

# THE COLUMBIA RIVER CONTROVERSY

C. B. BOURNE\*

*Vancouver*

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## I

Water is a basic element in life and its importance in human affairs cannot be easily exaggerated. To-day, it is necessary for domestic consumption, for sanitation and for industry;<sup>1</sup> sometimes it is of vital use for irrigation; and under favourable circumstances it makes possible the production of cheap electrical power and thus nourishes great industrial empires. It is not surprising, therefore, that water is often a cause of international tension where the drainage basin of a river lies in two or more states.<sup>2</sup>

An essential fact in a discussion of the development of the Columbia River is that the demand for electric power in the Canadian and United States Pacific Northwest has increased enormously since World War II. This demand will continue to increase rapidly in the foreseeable future, for it is estimated that power consumption in British Columbia will increase by about 457 percent between 1955 and 1975;<sup>3</sup> and there are similar estimates for the United States. There are, of course, many sources of electric power but none is as economically attractive as that of hydro-electric power in a land blessed with abundant river waters so arranged by nature as they are in British Columbia and the Pacific Northwest area generally. Even in that area, however, the demand for power will sooner or later exceed the supply of hydro-electric power that

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\*C. B. Bourne, Faculty of Law, University of British Columbia.

<sup>1</sup> In the United States, 261 billion gallons of water were used every day in 1957; it has been estimated that this figure will be 453 billion gallons in 1975.

<sup>2</sup> Examples of this are the current international disputes over the Indus, the Nile and the Jordan.

<sup>3</sup> This was the estimate in the brief presented by the British Columbia government to the Royal Commission on Canada's Economic Prospects. The Hon. R. G. Williston, Minister of Lands and Forests, reaffirmed this estimate in an address to the Legislature of British Columbia on January 27th, 1959. He said that an "annual average increase in use of electrical energy in the order of 9.6% can be expected until 1975" and "these forecasts are likely to be exceeded in actual practice unless serious depressions occur to retard all ordinary growth". The consumption of electric power at the end of 1958 was more than three times what it was in 1948.

may be had from its rivers. With an eye on future needs, therefore, Canadian and United States interests are already trying to secure for their own use the largest share of the power that inheres in the river waters of the area. It is this competition for cheap power that underlies the problems in the development of the Columbia River. It is the root of the matter.

## II

At the outset, some facts about the Columbia River should be noted. It is one of the greatest rivers of the world for hydro-electric power. It rises in Canada and is 1,210 miles long, 465 being in Canada. It drains an area of 260,000 square miles, fifteen percent of which is in Canada; but one-third of the water that flows in it has its origin in Canada. There is a drop of 2,650 feet between the source of the river and sea level, and the elevation is 1,290 feet at the Canada-United States boundary.

One of the most important features of the Columbia River for hydro-electric power purposes is that its flow is subject to great seasonal fluctuations, its average annual maximum flow being ten times as great as its average annual minimum flow. This great fluctuation is important, for to generate electricity economically continuity of flow is essential. In practice, the minimum flow of a river (or to put it another way, the "maximum continuous flow"), tends to set the limit of hydro-electric development, and the water above the minimum flow passes on to the sea unused. If one can raise the continuous flow of a river, one increases the capacity to produce electricity economically. Technological developments and man's engineering skill make it often possible to do this by building dams to retain the waters that without them would pass on to the sea unused (known as "surplus waters"). These waters may then be released from time to time so that they flow away below the dam at an even rate all year; and power plants downstream are then served by a greatly increased continuous flow and can usually produce more electric power at little extra cost.

This brings us to another important feature of the Columbia River: it possesses ideal dam sites, especially in Canada. And so its basic defect, the seasonal fluctuations, can best be cured by dams built in Canada. To appreciate the value of these dam sites, consider the effect of building a large dam at Mica Creek on the Columbia River above Revelstoke, B.C. By the single act of building this dam and holding in storage about eleven million acre-feet of water, something like 1,100,000 kilowatts of prime power would

be added to the power produced by plants that were in existence and under construction on the United States section of the river in 1956; and it would be about 1,900,000 kilowatts if one included future plants, an amount equal to four and one half times the power generated at Bonneville dam. The storage of surplus water, then, confers enormous benefits on downstream power plants. And other benefits than power will also follow from it, especially in flood control. One writer estimated that "if Mica Creek were now constructed, and a flood of 1894 magnitude were to occur. . . , the flood damage in the lower Columbia would be reduced by \$60 million".<sup>4</sup>

Another fact of interest is the present unequal development of the Columbia River in Canada and in the United States. On the United States section of the river plants already exist which generate 5,400,000 kilowatts of average generation; and with the projects under construction, authorized or licensed 10,000,000 kilowatts of average generation will be possible. As yet no electric power is generated on the Canadian section of the river.

### III

The story of the controversy about Columbia River development starts on March 9, 1944, when the Canadian and United States governments submitted a reference to the International Joint Commission asking it to investigate and make recommendations for further uses and developments of the waters of the Columbia River system. The Commission then established the International Columbia River Engineering Board to make the necessary studies. The report of this Board was completed about the end of 1958 and was brought before the International Joint Commission for discussion in March 1959. Only then did all the relevant facts about the hydro-electric potential of the river become available.

Between 1944 and 1959 there have been many discussions on this subject, both in the International Joint Commission and outside of it. In the early years of this period, the attitude of some Americans was that United States interests had a right to the waters of rivers flowing from Canada across the international boundary into the United States and that there could be no question of Canada interfering with the flow of such rivers. They also denied any obligation to pay compensation to Canada for any benefits accruing downstream in the United States from acts done

<sup>4</sup> See the statement by Jack Stevens in the Pacific Northwest Public Power Bulletin, July 1957.

in Canada. The expectation seems to have been that Canada would have to develop the Columbia River in Canada for its own benefit and that the waters would then flow on downstream to the sea in regulated flow. In other words, it was hoped that downstream interests would benefit from upstream Canadian storage without paying anything for it.

This attitude was clearly revealed in the Libby Dam discussions. Under the American proposal to build Libby Dam on the Kootenay River not far south of the Canadian border, 15,000 acres in British Columbia would be flooded, and the water of the Kootenay River would be raised 150 feet at the international boundary and would create a lake forty two miles long in Canada. When the proposal first came before the International Joint Commission in 1951, the Canadian members of the Commission contended that Canada was entitled to a fair recompense for the great benefit that would accrue downstream in the United States from using Canadian natural resources and Canadian territory as storage for the water of the Kootenay River (something more than one-third of the total at-site power to be generated at Libby; it is estimated that about 956,000 kilowatts of power would be produced in at-site and downstream plants in the United States by building Libby Dam). The American members of the Commission, however, would not even agree to discuss any compensation for "downstream benefits". In the application it had been stated that the United States would pay the costs of clearing the land that would be flooded and its value and also the cost of relocating highways and railways and the resettlement of displaced persons. It was also pointed out that there would be some benefit from Libby Dam to the Canadian plants downstream on the West Kootenay; but those benefits would be negligible.

