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# The Canada-United States Controversy over the Columbia River

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# THE CANADA-UNITED STATES CONTROVERSY OVER THE COLUMBIA RIVER†

RALPH W. JOHNSON\*

*In a comprehensive study of the recent dispute between Canada and the United States over the Columbia River, Professor Johnson traces its history through the birth of the Harmon doctrine in 1898, the signing of the Boundary Waters Treaty in 1909, and the first Canadian claim to downstream benefits in the early 1950's. Against this background, he analyzes the negotiations and events—particularly the Canadian proposals to divert the Columbia into the Fraser, and to develop the Peace River instead of the Columbia—that culminated in the Columbia River Treaty in 1961. Before Canadian ratification of the Treaty, however, additional problems presented by the split between the Provincial and National governments had to be resolved. Their resolution brought about the signing of a Protocol with the United States in 1964, as well as ratification of the Treaty. Finally, Professor Johnson comments on the benefits accruing to each nation from the Treaty and its potential impact on future Canadian-United States relations.*

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## TABLE OF CONTENTS

<i>Introduction</i> . . . . .	680
I. The Columbia Basin	
A. The River . . . . .	682
B. Climate in the Basin . . . . .	684

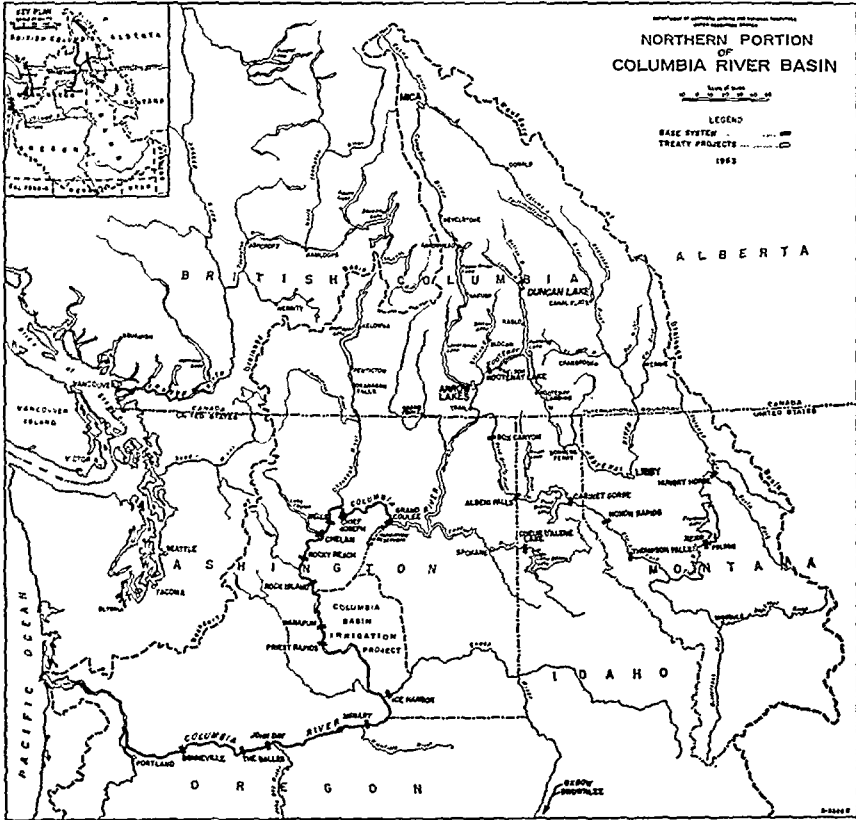
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C. Economy and Population of the Region . . . . .	685
D. Power . . . . .	686
E. Irrigation . . . . .	688
F. Commercial Fishery . . . . .	689
G. Navigation . . . . .	689
H. Flood Control . . . . .	690
I. Recreation . . . . .	690
II. Early History	
A. Discovery of the Columbia . . . . .	691
B. The Boundary Dispute, 1812-1846 . . . . .	692
C. The Post Treaty Period, 1846-1944 . . . . .	694
D. The 1909 Boundary Waters Treaty . . . . .	694
1. Introduction . . . . .	694
2. Prior Treaties . . . . .	695
3. The 1895 Dispute with Mexico—The Harmon Doctrine . . . . .	696
4. Existing Water Disputes with Canada . . . . .	698
5. Birth of the Joint Commission Idea . . . . .	699
6. The International Waterways Commission, 1905-1909 . . . . .	700
7. Negotiations Toward the Treaty . . . . .	702
8. Interpretation of Article II . . . . .	706
9. The Boundary Waters Treaty Provisions . . . . .	708
III. The 1944 Reference	
A. The Background . . . . .	711
B. Possible Advantages from Joint Development . . . . .	712
C. Signs of the Coming Storm—the Libby Dam Proposal . . . . .	713
D. Kaiser Aluminum—Arrow Lakes Dam Proposal . . . . .	715
E. Puget Sound Utilities Council—Mica Dam Proposal . . . . .	715
F. International River Improvements Act, 1955 . . . . .	716
IV. The Fraser Diversion Scheme	
A. Impact of Diversion on the United States . . . . .	717
B. Legal Arguments . . . . .	718
1. The Canadian View . . . . .	718
2. The American View . . . . .	719
3. Canadian Rebuttal . . . . .	720
4. Additional Arguments—Both Sides . . . . .	721
C. Comment on Legal Arguments . . . . .	724
V. The Peace River Alternative	
A. Progress Toward Agreement . . . . .	727

VI. The Engineering Report, April 1959	
A. Introduction . . . . .	729
B. The Board's Findings . . . . .	729
1. Plan No. 1, Non-Diversion . . . . .	731
2. Plan No. 2, Copper Creek Diversion . . . . .	733
3. Plan No. 3, Dorr Diversion . . . . .	733
4. Power Generation Possibilities . . . . .	733
5. Flood Control Possibilities . . . . .	735
C. Reaction to the Report . . . . .	735
VII. The Principles of Apportionment	
A. Introduction . . . . .	736
B. The Principles . . . . .	737
C. Reaction to the Principles . . . . .	737
VIII. The Treaty	
A. Negotiations . . . . .	739
B. Summary of the Treaty . . . . .	740
C. The United States Ratifies the Treaty . . . . .	742
D. Criticism from the United States Side . . . . .	743
E. Reaction in Canada . . . . .	744
F. The British Columbia—Ottawa Impasse . . . . .	744
1. Background . . . . .	744
2. The Issues . . . . .	746
3. Premier Bennett's Strategy . . . . .	747
4. Agreement is Reached . . . . .	748
IX. The Protocol	
A. Its Terms . . . . .	749
B. Action Required in the United States . . . . .	751
1. Northwest to California Power Intertie . . . . .	751
2. United States Financing of Power Purchase . . . . .	751
X. The Treaty Goes To Parliament	
A. McNaughton Opposes . . . . .	752
B. Other Objectors . . . . .	756
C. The Treaty is Approved . . . . .	756
XI. Summary and Conclusions	
A. The Basin Approach to River Development . . . . .	761
B. The Role of the International Joint Commission . . . . .	762
C. The Future . . . . .	763



## INTRODUCTION

The Columbia River dispute is settled. The Columbia River Treaty and Protocol of October 1964, which closed the dispute, stand as major achievements in the joint development of a great international river. The culmination of twenty years of studies, investigations, and negotiations, these documents embody important new principles, likely to exert a profound influence on the development of international rivers throughout the world.

The Treaty ended one of the bitterest debates ever waged between Canada and the United States. The record of these debates runs to many thousands of pages and covers virtually every conceivable aspect of engineering, economic, legal, hydrological, and geographical data that could be unearthed. Few, if any, international river conflicts ever have been examined so thoroughly, debated so vigorously, or written about so fully.

It is partly because of the mass of this data that this study has been undertaken. Its principal objective is to present an orderly analysis of the Columbia River conflict, noting the influence of various legal, political, and economic factors in determining the eventual outcome. It starts with a brief resumé of the historical and geographical background, pointing out especially the influence of the important 1909 Boundary Waters Treaty. It then traces the dispute from the 1944 reference of the joint development issue to the International Joint Commission, through the settlement embodied in the 1961 Treaty and 1964 Protocol. The study also examines the implications of the Columbia River case for development of international rivers elsewhere.

