114} See, for example, Clyde Eagleton, The Use of Water of International Rivers, (1955), 33 Can. Bar Rev. 1018, and same author in (1957), 51 A.J.I.L. 89.

\textsuperscript{115} International Law Association, Reports of the Forty-Seventh Conference, Dubrovnik, 1956, p. 246.
in each case. By and large, this is the view of Eagleton, Chairman of the I.L.A.'s International Committee, who is completing a three-year study of the problems. Basing his argument on *Kansas v. Colorado*, he takes the position that international practice and theory accepts the equitable apportionment rule. He favours the idea of resorting to international administrative tribunals, and insists that each river must be considered as a unified system to be developed without regard to national boundaries. The present writers agree that the Harmon Doctrine may no longer represent an international rule and that there may be an obligation on riparian states to use rivers reasonably. But, although they have examined state practice, judicial decisions, U.N. pronouncements, and the opinions of authors, they have been unable to find that general rules have been agreed upon. Though it is unsatisfactory *de lege ferenda*, they accept Sikri's criticisms of Laylin's brief as being an accurate exposition of the *lex lata*:

It is urged (by Laylin) that merely because States have entered into treaties dealing with uses of water some customary law has emerged. Allow me to read to you an extract from the Asylum Case to show how the International Court reads international treaties. "The facts brought to the knowledge of the Court were in no way presented in a manner that would allow the Court to state certain rules or to set up standards. The Court took cognizance of the rule of unilateral and definitive qualification of the offence." (Asylum Case, ICJ Reports 1950, p. 277). These remarks apply forcibly now. Secondly, he (Laylin) wrongly attaches importance to decisions of municipal courts and inter-federal practice, which are mere municipal facts. This was so held by the International Court in the judgment regarding Certain German Interests in Polish Upper Silesia. The Court said "from the standpoint of international law and of the Court which is its organ, municipal laws are merely facts which express the will and constitute the activities of the States, in the same manner as do legal decisions or administrative matters". Moreover, the Supreme Court of the United States does not say that it has derived any principle from international law. I have carefully studied these decisions and I cannot but agree with Hyde that the Court did not consider the problem with which you are confronted. The decision of the Tribunal in the Trail Smelter Case is clearly distinguishable. There the Tribunal was authorized to apply the law and practice followed in dealing with cognate questions in the United States as well as international law and practice and 'shall give consideration to the desire of the High Contracting parties to reach a solution just to all the parties'.

117 185 U.S. 125, 206 U.S. 46.
118 See note 77, ante.
120 See note 110, ante.
122 See the treatise and periodical literature cited above in notes 1, 4, 6, 26, 86, 106, and 119.
Thirdly, he insists that I should prove that there is no custom in a particular region. But, as held in the Lotus case, 'Restrictions upon the independence of States cannot be presumed'. If there is no custom or rule of international law limiting sovereignty, sovereignty remains unimpaired.

Lastly, he would derive a right to receive the benefits of a river only from the fact that, if the State did not receive the benefits, it would suffer harm. I know of no principle of any law, municipal or international, which would warrant this proposition.”

The result is that there are very few, if any, generally applicable legal rules in this area of international relations. The Columbia River problem is not really a legal problem. It is a political issue to be resolved by inter-governmental bargaining on the basis of such information as economists, engineers, irrigators and ichthyologists provide. International lawyers can be of assistance when it comes to drafting and interpreting agreements, and by continuing to scrutinize state practice with a view to advising on trends in the development of an international fluvial law.

**Possible Solutions**

(a) **Unilateral Diversion by Canada:** Diversion of unappropriated Columbia waters into the Fraser system is one possibility. The better interpretation of Article II is that American claimants injured by Canadians upstream have rights of action in Canadian courts. There is reason to predict that the Exchequer Court will apply the priorities that are set out in the British Columbia legislation. That is, the court may regard rights that have been acquired by prior appropriation under American state laws as being analogous to rights acquired under the British Columbia Act. Also, the court may find that McNaughton’s proposed diversion relates to hitherto unappropriated waters and that therefore it is not injurious to American interests. Unilateral diversion, however, has drawbacks. It would interfere with developed American-Canadian sockeye salmon industries. Further, it would invoke unfavourable American response because, for downstream interests, it entails a perpetual removal of potential power sources. The Canadian government may not care to raise American anger, the consequences of which could be more harmful than the results of the diversion are worth. Finally, Canada would have to pay the entire cost. She probably could get U.S. financial assistance for projects which benefit Americans as well as Canadians.