There is evidence that, in the course of time, the Americans modified their view and accepted the principle of payment for the downstream benefits of upstream storage. For example, in the revised Libby Dam application of 1954, the United States stated that it was willing to consider equitable recompense for the use of Canadian resources, through the sale of power or otherwise, taking into account compensatory benefits in Canada; but it also indicated that its opinion was that the recompense should be given in money, and not power. It became clear in discussions about this in the International Joint Commission that the recompense which was in mind was to be determined in relation to the flows of the Kootenay in its natural channel, that is to say, ignoring the use

that Canada could make of the water in Canada by diversion. The Canadian Commissioners considered this offer of recompense an improvement on the offer made in 1951, but still quite inadequate. In speaking of the Libby Dam application before the House of Commons Committee on External Affairs in 1954, General McNaughton, Chairman of the Canadian Section of the International Joint Commission, said: "They want us to give them a gold watch for the price of a bit of tinsel." The Libby Dam application has not yet been dealt with, because the Kootenay is an integral part of the Columbia River system and so it must await agreement on the development of the whole Columbia River system.

Two other examples of the acceptance of the principle of paying for downstream benefits come to mind. In the Kaiser Aluminum and Chemical Corporation proposal to build a dam at Castlegar for Arrow Lakes storage, the company offered to return without further cost twenty percent of the additional power that was furnished downstream as a result of the dam. The British Columbia government found this offer attractive, but many persons in Canada thought that twenty percent of added power was not adequate. Shortly after this proposal was announced in 1954, the Parliament of Canada passed the International River Improvements Act,<sup>5</sup> requiring a federal licence before work on international rivers may be undertaken. This Act frustrated this proposal. About the same time, the Puget Sound Utilities Council offered to build Mica Creek Dam (cost estimated in 1954 to be about \$250,000,000) and give it to British Columbia, leaving it to Canadians to instal at-site power (about 1,100,000 kilowatts). No further compensation was offered for the 1,100,000 kilowatts that Mica Dam, if the flow of the Columbia River were regulated for the maximum benefit of downstream plants, would add to United States plants without further expense.

When it became clear that American interests thought that they could reap the benefit of Canadian storage without paying for it, General McNaughton and his engineers launched a study of the feasibility of diverting some of the waters of the Kootenay River and the Columbia River so that they would be used entirely in Canada for the benefit of the residents of Canada. The plan under study is this: dam the Kootenay River and let its backed-up waters (some 3,600,000 acre-feet) flow across Canal Flats into Columbia Lake and on into the Columbia River; then build Mica Dam, or an equivalent dam, thus storing about eleven million

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<sup>5</sup> Stats. Can., 1955, c. 47.

acre-feet of water; below Mica Dam drill a tunnel or perhaps two tunnels to carry Columbia River water (about 15,000,000 acre-feet have been mentioned) down the Fraser River to the sea. In other words, if this diversion is possible, the water stored in Canada does not have to go on downstream as Americans might have assumed. And Canada will have a choice about what she does with it: she may allow it to pass downstream or divert it and use it in the Fraser River to her own great benefit.

The diversion of the Kootenay and Columbia Rivers, which is thought to be practicable, would, of course, have a profound effect upon United States and Canadian interests. United States interests draw about 5,400,000 kilowatts of average generation of power from the Columbia River and expect to use double that amount by 1966. In 1956, they had one and a half billion dollars in existing plants, one billion in plants under construction and two billion in plants on the drawing boards. It is argued by Canadian interests that a diversion of about fifteen million acre-feet of these rivers would take out of the Columbia River only surplus waters, which presently pass to the sea unused, and so would not injure existing plants in the United States.<sup>6</sup> But it is reasonable to assume that it would thwart some of the present plans for future plants. General E. C. Itschner (Brigadier General, Corps of Engineers, United States Army) said in the United States Senate hearings in 1958 that the loss in power would be more than fifty million dollars a year. This amount would increase as the years go by. It is also feared that it would damage the fish industry of both countries by affecting the salmon in the Fraser and Columbia Rivers. One can, therefore, understand American concern over Canadian talk of diversion.

While diversion would interfere with American plans for future development of the Columbia River in the United States, it would have a most beneficial effect on some Canadian interests. Firstly, the waters diverted from the Kootenay River alone would add about 400,000 kilowatts to installed capacity on the Canadian section of the Columbia; and, if these waters were further diverted by tunnel into the Fraser River system, something more than another 400,000 kilowatts would be added. These figures indicate what the waters in the Canadian part of the Kootenay River are worth to Canada; they give an idea of the measure of Canada's

<sup>6</sup> See the statement of General McNaughton to the International Joint Commission at Washington, D.C., on April 5th, 1955, reproduced in the Report of the House of Commons Standing Committee on External Affairs, 1956, p. 362.

sacrifice if she allows the waters to be used at Libby Dam rather than to be diverted and used in Canada. And, secondly, if one considers the waters that might be diverted from both the Kootenay and the Columbia Rivers, they would make possible an installed capacity on the South Thompson, Thompson and Fraser Rivers of about six and one half million kilowatts, or, to use another measure, of seventeen billion kilowatt hours per annum. The cost of the installations to generate this power would be something like two billion dollars, but it is estimated that the power produced would still be cheap, about two mills per kilowatt hour at site. These figures give an idea of the stakes at issue in this matter.

#### IV

From this cursory statement about the attitudes and views of some Canadians and Americans, it is apparent that the Columbia River development raises important and difficult legal questions. Indeed, the entire controversy is about the answer to two legal questions. Has an upstream state, Canada in this case, the right to the exclusive use of any, or all, of the waters of an international river (for example, to divert some of the waters of the Columbia River into the Fraser River)? And has an upstream state the right to compensation for benefits accruing to a downstream state from the construction and operation of works on the portion of the river in that upstream state (for example, for additional power or for flood control made possible by the storage of water at Mica Dam)? These questions will now be considered separately.

##### A. *The Right to Divert*

###### (a) *Diversion under the 1909 treaty*

Canada's legal right to divert the Kootenay and Columbia Rivers, and any other rivers flowing from Canada to the United States, is governed by article 2 of the Boundary Waters Treaty of 1909. The meaning of this article is the central legal issue in the controversy about diversion of waters from the Columbia River and it is hotly debated. The first part of the article provides 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 Governments on the other as the case may be, subject to any treaty provisions now existing with respect thereto, the exclusive jurisdiction and control over the use and diversion, whether temporary or permanent, of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary waters . . .

This seems clearly to embody what is known as the Harmon doctrine, a doctrine propounded by Attorney General Harmon of the United States in 1895 and formerly used by the United States government in disputes with the Mexican and Canadian governments. The essence of the doctrine is that a state may do as it pleases with the waters in the territories over which it has sovereignty without regard to downstream interests; there is "no liability or obligation" of any sort to them.

That article 2 incorporates this doctrine is supported by its *language*, which could hardly be more explicit. The *history* of the article also supports this interpretation. Relevant here are the statements of Chandler Anderson, a New York lawyer who was employed as adviser to the United States government on Canada-United States water problems and who conceived and drafted article 2; and so too are the speeches in the House of Commons of Canadian statesmen responsible for the treaty, especially that of Sir Wilfrid Laurier, the Prime Minister.<sup>7</sup> Extracts from many of these statements and speeches and from other documents pertaining to the negotiation and adoption of the 1909 treaty were recently published in the memorandum of the State Department on the "Legal Aspects of the Uses of Systems of International Waters with Reference to the Columbia-Kootenay River System under Customary International Law and the Treaty of 1909".<sup>8</sup> This memorandum was prepared by Mr. William Griffin of the State Department and submitted to the Senate Committee on Interior and Insular Affairs in April 1958. The record of the history of the treaty is fully, if not completely, set out. It shows, it is submitted, that Canada is on the firmest legal ground when it bases its claim to divert waters from the Kootenay and Columbia Rivers on article 2 of the treaty.