At the time of this writing joint development of the River is moving ahead rapidly. The broad outlines of the plan can be easily traced. Canada has agreed to build several large storage reservoirs on the upper Columbia, in Canada, to capture the flooding spring waters and hold them for gradual release throughout the low-flow months of the year. This levelling will make possible the generation of much more power in the United States than was possible previously, when the River fluctuated so radically. The storage will also reduce the risk of floods downstream in the United States.

In return, Canada will become entitled to one-half the additional power generated in the United States as a result of this levelling process. Canada has agreed to sell its downstream-power-entitlement to the United States for the first thirty years, and has already received

the sale price of 254 million dollars. In addition Canada will receive from the United States cash payments over the life of the Treaty for the flood control benefits bestowed on the latter country.

Several important generalizations can be made from this controversy and its settlement:

First, the Harmon Doctrine, which has played a significant role in international river law over the past sixty years, was soundly discredited. Briefly, this doctrine suggests that a sovereign nation can do as it pleases with the portion of an international river found within its borders, regardless of the impact on the downstream nation. Although most lawyers in the United States as well as in Canada were agreed that this doctrine was embodied in the 1909 Boundary Waters Treaty, they were also agreed that it was not the appropriate formula for settling this or any other international river dispute. Similarly the riparian and the appropriation systems, both of which appear in the internal laws of the two countries, were tested and found inadequate as a basis for settling international river disputes. They were designed, it was said, for handling private conflicts between individuals and offered little to the solution of an international problem where a whole river basin was involved. The equitable apportionment principle, on the other hand, gained enormously in prestige and acceptance. Because of this acceptance, it had a significant impact on the shape of the final settlement.

A second product of the Columbia River dispute also concerned law, although Canadian constitutional law rather than international law. During the final stages of the dispute, the Canadian Federal Government became acutely aware of its constitutional inability to implement a treaty solemnly signed by it, when its plans for implementation were opposed by a determined Provincial Government. The Canadian Federal Government could insist on its right to license international river projects, and did so under the 1955 International River Improvements Act, but could not carry out the project without obtaining the wholehearted cooperation of the Province.

A third product of the dispute was the reaffirmation of the long-standing friendship between the two nations and of the awareness that this friendship was one of the most important elements in shaping the eventual settlement. Many strongly worded articles and speeches were produced during the period, but it was unusual, indeed, to find one that ended without urging a settlement that would permit a con-

tinuation of the excellent relations between the two peoples. The occasional advocates of unilateral development were largely unheeded and failed to arouse public support.

It is significant to note that although in each country two different political parties were in power during the late 1950's and early 1960's, all four of these parties found themselves in agreement on the eventual Treaty and Protocol. Certainly the overwhelming mood of the people of both nations favored a peaceful, fair, and joint settlement.

The Columbia River experience also illustrates the impact of personalities on the outcome of negotiations. Although many such personalities could be singled out as playing an important role in the dispute and settlement, there were two whose roles loomed especially large. Both were Canadians. One was the late General A. G. L. McNaughton, Chairman of the Canadian Section of the International Joint Commission. His generally competent, colorful and occasionally bombastic views brought wide public attention to the Columbia dispute in the mid-1950's. To him, more than any other individual, perhaps, was due the development of the notion of downstream benefits, and the eventual acceptance of this notion by the United States. However, Premier Bennett of British Columbia played probably the most important role of any individual in the whole affair. His political and legal adroitness in dealings with Ottawa were sufficient to outmaneuver and bring capitulation from the Federal Government on the question of how the Treaty was to be implemented. In the eyes of most of his constituents in the Province, the Premier emerged as a staunch champion of their interests.

Finally, the Columbia River experience emphasizes the fact that the world's fund of experience in international river development is meager. Few principles have emerged which have broad application. It seems likely, however, that the principle of equitable apportionment, which became the cornerstone of the Columbia River agreement, will play an increasingly important role in future international river agreements.

## I. THE COLUMBIA BASIN

### *A. The River*<sup>1</sup>

The Columbia River has few peers among the rivers of North America. In length (1225 miles) and average runoff (180 million

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<sup>1</sup> Extensive data on the characteristics of the Columbia Basin may be found in INTERNATIONAL COLUMBIA RIVER ENGR' R BD., WATER RESOURCES OF THE COLUMBIA



acre-feet per year) it bows only to the Mississippi, the St. Lawrence, and possibly to the McKenzie. In hydro-electric potential it bows to none. Its wide basin, 730 miles at the extreme, encloses 259,000 square miles, an area larger than France.

From its birth in the womb of the great Columbia Ice Field in British Columbia to its disappearance in the Pacific Ocean off the Oregon-Washington coast, the Columbia graces some of the most beautiful scenery in North America. Water from the melting snows of the Columbia Ice Fields descends wild, timbered slopes to form Columbia Lake, the origin of the river, then tumbles rapidly out of the lake, and starts the long journey to the sea. It first heads 200 miles to the northwest in the spectacular Rocky Mountain Trench, then swings sharply back to the south at the big bend, around the northern tip of the Selkirk Mountain Range, and flows 250 miles down the Selkirk Trench past the international border. Just north of the border the river is joined by the Kootenay, which contributes about 11 per cent of the total flow, and then by the Clark Fork—Pend-Oreille, which contributes about 10 per cent. During its descent from Columbia Lake, the Columbia drops 1366 feet and picks up 40 per cent of its volume before arriving at the border. After crossing into the State of Washington, the river flows an additional 745 miles and drops 1,299 feet on its way to the Pacific Ocean.

Upon emerging from the Selkirk Trench in the State of Washington the Columbia flows onto the barren Columbia Plateau where it runs through a deep, ten-mile-wide canyon below lava benches rising several hundred feet on either side up to a plateau.

A hundred miles below the border the river is joined by the Spokane, a smaller tributary, and there turns west, flowing past the mouth of the great, empty Grand Coulee Canyon, where the Columbia flowed during the last ice age. The river then arcs back to the south and about 200 miles south of the border is joined by the Snake, the largest tributary, which accounts for 20 per cent of the total flow. It then turns westward, enters the Columbia Gorge where it flows between 3000 foot cliffs on either side and reaches a depth of some 300 feet. Here it cuts directly across the axis of the wet, heavily timbered Cascade Mountain Range. Still about 100 miles from the ocean, the river leaves the mountains and flows across the humid lowlands of the

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RIVER BASIN (1959) (hereinafter cited as ENGINEERING REPORT); PRESIDENT'S (U.S.) WATER RESOURCES POLICY COMM'N, TEN RIVERS IN AMERICA'S FUTURE, vol. II (1950); U.S. DEP'T OF INTERIOR, THE COLUMBIA RIVER (1947).

Puget Trough where it is joined by the Willamette, Lewis and Cowlitz Rivers, which contribute some 20 per cent of total flow. It then probes slightly to the north through a weakness in the low Coast Range and runs into the sea.

Two tributaries, the Kootenay and the Clark Fork—Pend-Oreille, themselves international, deserve special note. The Kootenay originates at an elevation of 4,150 feet from virtually the same snow slopes as the Columbia, but slightly to the east, it then runs parallel but in the opposite direction for about eighty miles, turning gradually toward Columbia Lake and missing that lake by only a mile as it crosses Canal Flats. At this point it could be diverted into the lake with little difficulty, and indeed this possibility was considered in the recent treaty negotiations between Canada and the United States over the Columbia River System. After leaving Canal Flats the Kootenay flows south across the border into Montana, turns northwestward into Idaho, then back across the border to the north again where it flows through Kootenay Lake and into the Columbia. Thus, the first 150 and the last 100 miles of the Kootenay River are in Canada and the middle 130 miles are in the United States.

The Clark Fork—Pend-Oreille originates in Montana, far south of the border, and flows northwesterly until just eleven miles before emptying into the Columbia where it crosses into Canada. One of the major tributaries of the Clark Fork—Pend-Oreille, the Flathead River, starts in Canada and flows southerly to join it near the Idaho-Montana border.