(b) **Development by Private Interests:** This was attempted in a limited way by the Kaiser interests. But there are arguments against this procedure. First, the money required makes it unlikely that any Canadian group could obtain the franchise. On the other hand, the licensing of an American group to develop so vital a natural resource probably would be unacceptable politically. Next, the maze of public and private interests that need to be harmonized can be handled more satisfactorily by a public agency that is linked to the governments concerned. Finally, provision of downstream benefits might be inadequately protected if merely contracted for by private companies. The American

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company concerned, which, of course, would be using cyclically-released water, might allow other downstream interests to increase their existing appropriations. If the U.S. company defaulted on the contract, Canada might be precluded from diverting such appropriated waters. A governmental agreement probably would not entail the same risks.

(c) Development by Governments: If the downstream benefits problem can be solved to Canadian satisfaction, and if negotiators can agree on the quantity of power to be returned to Canada when she needs it, this scheme is satisfactory. Whether the United States will meet Canadian demands is another question.

(d) "T.V.A."-type International Agency: A supra-national agency has been suggested by many commentators as providing the best solution. This fits American concepts of developing river basins under multi-state compacts that create agencies controlled by the federal government. It is submitted that this is an unrealistic proposal for the Columbia. The International Joint Commissioners and the diplomats have been hopelessly deadlocked. How could a new bi-national agency be expected to do better? International machinery initially is a response to, not a cause of, co-operative good will. Further, Canada's bargaining position is better as things stand now. The authors' quarrel with Cohen's concept of "sharing, exploitation, and management in common of the continent." This is excellent when neither nation can effectively realize its own objectives, for example, in the defence area. But Canada and the United States are not joint tenants of North America. Partition took place in 1783. There is no virtue in joint co-operative action per se. Canada should only participate in joint management schemes if they serve her national interests better than unilateral action.

(e) A New General Treaty: In view of the interpretative problems of Article II, and the fact that Canada and the United States are unlikely to rely upon strict formulations of the Harmon Doctrine, the two governments might consider amending the Treaty to embody the equitable apportionment principle on downstream benefits. But shrewd bargaining is essential here because Canada is in an upstream position in most of the remaining areas of dispute. She might try to insist that the amendment be conditional upon satisfactory dispositions of other boundary water disputes, such as the Chicago diversion and the St. Lawrence Seaway. The difficulties in achieving the limited agreement referred to in (c) are sufficiently great to preclude speculation on the possibilities of such an across-the-border settlement.

(f) Unilateral Storage by Canada: While Canada may decide against immediate diversion, it seems certain that she will proceed to construct storage installations. The reason is that much more delay will allow U.S. interests time to develop reservoirs of their own in upstate Washington. The net result probably would be that when Canada finally is in a position to utilize her own upstream storage sites, the flow commitment downstream during the reservoir-filling period on the river would preclude the capture of significant quantities of water
upstream. There is evidence that American opinion favours the development of a "series of large multi-purpose dams and reservoirs to be operated as a co-ordinated system in conjunction with lower Columbia levees, to control main Columbia floods, to improve inland navigation, and to furnish the main part of the power requirements of the basin. 124 Fortunately for Canada, implementation of this scheme is hindered by a controversy between its proponents and those who would develop the Hell's Canyon site with one large dam. The two plans are mutually exclusive; and, at the moment, they provide litigation as well as campaign material for elections. Either plan, however, potentially jeopardizes Canada's ability to fill her own reservoirs when she gets around to having them built. It is for this reason that McNaughton pleads for an early Canadian start on the Mica Creek project.