This claim of Canada to divert rivers at will is admitted by several Americans. For example, Dr. Charles E. Martin has said that "on the stark language of the treaty, unilaterally interpreted, . . . Canada's right to divert is clear and unmistakable".<sup>9</sup> Mr. Len Jordan, the former chairman of the American Section of the International Joint Commission, admitted Canada's right, although he was most hostile to the idea of diversion.<sup>10</sup> And, at a conference

<sup>7</sup> House of Commons Debates. (Canada), Sess. 1910-11, v.1, p. 911-912.

<sup>8</sup> Sen. Do. 118, 85th Cong., 2nd Sess.

<sup>9</sup> Charles E. Martin, *The Diversion of Columbia River Waters*, read before the 51st Annual Meeting of the American Society of International Law, Washington, D.C., on April 25th, 1957.

<sup>10</sup> Report of the Joint Hearings before the Committee on Interior and Insular Affairs and a Special Sub-committee of the Committee on Foreign



at Seattle in April, 1958, Mr. Douglas McKay, the present chairman of the American Section of the International Joint Commission, said: "We in the United States recognize that either country has the legal right under the Treaty to divert subject to the obligation to indemnify the injured parties."<sup>11</sup> Difference of opinion usually comes not about the right to divert, but about liability to pay compensation for any injuries that diversion may cause. It was a surprise, therefore, to find that in Mr. Griffin's memorandum to the Senate Committee, he contended that the record of the negotiation of the treaty does not support Canada's claim to divert. His view is that the parties did not intend to incorporate the Harmon doctrine in article 2.<sup>12</sup> One may note that this argument was made by Mr. Griffin on behalf of the State Department in 1958; in early 1959 the House of Representatives passed a bill authorizing the diversion of a further 1,000 cubic feet per second from Lake Michigan by the Chicago Drainage Canal. It seems that the House of Representatives does not share Mr. Griffin's views on the law relating to diversion.<sup>13</sup>

While the first part of article 2 gives, or more accurately, reserves the right to divert, its second part does qualify to some extent that right.<sup>14</sup> It provides:

... 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 . . . .

This part of article 2 causes some difficulty, and there is a difference

Relations, United States Senate, on "Upper Columbia River Development," 84th Cong., 2nd Sess., at p. 40.

<sup>11</sup> (1958), 49 Pacific Northwest Quarterly 104.

<sup>12</sup> *Supra*, footnote 8, pp. 57-62.

<sup>13</sup> The United States has argued before the International Joint Commission that under article 2 it has exclusive jurisdiction over rivers in its territory, not limited by any international servitude: see the Waterton-Belly Rivers reference noted in Bloomfield and FitzGerald, *Boundary Waters Problems of Canada and the United States* (1958), p. 179. And in the Waneta Dam and Reservoir application, the order of approval of the International Joint Commission expressly stated that its issuance should not be construed as waiving or otherwise impairing the right of the United States under article 2 to divert, if desirable, the waters of the Pend d'Oreille River: *ibid.*, p. 196. However, when it has suited its interest, the United States has argued that article 2 does not give an unfettered right to divert, as in the Sage Creek reference: *ibid.*, p. 174.

<sup>14</sup> There is an additional paragraph in article 2 that limits the right to divert where it would cause "material injury" to established navigation interests. It has not been seriously argued by anyone that Canadian diversion from the Columbia River would injure navigation interests downstream.

of opinion among lawyers about the right of "injured parties" and the liability of those who exercise their right to divert under this article.

One view is that the rights and remedies of a party who is injured downstream in the United States by a Canadian diversion are governed, in the absence of a Canadian federal water law, by the law in force at the date of the injury in the province where diversion occurs.<sup>15</sup> If, therefore, one assumes a diversion in British Columbia, the rights of downstream injured parties will be determined by the current water law of British Columbia. This would leave such parties without a remedy, for under British Columbia law (and it was so in 1909) *licensed* users of water are under no obligation to downstream unlicensed users, unless the licence expressly preserves some downstream rights.<sup>16</sup> The "doctrine of prior appropriation" is inapplicable. The only safeguard of a downstream user of water, therefore, is the right to protest to the Comptroller of Water Rights against the issue of a licence for diversion.

The other view, in opposition to the one just stated, proceeds on the assumption that an injured downstream party "should" or "must" have some rights and remedies for damage caused by an upstream diversion. The argument in favour of compensation for an injured party is twofold.

(i) *The "guaranteed remedy" argument*

It is that article 2 was meant to guarantee compensation to those injured by a diversion upstream in the other country; and that, therefore, the article should not be interpreted to produce a result that has the effect of making possible a destruction of all rights and remedies.<sup>17</sup> American authors, quite understandably, are

<sup>15</sup> For a fuller discussion of this, see Bourne, *Columbia River Diversion: The Law Determining the Rights of Injured Parties* (1958), 2 *University of British Columbia, Legal Notes*, at pp. 610-22.

<sup>16</sup> Water Act, R.S.B.C., 1948, c. 361. For the interpretation of this Act, see *Cook v. Vancouver* (1914), 6 W.W.R. 1492.

<sup>17</sup> In a recent article in (1958), 36 *Can. Bar Rev.* 511, Mr. R. D. Scott took the view that article 2 "is not a statute but a contractual undertaking", and that "Canada, having undertaken to provide a remedy for American claimants, cannot deny it by pointing to a statute of her own enactment. . . . Canada is under a contractual obligation to pass such legislation (or to interpret that which has already been passed in such a way) as may be necessary to provide the promised remedy. . . ." From this base, he goes on to build an intricate argument that the effect of this part of article 2 was to incorporate rules of "conflict of laws" which at common law gave such injured parties a right of action and damages. This argument about there being common-law rights in such cases is made in spite of the fact that there is no authority to support it in Britain, that such authority as there is in Canada is contrary to it, that, although there are in the United

fond of this argument and, indeed, there is also an advocate for this view among Canadian authors, for Professor Maxwell Cohen of McGill University has expressed his dislike of an interpretation of article 2 which would result in an injured party having no remedy.<sup>18</sup>

The answer to this argument that article 2 guarantees compensation is that, to use the words of Mr. Borden, the Leader of the Opposition at the time, in the House of Commons debates on the treaty, "there is nothing in the treaty to that effect".<sup>19</sup> But, apart from the words of the treaty, the statements of the Canadians responsible for making the treaty and carrying it through the Canadian House of Commons clearly indicate that there was no intention to guarantee compensation for injuries. It is sufficient to mention here that Hon. Mr. Pugsley, in the House of Commons debates on this very question, said that it was the spirit of the treaty that compensation for injuries should be paid; but he made it clear, when pressed by Mr. Borden and others, that in his opinion article 2 imposed no legal obligation to pay compensation if none is provided for by the law of the place of diversion. And members of the House accepted that view without further question. To contradict the guaranteed remedy argument, one may also cite the words of Chandler Anderson in his Memorandum explaining the 1909 treaty to the Foreign Relations Committee of the Senate. He wrote:

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 that they would be entitled to if the damage 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 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.

. . . such parties are given only the same right of action which they would have if they actually were within the State of Minnesota. Therefore, if the State of Minnesota is now at liberty to drain this swamp land as proposed without being liable to anyone for damages on its own side of the boundary, it is not believed that this provision will give any right of action to anyone on the other side of the boundary.<sup>20</sup>

States some decisions in support of it, there is authority against it, and especially that all those who had to do with the drafting and execution of the treaty seem to have "viewed the Harmon doctrine, as a principle of international law, lying athwart any route for private redress" (at p. 537).