### *B. Climate in the Basin*

To the west of the Cascade Mountains in Washington most of the precipitation falls in the form of rain during the winter months and runs off gradually throughout the winter. To the east of these mountains and throughout the Canadian portion of the basin, precipitation tends to fall in the form of snow that accumulates during the winter months and is released to the river quite suddenly with the spring thaw in May, June, and July. The mean monthly discharge during the highest flows of record is thirty to thirty-five times the mean monthly discharge during the lowest flows along the main stream and major tributaries east of the Cascades, while the difference in instantaneous peak and low flows is on the order of 300 to one.

The Columbia flows through widely varying physiographic regions,

ranging from extreme wet on the upper and lower reaches, to extreme dry on the central plateau. The prevailing southwest winds, coming off the Pacific Ocean, dump up to 150 inches of rain per year on the Columbia Mountains in Canada and on the Cascade and Coast Ranges in the United States. The Puget Trough averages thirty to forty inches of rain. The central plateau to the east, in the rain shadow of the Cascades, receives less than ten inches of rainfall per year, and thus serious droughts are commonplace.

Temperatures also vary considerably between various parts of the river basin. In the Puget Trough to the west of the Cascades where the maritime influence dominates, the mean annual temperature is fifty to fifty-three degrees Fahrenheit; temperatures are generally mild and vary little from summer to winter. In the Eastern Washington plateau region and in the Canadian part of the basin the summer and winter temperatures are subject to greater variation and the mean annual temperature approximates forty degrees Fahrenheit.

### *C. Economy and Population of the Region<sup>2</sup>*

The economy of the whole Pacific Northwest, including the Columbia Basin, is based heavily on natural resources and is still largely extractive, although a growing number of manufacturing industries have been attracted into the region in the past twenty years. Timber, minerals, fish and agriculture are the mainstays, with recreation gradually gaining in importance. Some of the industry operating in the basin was encouraged to locate there by the available cheap hydroelectric energy.

By many standards much of the Columbia Basin is sparsely settled; in 1955 some parts of the basin were occupied by only one or two persons per square mile. At the other extreme, Multnomah County, Oregon, probably the most densely populated county in the basin, crowded 1,112 persons into each square mile. In general, population is much more heavily concentrated in the United States part of the basin than in the Canadian part. Of the 3,283,000 people estimated to live in the basin in 1955, only 7 per cent lived in Canada. Urban areas of the United States contained about 50 per cent of these people.

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<sup>2</sup> See BRITISH COLUMBIA NATURAL RESOURCES CONFERENCE, *INVENTORY OF THE NATURAL RESOURCES OF BRITISH COLUMBIA* (1964); FREEMAN & UPTON, *WASHINGTON STATE RESOURCES* (2d ed. 1957); HOWAY, SAGE & ANGUS, *BRITISH COLUMBIA AND THE UNITED STATES* (1942); U.S. DEP'T OF INTERIOR, *THE COLUMBIA RIVER* (1947).

In Canada the population is scattered in a series of small nucleated settlements close to the river, whereas in the United States, it is more widely dispersed. Interestingly, some of the largest population centers of the Pacific Northwest are not in the basin, but are located on the coast in the Seattle metropolitan area (1,107,213) and in and around Vancouver, British Columbia (725,000).

#### *D. Power*<sup>3</sup>

The Columbia ranks among the world's greatest power-producing rivers. Excellently situated for this purpose, it descends over 2,500 feet from origin to sea, and flows for the most part in deep, narrow canyons where few people have settled, and where dams can be economically built.

Most of the better dam sites are located in the United States. This has been used to advantage by the Americans, who have, since the construction of the Bonneville Dam in 1933 about 100 miles from the mouth, developed nearly all such sites. Almost 1,299 feet, the total head south of the border, has been captured behind dams and now generates power. When the dams under construction are completed only seventy-seven feet of free fall will remain on this 745 mile stretch. Ten dams are now operating, including six run by federal agencies, and four by non-federal organizations.<sup>4</sup> One additional federal dam and two non-federal dams have been started. Upon the completion of all of these dams under construction, the main stem below the boundary will have an installed capacity of 9.8 million kilowatts and about 5.7 million acre-feet of storage usable for power production. These developments cost the United States about 2.74 billion dollars to install.<sup>5</sup>

An additional ninety-three hydro-electric power plants, each having over 1,000 kilowatts of installed capacity, operated on tributaries of the Columbia in the United States in 1959. Fifty-six of these have an installed capacity of 10,000 kilowatts or more. A number of other dams have been built since 1959, and there is currently an active program for construction of additional plants.

North of the border, Canada has yet to build its first dam on the main stem of the Columbia, although it has constructed three on the

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<sup>3</sup> See Bessey, *Pacific Northwest Regional Planning—A Review*, STATE OF WASH. DIV. POWER RESOURCES BULL. No. 6 (1963).

<sup>4</sup> Federal: Grand Coulee, Chief Joseph, McNary, John Day, The Dalles, Bonneville.

Non-federal (PUD): Priest Rapids, Wanapum, Rocky Reach, Rock Island.

<sup>5</sup> Krutilla, *The Columbia River Treaty, an International Evaluation*, Resources for the Future, Inc., Reprint No. 42, Sept. 1963.



British Columbia have not justified construction of dams in this area.

Joint development of the Columbia by the riparian states is essential if the maximum power potential of the river is to be realized. The bulk of the Columbia's power potential comes from the water that crosses into the United States from Canada. Peak runoff from Canadian sources occurs in May, June, and July, at the time of the spring thaw. During these months the river's flow at times reaches as much as thirty times the volume in the low-flow months of January and February; this dramatizes the need for a steady, relatively stable flow throughout the year as a requisite to the most efficient use of power generating facilities.<sup>7</sup> Large storage reservoirs are needed to level the flow. Those in use and available in the United States are not adequate for this purpose. The most efficient remaining sites are in Canada, in the Selkirk and Rocky Mountain Trenches.<sup>8</sup> Needless to say, these sites can only be developed by, or with the consent of, the Canadians.

#### *E. Irrigation*

Joint development of the Columbia has little to do with irrigation, either in Canada or the United States. With the aid of dams about five million acres of land have been brought under irrigation and cultivation in the Columbia Basin south of the border. It is estimated that an additional three million acres will be put under irrigation in the foreseeable future. Presently Canada has about 140,000 acres under irrigation in the basin and may have as much as 540,000 by the year 2010.<sup>9</sup>

Although the basin's largest irrigated acreage is on tributaries in Idaho (2.5 million acres), the largest such area on the main stem is in Washington's Columbia Basin Project, just north of the confluence of the Columbia and the Snake. Here, supplied by waters from the Grand Coulee Dam, about 350,000 acres have been brought under irrigation to date, with another 650,000 planned. Whereas, because of light rainfall, the land previously could be used only for dry wheat farming, irrigation now permits the growth of beans, potatoes, alfalfa, peas and sugar beets. The water for the project comes from the main stem of the river at Grand Coulee Dam.<sup>10</sup>

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<sup>7</sup> Krutilla, *op. cit. supra* note 5, at 5.

<sup>8</sup> *Id.* at 6.

<sup>9</sup> ENGINEERING REPORT 51.

<sup>10</sup> Power generated there is used to pump spring flood waters up 280 feet into an equaling reservoir called Banks Lake, a lake formed by damming a section of an abandoned water course in which the Columbia flowed in the last ice age. Water stored in Banks Lake is released during the dry summer months for use by farmers to the south.

### F. Commercial Fishery<sup>11</sup>

Virtually all commercial fishing on the Columbia originates in the United States. The only commercially valuable fish is the salmon. Over the past thirty years the number of salmon in the river has declined steadily as a result of excessive fishing, high dams, and pollution,<sup>12</sup> all originating on the United States side of the border. Fish ladders and similar devices have proven only partially successful. Grand Coulee Dam is too high for any fish to pass, so no salmon ever reach Canada. There is no reason to believe that Canada's plans for the Columbia will significantly affect the fish population.