<sup>18</sup> (1958), 36 Can. Bar Rev. 25, at pp. 37-38.

<sup>19</sup> *Supra*, footnote 7, p. 872.

<sup>20</sup> This statement is set out in Mr. Griffin's Memorandum, *op. cit.*, *supra*, footnote 8, p. 47. Italics mine.

There is no better authority on what the words of the treaty mean than Chandler Anderson, for he put them there.

It is submitted that this contemporary interpretation of article 2 is the proper one. The intention of the parties to the treaty seems to have been not to guarantee payment of compensation for all damage suffered, but to guarantee equality of treatment to all persons affected by a diversion, no matter on which side of the border they happen to be. For this purpose, the border is deemed to be no longer there and everyone has the same rights and remedies under the law of the place of the diversion. The words of the article seem to achieve this purpose very aptly.

(ii) *The "general principle" argument*

The second argument in favour of remedies for injured parties is an appeal to the general principles of international law. It is that there is a principle of international law that "a state which alters the character of the bed or flow of an international river can be held responsible if injury is thereby occasioned to another state on that river".<sup>21</sup> In other words, a state may have the right to divert, but, if doing so causes injury to downstream parties, then it must pay damages. Even if one were to admit that with certain modifications there is some such principle of *customary* international law (a principle that is the very opposite of the Harmon doctrine so firmly insisted on by the Americans responsible for the treaty), it seems perfectly clear from the history of the drafting of the 1909 treaty that the parties to it expressly agreed that their international rivers should be governed by a different principle. The Canadians had urged the adoption of the substance of an article in the Clinton-Gibbons draft treaty which would have prohibited diversions of waters that materially interfered with the natural flow "to the injury of the other country, or of its citizens", without the consent of such other country. But Chandler Anderson advised Secretary of State Elihu Root that non-boundary waters in the United States were under the exclusive control of the United States government, and that "international law fails to apply" to such waters; that, in effect, there were no principles of international law applicable to such "an undeveloped subject as the use of tributary waters or waters crossing the boundary".<sup>22</sup>

<sup>21</sup> This argument was supported by the late Professor Clyde Eagleton. See Papers presented at the Annual Meeting, Canadian Bar Association, Banff, 1957, p. 129. Professor Charles E. Martin also made a similar argument in his paper read before the American Society of International Law and referred to above.

<sup>22</sup> See Chandler Anderson's Report on the draft Clinton-Gibbons

With this advice in mind, the United States government rejected the principle of "no diversion without consent" and insisted on reserving its right to divert at will; but it agreed, as a concession to Canada, to the provisions for individual remedies as set out in the second part of article 2. The basic assumption, then, on which the article is based, is that international law does not apply to diversions of waters under the control of a state; it imposes no liability for injuries to other states or persons resident there. This is what the parties had in mind when they accepted article 2; and, to soften the customary law, they made special provision for individual remedies. Consequently, it is difficult to accept the argument that article 2 leaves room for the application of principles of state responsibility to diversions lawfully made. The very existence of the second part of article 2, making special provision for a remedy for injured individuals, is testimony to the fact that the parties understood that there would be no remedy of any kind available outside of that article.

One concludes, therefore, that under article 2 Canada has an unfettered right to divert the Kootenay and Columbia Rivers, that her liability for any damage suffered by diversion is confined to that under the second part of that article, and that, because of the provisions of the British Columbia Water Act, she would incur no liability to any "injured parties" downstream.

Some persons contend that the United States government might have a claim for compensation, not for injuries caused downstream by a diversion of Columbia River waters, but for injury to her interests in the sockeye salmon fishery of the Fraser River system. This argument is based on the assumption that the dams which would have to be built on the Fraser River to use economically the diverted waters and, perhaps, the colder water of the Columbia River would destroy the fishery. For Canada to destroy unilaterally this fishery, it is said, would be a violation of her obligations under the Sockeye Salmon Fisheries Convention between Canada and the United States.<sup>23</sup> By that treaty, it was recognized that this fishery was of "common concern" to the two countries and that the supply of fish was greatly depleted and should be restored and maintained. Article 7 provided that "they should share equally in the fishery". A claim by the United States to compensation for injury to the Fraser River fishery would, of course, arise out of the special treaty provisions relating to this treaty, which is reproduced in Mr. Griffin's Memorandum, *op. cit.*, *supra*, footnote 8, pp. 16-17.

<sup>23</sup> Signed in 1930 and ratified in 1937.

particular fishery and not from any law pertaining to the diversion of international rivers. One finds it difficult to see the merit of such a claim. There is nothing in the convention to suggest that the use of the Fraser River for power was in anyone's mind; nor is there anything to show that Canada or the United States thought that Canada was promising not to do anything on the Fraser River that might interfere with fish. The Commission, set up by the treaty, was given authority by article 3 to *recommend* to the governments that obstructions to the ascent of salmon should be removed; but it is clear that only obstructions caused by nature were in mind. In any case, the treaty imposed no obligation on the parties to carry out the recommendations of the Commission. I submit that this argument, using the Sockeye Salmon Fisheries Convention to limit Canada's right to divert the Columbia River and to develop the Fraser River for hydro-electric power, has little chance of success. It would be a surprising use of that treaty.

(b) *Diversion under general principles of international law*

While Canada's right to divert the Kootenay and Columbia Rivers has been based upon article 2, for treaty law displaces conflicting customary international law, it should not be thought that Canada's proposals are contrary to general principles of international law.

It may be said at once that it is still doubtful whether there is any international law on international rivers other than that embodied in the Harmon doctrine and in article 2. On the one hand, several upstream states even to-day pay at least lip-service to the doctrine of territorial sovereignty, that is to say, that a state may do as it pleases with any waters in its territory, including the waters of international rivers, without regard to downstream interests. And this view of international law, or rather of an absence of international law, is supported by some five or six text writers.<sup>24</sup> On the other hand, there is considerable support for a principle of international law known as the "doctrine of equitable apportionment". This support may be marshalled thus.

<sup>24</sup> For a review of the opinions of text writers, see Sevette, *Legal Aspects of Hydro-electric Development of Rivers and Lakes of Common Interest* (1952), and a report prepared by the Committee on Electric Power of the United Nations Economic Commission for Europe, U.N. Document No. E/ECE/136, at pp. 51-68. For further references to text writers, see *Principles of Law and Recommendations on the Uses of International Rivers*, submitted to the International Committee of the International Law Association by the Committee on the Uses of Waters of International Rivers of the American Branch (May 1958), at pp. 38-41 (Library of Congress, Catalog Card Number 58-12111).

(i) Downstream states have always opposed the "territorial sovereignty" doctrine and have pressed the claims of theories either requiring their consent to upstream acts that may produce adverse downstream effects or requiring co-riparians to share the benefits of an international river. For example, these are the theories expressed by the Canadian and United Kingdom governments in their correspondence and negotiations with the United States government before 1909 about Canadian and American rivers and lakes, especially about the diversion of the waters of the Great Lakes system at Chicago.<sup>25</sup>

(ii) Treaties dealing with international rivers, with a notable exception in article 2 of the Boundary Waters Treaty of 1909, in fact provide solutions based on an apportionment of benefits.<sup>26</sup> It is arguable, of course, whether or not treaty provisions can ever be any indication of general principles of customary international law. Circumstances may alter cases, but in general this statement made in a study of European international river problems seems sound:

Nevertheless, the examination of these conventions is of value insofar as it provides a clue to the conception of international law held by nations generally. If, in fact, the same problem is resolved in the same way in a large number of agreements, it may be concluded that that solution is in line with the principles generally recognized by civilized states.<sup>27</sup>

(iii) While there seem to be no international adjudications directly applying customary international law to international river problems,<sup>28</sup> there are several decisions of German, Italian, Swiss

<sup>25</sup> Simsarian, *The Diversion of Waters affecting the United States and Canada* (1938), 32 A.J. Int'l.L. 488, especially at p. 518.

<sup>26</sup> Access to this great mass of treaty law is provided in summaries or abstracts of the treaties in such books as: H. A. Smith, *The Economic Uses of International Rivers* (1931), pp. 159-217; and The U.N. Economic Commission for Europe Report, *op. cit.*, *supra*, footnote 24, pp. 95 *et seqq.* Other sources are referred to in the American Branch Report to the International Law Association Committee, *op. cit.*, *supra*, footnote 24, pp. 22-24. For a list of treaties and other agreements on international rivers and lakes in the western hemisphere, see Appendix II, Table II, in a study, *The Juridical Status of International (Non-Maritime) Waters in the Western Hemisphere* by Guillermo J. Cano, published in *Principles of Law Governing The Uses of International Rivers and Lakes*, being the Resolution adopted by the Inter-American Bar Association at its Tenth Conference held in November, 1957, at Buenos Aires, Argentina, together with Papers submitted to the Association (1958), p. 73, at pp. 108-111 (Library of Congress, Catalog Card Number 58-12112).

<sup>27</sup> The U.N. Economic Commission for Europe Report, *op. cit.*, *supra*, footnote 24, pp. 204-205. See other statements to the same effect in The American Branch Report to the International Law Association Committee, *op. cit.*, *supra*, footnote 24, pp. 25-27.

<sup>28</sup> In the decision of the Court of Arbitration set up to deal with a dispute between France and Spain about the use of the waters of Lake

and especially United States courts supporting the doctrines of equitable apportionment.<sup>29</sup> The doctrine was first enunciated in the United States Supreme Court in deciding disputes between States over the waters of inter-state rivers. In dealing with these problems, the Supreme Court regarded itself as a sort of international court. In an early decision, Holmes J. said:<sup>30</sup>

Sitting, as it were, as an international as well as a domestic tribunal, we apply Federal law, state law, and international law, as the exigencies of the particular case may demand. . . .

There is little doubt that the Supreme Court, in the absence of any explicit American law on the subject, applied what it conceived to be a common-sense principle in accordance with customary international law to a dispute between states analogous to sovereign states.<sup>31</sup> It called that principle "the doctrine of equitable apportionment", to be applied "without quibbling over formulas", as Holmes J. said in *New Jersey v. New York*.<sup>32</sup> This principle was also applied by a German,<sup>33</sup> a Swiss<sup>34</sup> and an Italian<sup>35</sup> court.

(iv) The great majority of text writers emphatically reject the "territorial sovereignty" theory (the Harmon doctrine).<sup>36</sup> Professor H. A. Smith has called it an "intolerable doctrine" that is "radically unsound".<sup>37</sup> The view of these text writers is largely based on the principle that one cannot injure one's neighbour unreasonably

Lanoux, the court in *obiter dicta* made it clear that in its view international practice, while it does not require an upstream state to get the consent of a downstream state before undertaking works using water for power purposes, requires it to take into account downstream interests which are in danger of being affected by the works to be undertaken. This decision may be found in (1958), 29 *Revue Générale de Droit International Public*, at pp. 79-119.

<sup>29</sup> For references to relevant cases, see the American Branch Report to the International Law Association Committee, *op. cit.*, *supra*, footnote 24, pp. 30-38.

<sup>30</sup> *Kansas v. Colorado* (1902), 185 U.S. 125, at pp. 146-147.

<sup>31</sup> Simsarian denies that the United States Supreme Court was applying a rule of international law; he contends that it was creating "inter-state law". The same view was expressed by R. D. Scott in (1958), 52 *Am. J. Int'l L.* 432. For a different view, see the American Branch Report to the International Law Association Committee, *op. cit.*, *supra*, footnote 24, pp. 31-33.

<sup>32</sup> (1931), 283 U.S. 336, at p. 343.

<sup>33</sup> *Württemberg and Prussia v. Baden* (1927), Annual Digest of Public International Law Cases, 128.

<sup>34</sup> For the decision of the Swiss Federal Tribunal, see Smith, *op. cit.* *supra*, footnote 26, pp. 39 and 104.

<sup>35</sup> *Société Énergie Électrique du Littoral Méditerranéen v. Compagnia Imprese Elettriche Liguri* (1939), Annual Digest of Public International Law Cases, No. 47.

<sup>36</sup> See *supra*, footnote 24 for review of authors. The doctrine of equitable apportionment was also adopted by the Report of the Indus (Rau) Commission (1942), Vol. I, printed by the Superintendent, Government Printing, Punjab, 1950.

<sup>37</sup> Smith, *op. cit.*, *supra*, footnote 26.



(*sic utere tuo ut alienum non laedas* is a principle that is appropriate in cases analogous to nuisance, like the *Trail Smelter* case,<sup>38</sup> but it can only be applied in modified form in international river disputes which may not be analogous in any way to nuisance problems). They all agree that international law imposes limitations upon the sovereignty of a state over a water-way situated in its territory in the interest of neighbouring states. But the scope and nature of these limitations are a matter of disagreement, with views ranging from the need for the consent of neighbouring states to proposed works (that is a veto right) to merely the requirement that a state need only act reasonably under the circumstances.

(v) Several conferences of international lawyers have dealt with the principles of law that govern or ought to govern international rivers. They have produced significant statements of principles, starting with the Madrid Declaration of 1911 and ending with the statement adopted by the International Law Association at New York in 1958.<sup>39</sup> Like those of the text writers, the principles adopted by these conferences vary considerably; all impose limitations on the sovereignty of co-riparians, but there is disagreement about the degree of limitations. The most recent statement, that adopted at New York in 1958, is the vaguest one of all. After much discussion and disagreement, the Committee on the Uses of the Waters of International Rivers of the International Law Association adopted unanimously the following propositions:

2. Except as otherwise provided by treaty or other instruments or customs binding upon the parties, each co-riparian State is entitled to a reasonable and equitable share in the beneficial uses of the waters of the drainage basin. What amounts to a reasonable and equitable share is a question to be determined in the light of all the relevant factors in each particular case.
3. Co-riparian States are under a duty to respect the legal rights of each co-riparian State in the drainage basin.

This sparse statement of law, adopted in plenary session, was the maximum that members could agree on. Beyond it, there was no agreement about the content of the law of equitable sharing (for example, about the right to divert some of the waters of the river, to act unilaterally and so on).

These five categories just set out provide the material with which to build an impressive argument against the "territorial

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<sup>38</sup> *The Trail Smelter Arbitration* (1938: 1941), 3 U.N. Reports of International Arbitral Awards 1905.