### G. Navigation<sup>13</sup>

Navigation is important only on the lower 270 miles of the Columbia, all of which is located in the United States. A dredged depth of forty feet permits ocean-going vessels to steam to Portland, 100 miles upriver from the sea, and makes that city an important seaport. At Portland shippers transfer cargoes to barges, and in a channel dredged to twenty-seven feet, tug them upriver seventy miles, through locks at Bonneville Dam, to The Dalles, Oregon. Navigation for smaller tugs and barges is possible on up the river another 100 miles to Pasco, Washington at the mouth of the Snake, through locks at The Dalles and McNary Dams. The John Day Dam, now under construction in this stretch of the river, will also contain locks; upon its completion ships will have slack water navigation, *i.e.*, will not have to contend with any appreciable current for the entire Bonneville Dam to Pasco stretch behind the four dams.

Commercial ships and barges have never operated successfully above Pasco, Washington, and certainly not to the Canadian border. There are no Canadian ports on the river. No question of navigational rights for Canadian vessels has been raised since shortly after the boundary was settled in 1846.

If Canada were to divert water from the Columbia and carry it to another watershed, conceivably some interference with navigation on

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<sup>11</sup> See Craig & Hacker, *The History and Development of the Fisheries of the Columbia River*, U.S. DEP'T OF INTERIOR, BUREAU OF FISHERIES BULL. No. 32 (1940); Gangmark & Fulton, *Status of Columbia River Blueback Salmon Runs, 1951*, U.S. DEP'T OF INTERIOR, FISH & WILDLIFE SERVICE SPECIAL SCIENTIFIC REP. No. 74 (April 1952); Rich, *A Survey of the Columbia River and Its Tributaries with Special Reference to the Management of Its Fishery Resources*, U.S. DEP'T. OF INTERIOR, FISH & WILDLIFE SERVICE SPECIAL SCIENTIFIC REP. No. 51 (May 1948).

<sup>12</sup> The average number of cases packed is less than half of what it was in the 1920's. *Pacific Fisherman*, Jan. 25, 1955, p. 110.

<sup>13</sup> See Bessey, *supra* note 3; ENGINEERING REPORT 57-58.

the lower river might result. There has never been any prospect, however, of diversions of water by Canada in sufficient quantities to affect navigation on the lower Columbia. Furthermore, Canada is bound by article II of the 1909 Boundary Waters Treaty,<sup>14</sup> to assure that ample water is left in the river for navigational purposes.

#### *H. Flood Control<sup>15</sup>*

The largest flood on the Columbia ever recorded occurred in 1894 when the discharge at The Dalles was estimated at 1.24 million cubic feet per second. A 1948 flood that caused about 100 million dollars in damage on the lower river was estimated to contain 1.01 million cubic feet per second at The Dalles. The Corps of Engineers has estimated that between 18 and 21 million acre-feet of storage would be required to reduce a flood of 1894 proportions to 80,000 cubic feet per second at The Dalles, and eliminate all major damage on the lower river.<sup>16</sup> About 10 million acre-feet has already been provided by Grand Coulee and other dams in the United States. Some of the remaining 8 to 11 million acre-feet of storage could be supplied in the United States, but the cost of doing so would be relatively high. Good storage sites exist in Canada, and if developed would provide an ample buffer of 15.5 million acre-feet of storage.<sup>17</sup> Such storage capacity can keep damage in the United States to a minimum, assuming, of course, that the people in the United States do not build their homes and industries in the extreme lowland areas that have in the past been flooded almost annually, and will continue to be flooded from time to time.

#### *I. Recreation*

Recreational facilities have been developed to some extent on the main stem of the Columbia in the United States, and to a lesser degree in Canada. There is no reason to believe these facilities, or the opportunity for new ones, will be adversely affected by joint development of

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<sup>14</sup> Treaty with Great Britain Relating to Boundary Waters, and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. II, 36 Stat. 2448, T.S. No. 548.

<sup>15</sup> ENGINEERING REPORT 53-57.

<sup>16</sup> *Id.* at 56.

<sup>17</sup> *Id.* at 109.



the river. The levelling of the flow may, in fact, permit riverside recreational uses not previously available.

## II. EARLY HISTORY<sup>18</sup>

### A. *Discovery of the Columbia*

The Columbia River itself was not discovered until 1792, although several adventurous European explorers had earlier investigated the coastline nearby. The Greek captain, Juan de Fuca, claimed to have sailed into either a deep bay or strait as early as 1592. About two hundred years later, in 1775, two Spanish vessels visited the Washington coast, stopping to provision briefly at the mouth of the Hoh River. Three or four years later the famous English explorer Captain Cook landed on Vancouver Island while searching for the Northwest Passage. The French also entered the competition for the new territory in 1786 when Captain Laperouse claimed possession of a small bay on the mainland to the north of Vancouver Island. Another Englishman, Captain Charles Barkley, is credited with officially discovering the Strait of Juan de Fuca when he sailed into the Strait for a short distance in 1787. Captain Barkley identified it as the one visited by the Greek captain Juan de Fuca nearly two hundred years earlier, and bestowed the latter's name on it.

None of these explorers realized that the large inlet at Cape Disappointment was the mouth of a great river; however, on April 20, 1792, Captain Robert Gray, commanding an American vessel, was surprised to find that a strong current flowed out of this "bay"—strong enough to prevent his sailing into it. A few weeks later the English ship *Chatham*, one of Captain Vancouver's vessels, managed a hazardous crossing of the bar at the mouth of the river and explored a few miles inland.

There was no great surge of population into the region for many years after discovery. A few hundred traders and settlers were all that could be found there until about 1840 when the number swelled to 8,000 or 10,000.

It was during the period of 1812 to 1846 that the first controversy over the Columbia took place, as part of a dispute over the boundary between Canada and the United States.

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<sup>18</sup> See generally FREEMAN & MARTIN, *THE PACIFIC NORTHWEST* (2d ed. 1954); HOLBROOK, *THE COLUMBIA* (1956); JOHANSEN & GATES, *EMPIRE OF THE COLUMBIA* (1957); MORGAN, *THE COLUMBIA* (1949).

*B. The Boundary Dispute, 1812-1846*<sup>19</sup>

The earliest dispute involving the Columbia centered around a boundary dispute between Great Britain and the United States. It waxed and waned before the War of 1812 and continued until 1846 when the Oregon Treaty was signed settling the western boundary between the two countries. Both countries' claims to the territory were based on discovery and settlement. During the War of 1812 the British occupied Fort Astoria on the south side of the river's mouth. The Treaty of Ghent of 1815, which concluded the war, provided for the restoration of all locations, except certain islands in Passamaquoddy Bay, taken by military action by either party during the war. The British argued that this fort was really British because the boundary was, or should be, drawn further to the south. Reoccupation by United States forces in 1817 took place only under British protest, and the assertion that the ultimate ownership had to depend on final settlement of the boundary question.

During eight conferences between negotiators in the fall of 1818, no agreement was reached on the boundary. The Americans refused to consider any suggested line south of the forty-ninth parallel, and the British would not accept a line so far north. Postponement of the issue followed when the negotiators reached a ten-year joint occupation agreement permitting citizens of either country to settle and occupy the area without prejudice to either nation's claim to sovereignty.

In the meantime, President John Quincy Adams eliminated the other two claimants to the territory. In an 1819 treaty with Spain concerning the Floridas, the President secured the Spanish surrender of all claims to lands west of the source of the Arkansas River and north of the forty-second parallel to the Pacific.<sup>20</sup> Somewhat more substantial Russian claims, founded on exploration and settlement as far south as Bodega Bay in California, were eliminated by a treaty signed in April 1824.<sup>21</sup> The British-American dispute was not settled so readily. Both sides based their claims on exploration and settlement. One significant difference between the claims did exist: while the British were concerned primarily with preserving their trading

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<sup>19</sup> JOHANSEN & GATES, *op. cit. supra* note 18, at 188-200.

<sup>20</sup> Treaty with Spain Relating to Amity, Settlement & Limits, Cession of Florida, Feb. 22, 1819, 8 Stat. 252, T.S. No. 327.

<sup>21</sup> Treaty with Russia Relating to Navigation, Fishing, Trading, and the Northwest Coast of America, April 17, 1824, 8 Stat. 302, T.S. No. 298.

rights and access routes, the Americans were thinking in terms of permanent settlement.

Two British proposals deserve special mention. One, made twice during the 1818-1846 negotiations, suggested a boundary along the Columbia River, giving Canada all the land to the north and west of the river. The other proposal suggested a boundary running easterly up the Columbia to the Snake, then easterly up that river until it arrived at the continental divide. There the line would turn north and go up to the forty-ninth parallel. To the east of the continental divide the forty-ninth parallel formed the agreed boundary between the countries. These proposals came to nought since neither was acceptable to the United States.

The scales began to weigh more heavily toward the United States as 1846 approached. The great American migration westward was attaining full stride and an increasing number of American settlers had moved into the area. Their strong nationalism, fed by a few petty grievances arising out of the joint occupation of the area, fanned anti-British emotions high and inspired the extremist slogan "54-40 or fight."

Such a boundary line, along the 54° 40' parallel, was neither legally nor morally supportable. Nonetheless, it was picked up in the American presidential campaign of 1844 and given lip service by high United States officials. Quite naturally the British would have refused to give serious consideration to such a proposal had it been made; in fact it apparently was never made. The British, however, were aware of the rapid westward movement of American settlers, and of their aggressiveness. Also, British interest in the area south of the forty-ninth parallel had somewhat diminished when the Hudson's Bay Company moved from the mouth of the Columbia River to Victoria, on the southern tip of Vancouver Island in 1842. On the other hand, in the United States, after President Polk was elected in 1844, his administration rapidly lost interest in pushing the unrealistic "54-40" claim. Britain's opposition to any such claim was a certainty and the new President had more serious troubles to the south where war with Mexico was imminent. Congress put further pressure on the President toward settlement in April 1846, by passing a resolution recommending that he terminate the twice-renewed joint occupation agreement with Britain. Now, for the first time it seemed both possible and desirable to settle the issue permanently. Brief negotiations brought agreement

and the signing of the Oregon Treaty in Washington, D. C. on June 15, 1846.<sup>22</sup>

The Treaty set the boundary at the forty-ninth parallel, continuing the line already set to the east of the Rockies. The new line went westward "to the middle of the channel which separates the continent from Vancouver's Island, and then southerly from the middle of the said channel, and of Juan de Fuca Straits, to the Pacific Ocean." Navigation of the channel and straits south of the forty-ninth parallel was to remain free and open to both parties, and the Hudson's Bay Company was to have free navigation of the Columbia River from the forty-ninth parallel to the ocean. Properties of the Hudson's Bay and another organization, the Puget Sound Agricultural Company, which were located south of the forty-ninth parallel, were left undisturbed until 1863 when they were bought by the United States. Thus ended the first dispute between Canada and the United States over the Columbia. The boundary established between the two countries cut across the Columbia, creating the particular set of problems that came to a head between 1944 and 1964.

### *C. The Post-Treaty Period, 1846 to 1944*

From 1846 to the present, Canadian-United States relations have been marked by lack of controversy. One of the few effective disarmament treaties, the Rush-Bagot Agreement of 1817,<sup>23</sup> contributed significantly to this atmosphere of peace and compromise. By this treaty both nations agreed not to maintain vessels of war on the Great Lakes, and to limit government vessels to those necessary to police the waterways. As a result of the treaty, and a general attitude of friendliness between the two countries, the world has seen the amazing spectacle of a 3,000 mile frontier absolutely undefended. There were, however, negotiations and agreements between the countries during this period which had a bearing on the recent Columbia River controversy.

### *D. The 1909 Boundary Waters Treaty<sup>24</sup>*

1. *Introduction.* The 1909 Boundary Waters Treaty was designed

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<sup>22</sup> Treaty with Great Britain Relating to the United States-Canadian Boundary West of the Rocky Mountains, June 15, 1846, 9 Stat. 869, T.S. No. 120.

<sup>23</sup> Treaty with Great Britain Relating to Naval Forces on American Lakes, April 28, 1817, 8 Stat. 231, T.S. No. 110½.

<sup>24</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, 36 Stat. 2448, T.S. No. 548.

to cover not only the Columbia, but all waters that run along or cross the international boundary between Canada and the United States. The Treaty was created because of a number of river disputes that arose between the two countries during the 1890's and early 1900's, and because statesmen on both sides of the border could see in the future a series of potential conflicts over still other waters. Thus the Treaty was not primarily designed to solve any particular dispute, but was designed to create machinery for handling any water conflict that might arise.

Except for navigation on the river's lower reaches, the Columbia was almost completely unused at the time of the Treaty. No hydro-power dams were yet built or planned. No significant irrigation was done with Columbia waters. Tributaries were used extensively by United States farmers for irrigation but only downstream from Canada. It is likely that the negotiators gave little thought to the Columbia. Clearly they did not foresee the particular problem of apportionment of downstream benefits resulting from upstream storage, which was the crux of the recent controversy.

Yet, when the arguments of the 1950-1960 period arose, the Boundary Waters Treaty held center stage. Disagreement stemmed over the meaning of article II, *i.e.*, whether it incorporated the "Harmon Doctrine," and thus gave Canada the right to divert the river. Before examining this disagreement, however, it is appropriate to review the treaties which preceded the 1909 agreement.

2. *Prior Treaties.* The large number of rivers and lakes on the Canadian-United States boundary created several problems between the two countries prior to 1909. Most of these involved navigation. Treaties were concluded between the two countries settling their rights to the use of various waters.

The Definitive Treaty of Peace,<sup>25</sup> concluded in Paris in 1783, recognized the independence of the thirteen colonies and settled certain boundaries between Canada and the United States. The Treaty also guaranteed to British subjects the right of free navigation on all of the Mississippi, apparently as the result of a misapprehension that the headwaters of the Mississippi were located in Canada. The Jay Treaty of 1794 provided that British and United States citizens, as well as the Indians living on both sides of the boundary, were entitled to travel by land or water into each country "and to navigate all the

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<sup>25</sup> Treaty with Great Britain Relating to Definitive Terms of Peace, Sept. 3, 1783, 8 Stat. 80, T.S. No. 104.

lakes, rivers and waters thereof, and freely to carry on trade and commerce with each other."<sup>26</sup> The Rush-Bagot Agreement of 1817,<sup>27</sup> as aforementioned, limited naval armaments on the Great Lakes, on Lake Ontario and on Lake Champlain to certain light vessels appropriate only for police work. The Webster-Ashburton Treaty of 1842,<sup>28</sup> the Northwest Boundary Treaty of 1846,<sup>29</sup> and an unnamed 1854<sup>30</sup> treaty all gave certain navigation rights to the citizens of one country on waters in the other. The Treaty of Washington of 1871<sup>31</sup> provided for mutual navigation rights on the St. Lawrence, Welland, and other canals, and on the Yukon, Porcupine and Stikine Rivers that flow partly through Alaska.

3. *The 1895 Dispute with Mexico—The Harmon Doctrine.*<sup>32</sup> One of the most important pieces of background history to the Boundary Waters Treaty was a series of negotiations that had nothing to do with Canada. They concerned a Mexico-United States dispute over the waters of the Rio Grande. That river starts in the United States, flows south to the border, then flows along the border for about 60 per cent of the distance that the two countries are joined. In 1894 and 1895 Mexico protested certain irrigation diversions on the upper Rio Grande by United States citizens. These diversions were entirely within United States territory, but their effect was to reduce the water available to Mexican farmers on the lower river where it formed the international boundary. One of the principal points in the Mexican protest of October 1894, was that the claims of the Mexicans were incontestable, "being prior to that of the inhabitants [of the United States] by hundreds of years, and, according to the principles of civil law, a prior claim takes precedence in case of dispute."<sup>33</sup>

The United States Secretary of State referred the Mexican protest to Attorney General Judson Harmon for an opinion with respect to

<sup>26</sup>Treaty with Great Britain Relating to Amity, Commerce, and Navigation, Nov. 19, 1794, art. III, 8 Stat. 116, T.S. No. 105.

<sup>27</sup>Treaty with Great Britain Relating to Naval Forces on American Lakes, April 28, 1817, 8 Stat. 231, T.S. No. 110½.

<sup>28</sup>Treaty with Great Britain Relating to Slave Trade, Boundaries, and Extradition, Aug. 9, 1842, 8 Stat. 572, T.S. No. 119.