<sup>39</sup> For convenient extracts from these documents, except the latest one, see the American Branch Report to the International Law Association Committee, *op. cit.*, *supra*, footnote 24, pp. 53-73.

sovereignty" theory. They give strong evidence that there is some international law to regulate the uses of international rivers. But international law in this area is not much developed and does not go beyond that statement agreed upon by the International Law Association in 1958. It is nothing more than the doctrine of equitable apportionment. It affirms that a downstream state has some rights in an international river, but it leaves the rights and duties of co-riparians uncertain; it is merely a question of what is reasonable "in the light of all relevant factors in each particular case". This would mean that *some* diversion by an upstream state is possible without violating international law, the test of the lawfulness being the reasonableness of the diversion under the particular circumstances. In other words, the international law principle of equitable apportionment is not the same as the common-law "riparian rights" rule, under which the downstream riparian owner had an absolute veto over upstream diversions.<sup>40</sup> The lawfulness of reasonable diversions under the doctrine of equitable apportionment is supported by such decisions of the United States Supreme Court as *Kansas v. Colorado*,<sup>41</sup> where the right of Colorado to divert water was upheld because the gain to that state outweighed the loss to Kansas (that is, it was reasonable in the particular circumstances).

And so it is submitted that, even under the general principles of international law and apart from article 2 of the 1909 treaty, Canada may lawfully make *reasonable* diversions of the Kootenay and Columbia Rivers. If this is so, Canada's right to make the diversions under study can be viewed not only under article 2 but also under general principles. And one may ask whether or not it is reasonable for Canada to claim fifteen million acre-feet of the waters of these rivers as her fair share and equitable portion of them. This claim does not seem unreasonable when one takes into account the particular circumstances of those rivers, that is to say, the fact that about sixty three million acre-feet out of a total average annual flow of 180 million acre-feet of the water that reaches the sea by the Columbia River have their origin in Canada, the ability to use the water in Canada by diversion to the Fraser River, the economic aspects of the diversion, balancing the advantages to Canada against the disadvantages to the United States, and so on.

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<sup>40</sup> See the decision of the Court of Arbitration in the Lake Lanoux dispute, *supra*, footnote 28.

<sup>41</sup> *Supra*, footnote 30; (1907), 206 U.S. 46.

### B. *The Right to Compensation for Downstream Benefits*

The assertion by an upstream state to a right to compensation for downstream benefits is of recent origin and, consequently, there is little authority directly in point. The United States government itself was the first to argue for such a right. In 1925 the New Brunswick Electric Power Commission applied to the International Joint Commission for approval, under article 4 of the 1909 treaty, for a power development at Grand Falls on the Saint John River which would back up the waters of the river and raise its level at and along the international boundary. At the hearings, counsel for the United States, Mr. Hackworth (now the President of the International Court of Justice), claimed that the United States was entitled to a certain percentage of the power generated at Grand Falls. In substance, the claim was to all of the power whose generation was made possible by the storage of water on American soil, which he called "an encroachment on sovereignty". As it was a boundary water, the United States was entitled to only half of the waters and, therefore, only claimed half of the power made possible by backing up the waters of the river. Canada and New Brunswick argued against the claim. The Commission, however, did not have to decide the issue because the applicant entered into an agreement with American interests to make certain power available for use in Maine; and the order of the Commission merely noted this agreement.<sup>42</sup> Although there was no decision on this question in the Grand Falls Power Dam application, it is an instance of acquiescence in a claim for compensation for downstream benefits and of compensation being made in the form of power rather than cash. Other examples of such claims being acquiesced in are found in European treaties.

The Grand Falls Power Dam case is relied on heavily by Canada as a precedent supporting her claims to recompense for downstream benefits. But when she referred to it in argument in the Libby Dam application, the United States denied its applicability, contending that there is a distinction between the claims that may be made when waters are backed up into *boundary waters* and when they are backed up *across* the boundary. The basis of this argument is that article 8 of the 1909 treaty expressly provided that there must be "an equal division" of boundary waters between the United States and Canada and that both have "equal and similar rights in the use" of those waters; hence, power generated in

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<sup>42</sup> See Bloomfield and FitzGerald, *op. cit.*, *supra*, footnote 13, pp. 113-115.

boundary waters must be shared. But since the treaty did not provide for sharing the waters of trans-boundary rivers, power produced in one country does not have to be shared with the other country.

This argument is correct as far as it goes, but it does not go far enough to dispose of Canada's claim to share downstream benefits. The United States is undoubtedly entitled to all of the hydro-electric power that can be generated in the United States without assistance from Canada and with the water that she is legally entitled to. But if the United States seeks to generate power beyond the amount that can be thus generated, either by invoking Canada's aid in regulating the flow of a river by the storage of water in Canada (for example, behind Libby Dam or Mica Creek Dam), or by seeking to use waters that Canada is exclusively entitled to and wishes to use (for example, by diversion from the Columbia River to the Fraser River), should she not expect to pay a price for it? There is no warrant in the treaty or elsewhere for saying that the United States is entitled to that aid or those "Canadian" waters; or that she is under no obligation to give something in return for the benefits that she would derive from such aid or such waters. It must be remembered that article 2 tolerates unilateral diversions of trans-boundary rivers and so it is not inappropriate to speak of "Canadian" waters. Is there, then, any real difference between the argument of the United States in the Grand Falls Power Dam application and that of Canada in the Libby Dam application and in other discussions about developments on the Canadian portion of the Columbia River? In all instances, the governments were claiming electric power made possible by the use of their resources.

Admitting that there is little authority to support the right to compensation for downstream benefits, this right seems inherent in the principle of customary international law that the waters of a river must be shared equitably by the states through whose territories it passes. This principle contemplates the equitable division of the benefits of a river system. Within the United States, upstream states have in fact been successfully claiming a share of benefits conferred on downstream states by works in the upstream states.<sup>43</sup> Some Americans, too, have come to the view that Canada

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<sup>43</sup> Apart from attempts to provide for sharing of benefits by "interstate compacts", section 10(f) of the Federal Power Act imposes on the Federal Power Commission the duty of determining the benefits to downstream plants from upstream storage and of assessing charges against those downstream plants.

is entitled to some share of the downstream benefits arising from storage of water in Canada. The offer in the 1954 Libby Dam application to pay some recompense to Canada showed this. And Mr. F. W. Jandrey, Jr., of the State Department, said in a statement to the Senate Committee on Interior and Insular Affairs in 1958 that "there is little disagreement with the general principle that simple equity requires some compensation be paid for the benefits received from upstream improvements". There is little argument now about the right to compensation, but only about the amount and the method of compensation.

With regard to the amount of compensation, there is no fixed principle. The extreme view, based on the Grand Falls Power Dam case, is that a state is entitled "to receive a share of power proportional to the *whole* increase" of power attributable to the works in the upstream state or to the use of waters exclusively belonging to that upstream state. In practice, it will, no doubt, be a matter for negotiation in each particular case. General McNaughton has mentioned that power benefits should be shared on a fifty-fifty basis; and, in a statement issued on December 5th, 1958, the Hon. Howard Green, Acting Prime Minister, spoke of "downstream benefits of half the additional energy produced in existing United States plants as a result of regulated flow of storage in Canada". No one knows whether this formula will be acceptable to the United States.