<sup>29</sup>Treaty with Great Britain Relating to the United States-Canadian Boundary West of the Rocky Mountains, June 15, 1846, 9 Stat. 869, T.S. No. 120.

<sup>30</sup>Treaty with Great Britain Relating to Fisheries, Commerce, and Navigation (St. Lawrence and Great Lakes), June 5, 1854, 10 Stat. 1089, T.S. No. 124.

<sup>31</sup>Treaty with Great Britain Relating to Boundaries, Claims, etc., May 8, 1871, 17 Stat. 863, T.S. No. 133.

<sup>32</sup>For a description of this dispute see Austin, *Canadian-United States Practice and Theory Respecting the International Law of International Rivers: A Study of the History and Influence of the Harmon Doctrine*, 37 CAN. B. REV. 393 (1959).

<sup>33</sup>See Romero to Olney, S. Doc. No. 154, 57th Cong., 2d Sess. 8 (1895).

its legal basis. The question posed was whether the diversions were contrary to international law and entitled Mexico to damages or to any other relief. In an opinion which became known as the Harmon Doctrine, the Attorney General replied:<sup>34</sup>

[I]t is evident that what is really contended for (by Mexico) is a servitude which makes the lower country dominant and subjects the upper country to the burden of arresting its development and denying to its inhabitants the use of a provision which nature has supplied entirely within its own territory.

The fundamental principle of international law is the absolute sovereignty of every nation, as against all others, within its own territory. Of the nature and scope of sovereignty with respect to judicial jurisdiction, which is one of its elements, Chief Justice Marshall said (*Schooner Exchange v. McFadden*, 1 Cranch. p. 136): "The jurisdiction of the nation within its own territory is necessarily exclusive and absolute. It is susceptible of no limitation not imposed by itself. Any restriction upon it, deriving validity from an external source, would imply a diminution of its sovereignty to the extent of the restriction, and an investment of that sovereignty to the same extent in that power which could impose such restriction.

"All exceptions, therefore, to the full and complete power of a nation within its own territories must be traced up to the consent of the nation itself. They can flow from no other legitimate source."

On the basis of this opinion the State Department advised the Mexican Minister:<sup>35</sup>

That the rules of international law imposed upon the United States no duty to deny to its inhabitants the use of the water of that part of the Rio Grande lying wholly within the United States, although such use resulted in reducing the volume of water in the river below the point where it ceased to be entirely within the United States, the supposition of the existence of such a duty being inconsistent with the sovereign jurisdiction of the United States over the national domain.

Having stated what was considered to be the "law" on the question, the United States nonetheless attempted to negotiate a fair apportionment of the Rio Grande waters with Mexico. In fact, even before the issuance of the Harmon Doctrine, President Cleveland had expressed the hope of solving the problem by joint action between the

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<sup>34</sup> 21 OPS. ATT'Y GEN. 281-82 (1895).

<sup>35</sup> Moore, *A Digest of International Law*, H.R. Doc. No. 551, 56th Cong., 2d Sess. vol. I, 654 (1906).

two countries.<sup>36</sup> Extended negotiations during the next eleven years produced a treaty in 1906<sup>37</sup> which apportioned the water between Mexico and the United States. The United States did not assert a claim to all Rio Grande waters originating in the United States. On the contrary, it negotiated from the outset on the assumption that a fair division of the waters was the proper solution. However, the United States did not want the Treaty to stand as a binding precedent on the apportionment question and so inserted a clause saying:<sup>38</sup>

The delivery of water as herein provided is not to be construed as recognition by the United States of any claim on the part of Mexico to the said waters.

To make abundantly clear what was intended, article 5 proclaims in part:<sup>39</sup>

The United States, in entering into this treaty, does not thereby concede, expressly or by implication, any legal basis for any claims heretofore asserted or which may be hereafter asserted by reason of any losses incurred by the owners of land in Mexico due or alleged to be due to the diversion of the waters of the Rio Grande within the United States; nor does the United States in any way concede the establishment of any general principle or precedent by the concluding of this treaty.

4. *Existing Water Disputes with Canada.*<sup>40</sup> In the meantime, to the north, Canada and the United States were faced with a growing number of unsolved water conflicts. The *ad hoc* approach previously used to resolve these problems was no longer adequate. It was time consuming, and failed to provide the consistency in approach that both countries believed desirable. Conflicts regarding the Milk, St. Mary, and Rainy Rivers, the Lake of the Woods, and Lake Michigan were all outstanding. Discussions concerning the St. Mary and Milk Rivers, both of which rise in Montana and flow into Canada, had been going on since 1902.<sup>41</sup>

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<sup>36</sup> Simsarian, *The Diversion of Waters Affecting the United States and Mexico*, 17 TEXAS L. REV. 27 (1938).

<sup>37</sup> Treaty with Mexico Relating to the Rio Grande and Distribution of the Waters Thereof, May 21, 1906, 34 Stat. 2953, T.S. No. 455.

<sup>38</sup> Treaty with Mexico Relating to the Rio Grande and Distribution of the Waters Thereof, May 21, 1906, art. IV, 34 Stat. 2953, T.S. No. 455.

<sup>39</sup> Treaty with Mexico Relating to the Rio Grande and Distribution of the Waters Thereof, May 21, 1906, art. V, 34 Stat. 2953, T.S. No. 455.

<sup>40</sup> See BLOOMFIELD & FITZGERALD, *BOUNDARY WATER PROBLEMS OF CANADA & THE UNITED STATES (THE INT'L JOINT COMM'N 1912-1958)* 2-10 (1958); Austin, *supra* note 32, at 411-17; Simsarian, *supra* note 36.

<sup>41</sup> The Milk River re-enters the United States after flowing about 100 miles in Canada.



In 1902 Canada protested against a proposed United States diversion of the waters of the St. Mary, on the ground that such a diversion would injure existing Canadian diversion works. In 1904 while this issue was still unresolved, the United States protested a proposed Canadian diversion of the Milk River which, it claimed, would injure existing uses in Montana. Negotiations concerning both rivers were continued until 1909 when settled by the Boundary Waters Treaty.<sup>42</sup>

In 1905 Canada complained of a proposed diversion from the Birch Lake Basin in Minnesota by the Minnesota Canal and Power Company, a United States company. The Canadians argued that the diversion would have a detrimental effect on navigation on the Rainy River and the Lake of the Woods, both shared by Canada and the United States. This dispute was referred to the newly formed International Waterways Commission for investigation. Their investigation continued until 1909 when a formula for solution was prescribed in the Boundary Waters Treaty.<sup>43</sup>

A serious disagreement also existed regarding the use of Lake Michigan waters by the city of Chicago.<sup>44</sup> Until 1900 Chicago dumped its sewage directly into the lake. In that year a canal was completed draining lake water to the Chicago River and then into the Mississippi. The city's sewage was then deposited in the canal. In 1899 Congress enacted a bill prohibiting any diversion from Lake Michigan that would affect navigation.<sup>45</sup> The law notwithstanding, Chicago continued to divert substantial quantities of water from the lake, eventually lowering the level by about six inches, and causing a hazard to navigation in the whole system of Great Lakes and water ways extending to the Atlantic Ocean. Although an attempt was made to resolve this dispute in the 1909 Treaty it proved too large and complex to be handled thus. It was, however, one of the stimuli in the negotiations, urging the negotiators to try to resolve other, more manageable water problems.

5. *Birth of the Joint Commission Idea.* The idea of a permanent commission for the study and resolution of water conflicts appears

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<sup>42</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. VI, 36 Stat. 2448, T.S. No. 548.

<sup>43</sup> Article II of the treaty provided a means for indemnifying private Canadian interests injured by the diversion. Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. II, 36 Stat. 2448, T.S. No. 548.

<sup>44</sup> Griffin, *Legal Aspects of the Use of Systems of Int'l Waters*, S. Doc. No. 118, 85th Cong., 2d Sess. 8-9, 16-20 (1958).

<sup>45</sup> Act of March 3, 1899, ch. 425, § 10, 30 Stat. 1121.

to have been born in the mid-1890's. In 1895 the fourth annual meeting of the International Irrigation Congress, held in Albuquerque, New Mexico, was attended by delegates from Canada, Mexico and the United States. They resolved that an international commission should be formed "[for] adjudicating the conflicting rights which have arisen, or may thereafter arise, on streams of an international character."<sup>46</sup> This resolution envisioned a single commission on which all three countries would be represented and which would be essentially a judicial body, deciding water conflicts much as a court of law.

6. *The International Waterways Commission, 1905-1909.* Between 1895 and 1902 several notes passed between the Canadian and American governments on the subject of such a commission. During this time the idea of Mexican participation was quietly dropped. Congressional approval of the idea of a Canadian-United States commission was expressed in the 1902 Rivers and Harbors Act which requested President Theodore Roosevelt to invite the government of Great Britain to:<sup>47</sup>

join in the formation of an international commission, to be composed of three members from the United States and three who shall represent the interests of the Dominion of Canada, whose duty it shall be to investigate and report upon the conditions and uses of the waters adjacent to the boundary lines between the United States and Canada, including all of the waters of the lakes and rivers whose natural outlet is by the River Saint Lawrence and to the Atlantic Ocean; also upon the maintenance and regulation of suitable levels; and also upon the effect upon the shores of these waters and the structures thereon, and upon the interests of navigation, by reason of the diversion of these waters from or change in their natural flow; and, further, to report upon the necessary measures to regulate such diversion, and to make such recommendations for improvements and regulations as shall best subserve the interests of navigation in said waters.

Shortly thereafter, President Roosevelt sent an invitation to the British Foreign Office, and by 1905 Canada and the United States had each appointed three commissioners for the new International Waterways Commission. This Commission was essentially an investigative body, without executive, legislative or judicial powers. When a question was referred to it the Commission made an investigation, framed

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<sup>46</sup> Address before the National Irrigation Congress, 4th Annual Sess., S. Doc. No. 253, 54th Cong., 1st Sess. (1896).

<sup>47</sup> 1902 Rivers & Harbors Act, ch. 1079, § 4, 32 Stat. 331.

recommendations and forwarded them to the respective governments, which then took appropriate action.

During its brief existence several important water problems were referred to the International Waterways Commission.<sup>48</sup> The Commissioners soon realized, however, that their powers were too limited to permit effective handling of either present or future problems and they therefore recommended a number of changes. The first came in the Niagara River report where the Canadian Commissioners urged the adoption of five basic principles which should govern the diversion and use of all shared waters,<sup>49</sup> and the creation of a "permanent joint commission," which could "deal much more satisfactorily with the settlement of all disputes arising as to the application of these principles."<sup>50</sup> The American Commissioners declined to support this recommendation, arguing that the enunciation of principles to govern the making of a general treaty was not within the scope of their functions.

Later, however, in the application of the Minnesota Canal and Power Company the American Commissioners joined in, saying:<sup>51</sup>

2. As questions involving the same principles and difficulties liable to create friction, hostile feelings, and reprisals, are liable to arise between the two countries, affecting waters on or crossing the boundary line, the Commission would recommend that a treaty be entered into which will settle the rules and principles upon which all such questions may be peacefully and satisfactorily determined, as they arise.
3. The Commission would recommend that any treaty which may be

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<sup>48</sup> INTERNATIONAL WATERWAYS COMM'N PROGRESS REP. 1905-1911. In May 1906, it reported on the diversion and use of the Niagara River. In November 1906, it reported on the application of the Minnesota Canal & Power Company to use waters of Birch Lake Basin. And in January 1907, it reported on the Chicago drainage canal. On each of these references it gathered valuable data and made useful recommendations.

<sup>49</sup> The following principles were suggested:

- (1) In all navigable waters the use for navigation purposes is of primary and paramount right. The Great Lakes system, on the boundary between the United States and Canada and finding its outlet by the St. Lawrence to the sea, should be maintained in its integrity.

- (2) Permanent or complete diversions of navigable waters or their tributary streams should only be permitted for domestic purposes and for the use of locks in navigation canals.

- (3) Diversions can be permitted of a temporary character where the water is taken and returned again, when such diversions do not interfere in any way with the interests of navigation. In such cases each country is to have a right to diversion in equal quantities.

- (4) No obstruction or diversion shall be permitted in or upon any navigable water crossing the boundary, or in or from streams tributary thereto, which would injuriously affect navigation in either country.

- (5) Each country shall have the right of diversion for irrigation or extraordinary purposes in equal quantities of the waters of non-navigable streams crossing the international boundary. 2d (i). *Id.* at 14-15 (1906).

<sup>50</sup> INTERNATIONAL WATERWAYS COMM'N PROGRESS REP. 1905-1911.

entered into should define the uses to which international waters may be put by either country without the necessity of adjustment in each instance, and would respectfully suggest that such uses should be declared to be:

- (a) Use for necessary domestic and sanitary purposes.
- (b) Service of locks used for navigation purposes.
- (c) The right to navigate.

4. The Commission would also respectfully suggest that the treaty should prohibit the permanent diversion of navigable streams, which cross the international boundary or which form a part thereof, except upon adjustment of the rights of all parties by a permanent commission, and with its consent.

In paragraph 42 of its January 1907 report on the Chicago drainage canal,<sup>52</sup> the Commissioners renewed their recommendations of November 15, 1906, criticizing the *ad hoc* approach to the settlement of water conflicts and urging the adoption of general principles for this purpose. These recommendations were finally heeded by the two governments and negotiations undertaken to design an appropriate treaty.

#### 7. *Negotiations Toward the Treaty.*

*The Negotiators.* The two principal figures in the negotiations, although seldom direct participants, were Elihu Root, United States Secretary of State, and Lord Bryce, British Ambassador to the United States. Mr. Root was assisted by Chandler P. Anderson, special counsel retained to help in several pending negotiations with Canada, Mr. George Clinton, a member of the International Waterways Commission, and Mr. F. H. Newell of the United States Reclamation Service. Lord Bryce was assisted by Sir George Gibbons, member of the International Waterways Commission, William Pugsley, Minister of Public Works in Canada, and Dr. W. F. King, member of the International Boundary Commission.

*The Canadian View.* A draft treaty<sup>53</sup> was first prepared by Messrs. Gibbons and Clinton of the International Waterways Commission and on September 25, 1907, was submitted to Secretary Root. This draft reflected the previous recommendations of the Commission, and set forth "general principles" which would guide a new permanent commission in resolving international water conflicts. The new commis-

<sup>51</sup> 2d(ii). *Id.* at 131.

<sup>52</sup> INTERNATIONAL WATERWAYS COMM'N PROGRESS REP. 1905-1911.

<sup>53</sup> For the full text of this draft see Griffin, *supra* note 44, at 12-15.

sion would be clothed with broad judicial powers. The commissioners would be directed to act "impartially," "without feeling, favor or affection to their country" in deciding cases referred to them. They would be guided first by the general principles set out in the treaty, and if those were inadequate then they would act to "the best of their judgment and according to justice and equity."<sup>54</sup>

This draft reflected the view not only of the International Waterways Commissioners but also of the Canadian negotiators. The Canadians were more concerned than the Americans about *ad hoc* treatment of water problems<sup>55</sup> and throughout the negotiations urged (1) the creation of an independent judicially empowered commission, and (2) the restatement of general principles of international law in the treaty to guide the Commission in its deliberations.

*The American View.* The Americans, on the other hand, wanted only a "Joint Commission of Inquiry" with power to investigate and recommend. Possibly it should have subpoena powers, but not judicial or decision making powers. Secretary Root argued against adoption of "general principles" for resolving future water conflicts, on the ground that "the subject with which we are endeavoring to deal has not been sufficiently developed to justify the incorporation of such a declaration" (of general principles), or "to make it safe to endeavor to lay down hard and fast rules of this description which are to govern the unknown questions of the future."<sup>56</sup> One of the "unknown questions" expressly noted by Mr. Root was the development of hydro-electric power. Also he felt it would be unwise to set any rigid priority of uses, such as navigation over irrigation, because, although such a priority might be desirable for some rivers, it would not be for others. Possibly irrigation, or power generation, should be paramount. He suggested, therefore, a common law approach, that is, "to permit the commission . . . to declare in its decisions from time to time the principles which they deem applicable, and, following the precedents thus established so far as they are applicable in each successive case, to build up a system of rules which will be the result of experience and consideration in concrete cases."<sup>57</sup>

<sup>54</sup> Griffin, *Legal Aspects of the Use of Systems of Int'l Waters*, S. Doc. No. 118, 85th Cong., 2d Sess. (1958).