There are, of course, other downstream benefits besides power for which compensation may be claimed. Flood control, irrigation, navigation, domestic and industrial uses, the preservation of natural beauty and of recreational areas, the improvement of fisheries, all of these and perhaps others may be assisted by upstream works. Many variables will enter into the calculation of the value of such benefits as these; and few formulas for determining it have been noticed.<sup>44</sup> The Secretary of the Northwest Public Power Association had this to say about flood control benefits: "Payment to Canada for downstream flood control benefits can logically be based on the downstream exposure to flood damage . . . doubling and tripling every few decades. Canada can exact a greater and

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<sup>44</sup> It will be difficult to reach agreement on what downstream benefits do in fact accrue from Canadian storage and regulation of flow. For an American view that Canadian storage will have a diminishing value as the years pass, see the Report of the Joint Hearings before the Committee on Interior and Insular Affairs and a Special Sub-committee of the Committee on Foreign Relations, United States Senate, 1956, at pp. 53, 78, 82-83, 100-103. For an opposite American view, see *ibid.*, at pp. 364-367.

greater price . . . payments will be required each year for ever".<sup>45</sup> He then estimated that the United States would "in all likelihood be required to pay Canada . . . initially about \$1 per acre-foot of effective flood storage per year".

The method of compensation is also a contentious matter, especially when the downstream benefit is power. Canada insists that she is then entitled to compensation by the return of power to Canada and not by the payment of cash. There are two reasons for this. Firstly, money has a tendency to lose its value over the years and any sums fixed now may soon bear no relation to the actual value of the benefit conferred. Secondly, and more important, the value of water for generating electricity will likely increase greatly as the years go on and it is not possible at the present time to estimate its true worth. When all sources of hydro-electric power are developed, then additional power will come from plants powered by gas, coal, nuclear materials and so on. In such a mixed power system, water will be used most economically for "peaking". Water held in storage behind a dam can at a moment's notice be brought to the turbines to meet sudden demands for extra power and it would cost the same to produce a kilowatt of hydro-electric power for this peak load as for the base load. Thermal or nuclear power plants, on the other hand, are intricate and complicated things and cannot be turned on and off at a moment's notice and so it is very expensive to use them to produce power needed only for short periods. To determine the true value of water used for power in the future, one must compare hydro-electric power plants not with thermal or nuclear plants used always at 100% capacity but with those plants used only to produce power for short periods to meet peak loads.<sup>46</sup>

Canada's demand for compensation in power rather than in cash raises a temporary problem, for there is no immediate market for vast quantities of power in British Columbia. It would seem probable, therefore, that Canada will wish to enter into an agreement with the United States providing that, until the power is needed, compensation shall be paid in cash equivalent to the power that she is entitled to. This sort of agreement has its dangers, for experience with a similar agreement (to export power from Ontario to New York) early in this century showed that it is not easy to

<sup>45</sup> Letter of May 6th, 1957, to the Chairman, Sub-Committee on Irrigation and Reclamation of the Interior and Insular Affairs Committee of the House of Representatives, Washington.

<sup>46</sup> See the statement of General McNaughton, *op. cit.*, *supra*, footnote 6, pp. 364-365; 409-410.

deprive users in another country of the power on which they have built their industries. In these days, however, when alternative though more costly sources of power are readily available to fill any gaps in the supply of power made by the need to export power in payment for the enjoyment of downstream benefits, it should be possible to avoid future difficulties by a carefully drawn agreement.

## V

Disputes about international rivers have in practice been settled by agreement rather than by resort to law. This is not surprising in view of the doubt about the very existence of an international law of rivers and of the confusion of opinion about what the substance of that law is or ought to be. But even if the parties to such disputes were to accept the highest claims made for an international law of rivers, many details about the development and operation of the rivers in question would not be defined by that law and would be left for settlement by agreement. Many of these details often raise problems of policy and in any event are complicated,<sup>47</sup> so that one cannot foresee that legal rules will ever do more than impose on the parties an obligation to negotiate and to reach an agreement about them. It is inevitable that Columbia River development must be preceded by negotiations and by an agreement between Canada and the United States. Negotiations have in fact been proceeding off and on during recent years and almost continuously during 1959.

Canada's attitudes in these negotiations have been affected by economic, legal and political factors. There is, first of all, the predicted need for cheap power to ensure competitive industrial development. Secondly, there is the firmly held view of Canada's legal right to use a portion of the Columbia River waters in Canada by diversion to the Fraser River. Thirdly, there are a number of factors of a political nature that must be taken into account. Two of these deserve mention: the influence of the fisheries interests; and the prospect of a huge hydro-electric development of the Peace River in northern British Columbia by private power interests.

The fisheries interests of British Columbia, along with those in the United States, strongly oppose the building of dams on the Fraser River until it has been demonstrated beyond doubt that such dams will not interfere with the passage of fish. They are not

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<sup>47</sup> For some of the problems that arise, see: *op. cit.*, *supra*, footnote 10, at p. 45.

yet convinced that dams on a river are compatible with the preservation of a fishery; and they are also apprehensive about having cold Columbia River waters diverted into the Fraser, wondering whether the change in temperature will adversely affect the fish. Both of these problems will undoubtedly be solved in the long run by scientific investigation and engineering skill, and then both power and fish will be had from the Fraser (it must be remembered that the Fraser River is, by reason of proximity, the cheapest source of electric power for the lower mainland area of British Columbia). However, in the short run, while the problems remain unsolved, the fisheries interests are strong enough to embarrass the government in any attempt at a diversion scheme. As we shall see, actual diversion into the Fraser River is not likely to take place in the near future, and so its fishery will not be immediately threatened. Diversion will not come, if at all, until a time sufficiently far in the future to have allowed solutions to the problems raised by building power plants on rivers with fish. It is not, therefore, anticipated that the British Columbia fisheries interests will oppose whatever plan the Canadian government is proposing as a basis for agreement on Columbia River development.

A struggle between "public power" and "private power" advocates in British Columbia has emerged and by the end of 1958 it had become intense and even bitter.<sup>48</sup> The reason for the growing warmth of this struggle was mainly that it had become clear during 1958 that there was a scheme afoot, with the blessing of the British Columbia government, to dam the Peace River in a manner that will produce enormous quantities of electric power (about 4,000,000 kilowatts at two sites and perhaps twice as much later with other sites). Some persons have been disturbed by several aspects of this scheme. They argue thus. Firstly, this development of the Peace River will be undertaken by predominately private interests.<sup>49</sup> Privately developed power, they say, is bound to be more expensive than public power because the cost of financing it is higher. Secondly, the bulk of the Peace River power will have to be transmitted

<sup>48</sup> A Royal Commission was established in November 1958 to enquire into charges made by the former manager of the B.C. Power Commission, the publicly owned corporation, the gist of them being that private power interests were being favoured by the provincial government at the expense of the publicly owned power corporation.

<sup>49</sup> A private company, the Peace River Power Development Company Limited, has been incorporated with the object of developing the hydro-electric potential of the Peace River. It has been suggested, however, that the B.C. Power Commission may be allowed to buy a small percentage of the shares of the Peace River Power Corporation, as the B.C. Electric Company Ltd., and other corporations have been allowed to do.



about 580 miles to the Vancouver area because there is at present no market for so much power in the northern interior of British Columbia, and this will greatly increase the cost of the power. Peace River power will, therefore, be more expensive than that from Mica Dam on the Columbia River which will be only about 400 miles from the Vancouver market. Furthermore, Mica Dam will also have other advantages because it will entitle British Columbia to cheap power from the United States in payment of downstream benefits. Thirdly, developing the Peace River now will postpone the development of the Columbia River because the two schemes cannot be undertaken simultaneously, there being insufficient funds to finance both and, more important, there being no market for the power from both of these great projects. Consequently, it will disturb relations with the United States whose patience in waiting for decisions about the Columbia River has already been sorely tried. Fourthly, the Peace River power development is linked with the much grander scheme of the Swedish financier, Dr. Axel Wenner-Gren and his associates, to develop the Rocky Mountain Trench in the northern interior of British Columbia. This scheme has been under considerable criticism from some quarters and charges of a "give away of British Columbia's natural resources" have been heard. The proposed Peace River power scheme is easily tarred with the same brush.

There are, of course, those who take the opposite view and explain away or refute the points just made. And the British Columbia government does seem to feel that the fruition of these schemes in the Peace River area will contribute greatly to the rapid growth and prosperity of the province. It takes the view that the two schemes, Peace River and Columbia River, can proceed together. And, while it supports development of the Peace River by private interests, it has for some time now taken the stand that the Columbia River will be developed by publicly owned interests, although the exact form of the development agency has not yet been disclosed.<sup>50</sup>

While a public versus private power controversy does not necessarily affect decisions about developing the Columbia River, it may in fact have repercussions on them. The provincial government seems to favour an early start on the Peace River development scheme. The federal government, on the other hand, strongly favours developing the Columbia River first. It no doubt has in mind

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<sup>50</sup> The federal government has offered to share the burden of development of the Columbia River by a public agency.

the dangers in exporting and later trying to recapture the huge amounts of electric power which would have to be disposed of if both developments proceed concurrently, and also the anticipated cheaper price of power from Columbia River development. Both provincial and federal governments have asserted, since January 1959 at any rate, that their policies on Columbia River development are in harmony; but there is an underlying conflict of views about the timing of the Peace River development which may well strain relations between the two governments and interfere to some extent with the settlement of the international Columbia River issue.

There has been no disclosure of the stand taken either by Canada or by the United States in the current negotiations about Columbia River development. However, there have been indications of the sort of settlement that both wish for, and one can speculate about their respective claims. The basic Canadian policy clearly is that Canada should claim her fair share of international river waters and should use them to the best advantage of Canada. With this in mind, one guesses that Canada's proposed terms of settlement are as follows.

1. The Columbia River system should, for the purpose of development, be treated as an integrated whole. This would mean co-operative development and operation of storage and power projects so as to produce the greatest possible benefits from the waters of the Columbia and Kootenay Rivers without regard to the international boundary, and taking the possibility of all diversions into account.<sup>61</sup> It would not, however, involve joint-ownership or joint-management of any works; and a new international agency would not be necessary.<sup>62</sup>
2. The "Dorr Diversion" plan, one of three possible plans suggested by the International Columbia River Engineering Board, should be adopted. Under this plan the waters of the Kootenay River would be backed-up behind a dam at Dorr, the lowest suitable site above the United States border, which would allow about 8,000 cubic feet per second to flow through a one-mile

<sup>61</sup> The Report of the International Columbia River Engineering Board dealt only with the diversion from the Kootenay River to the Columbia River. It showed not only that this diversion is possible but that the maximum diversion plan, which would make Libby Dam impossible, is the most economical use of the water, the total investment costs being estimated at about eight percent below the next alternative plan (that is to say, a saving of something like \$300,000,000).

<sup>62</sup> Professor Maxwell Cohen favoured the creation of a new international agency to manage the development and operation of the Columbia River system, *op. cit.*, *supra*, footnote 18, at pp. 39-40.

canal at Canal Flats into the Columbia River. The conception of a great dam at Libby would have to be abandoned.<sup>53</sup>

3. There should be no immediate diversion of the waters from the Columbia River to the Fraser River, mainly because the supply of power from Columbia River and other developments will exceed the demand for it in British Columbia for some years. But it should be firmly agreed now that Canada can make this diversion (15,000,000 acre-feet has been mentioned) in twenty five to thirty five years. By that time there will be a market in British Columbia for the power the diverted water can produce in Canada. Pending diversion, the United States would have the benefits that these Canadian waters can confer on downstream interests. And in the intervening years United States interests would have time to amortize the installations built to take advantage of the regulated flow made possible by Canadian dams and to plan and build the alternative sources of power that will be needed when the water has been diverted in Canada.
4. The benefits from the Columbia River system should be shared equitably between Canada and the United States. The United States, therefore, should share all downstream benefits with Canada. Where the downstream benefits are power, Canada's share of those benefits should be half of the power produced in plants in the United States and attributable to the regulated flow of the river by storage in Canada. And payment for power benefits should always be in the form of *power* and not cash; but, if there is no present need for power, "then, as a temporary measure for a limited fixed period of years only, settlement . . . may be made in cash equivalent . . ."<sup>54</sup>

The reaction of the United States government to these Canadian proposals may be predicted as follows. It will readily agree to the first proposition; it will try to modify the second, pressing for a more limited diversion, but it will be prepared to agree to it in the end; it will be relieved to learn from the third proposition that no immediate diversion into the Fraser River is contemplated, but it will be uncompromising in its refusal to agree to any diversion from the Columbia River into the Fraser River now or in the future; it will agree (in fact, it already has agreed) to the

<sup>53</sup> The Report of the International Columbia River Engineering Board shows that Libby Dam is less economical than alternate projects on the Columbia River in Canada.

<sup>54</sup> This quotation is taken from a statement of the official policy of the Conservative Party. This policy was reaffirmed by Prime Minister Diefenbaker in a speech at Vancouver in March, 1958.

principle in the fourth proposition that Canada is entitled to a share of the downstream benefits, but it will minimize greatly the quantum of downstream benefits from the development of the Columbia River in Canada and it will dispute keenly the fifty-fifty formula. It is almost certain, then, that there will be hard bargaining about the amount of downstream benefits and their division; but the parties will most likely reach agreement on these matters without great difficulty or delay. The question of ultimate diversion into the Fraser River is another matter, for the value of this 15,000,000 acre-feet of water for hydro-electric purposes is in the long run so great that neither Canada nor the United States will wish to surrender it by voluntary act. It is, therefore, a real stumbling-block in the way of agreement.

Since the economic and political pressures for an early start on Columbia River development are considerable in both Canada and the United States, some way around the diversion stumbling-block must be found. There is such a way; and it is a most convenient and proper one. The entire "diversion" issue turns upon Canada's legal right to make this particular diversion. If this most contentious issue does threaten to frustrate attempts to reach agreement, would it not be desirable to dispose of it by agreeing to submit it to adjudication by the International Court of Justice or by an *ad hoc* tribunal? Once adjudication as the means of deciding this matter of diversion has been unequivocally accepted by both parties, then agreements on other matters could be implemented without delay.

By and large, prospects for settlement of the Columbia River controversy have never been brighter than they now are. The report of the International Columbia River Engineering Board has made available the facts necessary for making a rational judgment of the use of the waters of the Columbia River basin for maximum power production. The British Columbia and the Canadian governments, co-operating closely now, have been studying the economic aspects of various proposals for settling how the river is to be developed, and so they have a clearer idea of the economic effects of various schemes. United States interests wish settlement as soon as possible, for they need the power. And the Canadian government has become very interested in an early settlement since the plans for Peace River power loomed on the horizon. But the negotiators are dealing with difficult and intricate problems and have to make decisions of tremendous importance to both countries. General McNaughton has said that it is not a king's ransom at stake, but

“an empire’s ransom”. It is unreasonable to expect detailed agreements quickly. The chances are that it will take longer to reach a comprehensive settlement than most persons think.

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