<sup>55</sup> The Canadian's concern is set out in a letter from Gibbons to Sir Wilfred Laurier, Prime Minister of Canada, written circa Jan. 1909, following early discussions with the United States relative to establishment of a permanent commission, and reproduced in Gibbons, *Sir George Gibbons and the Boundary Waters Treaty of 1909*, 36(2) CANADIAN HISTORICAL REV. 124-26 (1953).

<sup>56</sup> Dep't State Numerical File 1906-1910, National Archives 5934/25.

<sup>57</sup> See note handed by Mr. Root to Mr. Bryce at this meeting on June 6, 1908, *ibid.*

Special difficulty was encountered in connection with article II of the present Treaty, concerning the right of one state, unilaterally, to make diversions; disagreement developed as to the remedy to be afforded injured parties in the other state. The early draft by Clinton-Gibbons provided in section 9 of article III:<sup>58</sup>

No diversion or obstruction of boundary waters in, or by, either country, which shall materially interfere with the natural flow thereof, to the injury to the other country, or of its citizens or subjects shall be permitted without the consent of such other country.

This provision was sharply criticized by Chandler Anderson in a report to Secretary Root dated December 1907:<sup>59</sup>

It remains, therefore, to consider what would be the effect of dealing with questions involving the use and diversion of contiguous boundary waters in accordance with the provisions of this treaty. The treaty requires the submission of all such questions to this Commission for encision and, as above pointed out, they must be decided in accordance with the principles of international law combined with the series of principles or rules specially adopted by the treaty.

Unfortunately international law with respect to the use of international boundary waters is, as yet, somewhat undeveloped, and the writers on international law are not altogether in accord upon the doctrines to be established as to the rights of adjoining countries in such waters.

It is urged by some that waters of boundary lakes and rivers should be regarded as held in common by the adjoining countries, in which case each country would presumably have the right to partition its own share in such waters and make such use of them as it pleases, subject to equal and similar rights on the other side and to any paramount use mutually recognized, or otherwise imposed upon such waters, as, for example, the maintenance of certain levels for navigation or other purposes.

This doctrine seems hardly permissible, however, as it conflicts with the recognized principle of absolute territorial sovereignty on each side up to the international boundary line, which principle negatives any right of ownership in common or joint ownership in the waters themselves.

On the other hand absolute sovereignty carries with it the right of inviolability as to such territorial waters, and inviolability on each side imposes a coextensive restraint upon the other, so that neither country is at liberty to so use its own waters as to injuriously affect the other.

In either case, however, the conclusion is justified that international law would recognize the right of either side to make any use of the waters on its own side which did not interfere with the coextensive rights

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<sup>58</sup> *Id.* at 5934/6-7.

<sup>59</sup> Chandler P. Anderson Papers, Box 68, Manuscript Division, Library of Congress.

of the other, and was not injurious to it, and this applies particularly to what may be regarded as surplus waters not required for any paramount uses or rights otherwise established.

*Compromise and Agreement.* As noted previously, the American negotiators initially proposed a very limited treaty, creating only a Joint Commission of Inquiry. However, in August 1908, Mr. Anderson submitted a new draft, article II of which was a compromise of the views of the two countries.<sup>60</sup> This provision was accepted by the Canadians and, with some slight modification, was incorporated in article II of the final Treaty, signed on January 11, 1909. This article provides:

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

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<sup>60</sup> The draft provided:

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 or hereafter adopted 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 which, for this purpose, are defined as the waters from shore to shore of the lakes and rivers connecting waterways along which the international boundary passes, and in order to extend the equal protection of the laws on each side to cover any injury or damage which may result on one side of the boundary from the exercise in the future of the exclusive jurisdiction and control hereby reserved over such waters on the other side, the High Contracting Parties agree that, except in cases already existing and in cases expressly covered by special agreement between the parties hereto, any interference with or diversion from their natural channel of such waters on either side of the boundary, resulting in any injury or damage on the other side of the boundary, shall be subject to the same rights and restraints and impose the same obligation, and entail the same legal consequences, and justify the same legal remedies as if such injury or damage took place within the territory and under the jurisdiction of the Government, whether Federal or State on the one side, or Dominion or Provincial on the other, within whose territory such diversion or interference actually occurs.

have, to object to any interference with or diversions of waters on the other side of the boundary the effect of which would be productive of material injury to the navigation interests on its own side of the boundary.

*8. Interpretation of Article II.* Within the next few months article II was subjected to a good deal of discussion on both sides of the border. Some of the comments made were very much to the point in the 1950-1960 controversy. Being contemporaneous with the execution of the treaty, and coming from those who had most to do with its negotiation, these comments are most helpful in determining what the parties originally intended. Relevant portions are therefore quoted below.

Secretary of State Root testified before the Senate Committee on Foreign Relations that the article was "an exceedingly useful provision," saying:

This provision creates the same situation on the part of the people on either side of the line between the United States and Canada as now exists on either side of the respective lines between our State (New York) and Pennsylvania, for example. It relieves a great amount of troublesome questions from becoming international questions and substitutes the decisions of the courts.

Take, for illustration, the situation which Senator Carter is familiar with. There are settlers down on the Milk River in the United States. There are settlers in Canada on the Milk River. One trouble we have had about getting any arrangements about the question of the waters of the Milk is the alleged rights and interests of those settlers down there on the Canadian side. We found on investigation that there were 23 families down there on the Canadian side, and that matters which involve many millions of dollars' worth of property have been held up because Canada would not consent to anything that might hurt those 23 families down there. The best estimate we can make shows that \$10,000 would settle the whole thing. This provision relieves that entirely. If our use of the Milk River injures those settlers down there they have their recourse and their rights can be protected in the American courts instead of becoming a great international question and having all of the people in Canada take an interest in it. It simply becomes a question of litigation before the courts instead of an international question.

Chandler Anderson further explained:

(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 the use of the words "injured parties." Wherever 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 capital and the use of the word in the plural indicates that it can refer only to individuals.

The Senate advised ratification of the Treaty on March 3, 1909. The British government approved the Treaty on March 31, 1910 and ratifications were exchanged between the governments on May 5, 1910.

Article II precipitated debate in the Canadian House of Commons for the first time in December when a bill was introduced to create the International Joint Commission. Mr. Pugsley, Minister of Public Works and one of the treaty negotiators was questioned about it. He answered that article II was "simply an affirmation of what has always been contended by the United States to be international law, and what I do not think has been disputed by the jurists of this country."<sup>61</sup> The United States conceded that the upstream state could not arbitrarily alter the flow of a river when it would impair navigation in the downstream state, but contended the same rule did not apply to irrigation and other uses. As the treaty provided a remedy in damages for injured parties in the downstream state, Mr. Pugsley argued that this gave Canadians a new legal remedy in a situation where they had none at all before. This line of argument was also supported by Mr. Ayelsworth, Minister of Justice, and by Sir Wilfred Laurier, Prime Minister. The latter was not quite so certain about the nature of existing international law as was Mr. Pugsley, but concurred in other respects:<sup>62</sup>

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 shall be liable to damages to the party who suffers.

This intense interest in article II quieted down shortly after the creation of the International Joint Commission, and did not arise again for forty years, until the question of a possible Canadian diversion of the Columbia into the Fraser arose. In the meantime the Treaty went

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<sup>61</sup> I H.C. DEB. (Sess. 1910-1911) 870 (Can.).

<sup>62</sup> I H.C. DEB. (Sess. 1910-1911) 911-12 (Can.).

into effect, the International Joint Commission was created and numerous international water conflicts between the two countries were referred to the Commission for report and recommendation.

9. *The Boundary Waters Treaty Provisions.* The Boundary Waters Treaty<sup>63</sup> did three things. It created and defined the powers of the International Joint Commission, it pronounced certain general principles of law about water rights, and it resolved two existing water disputes.

*Specific Disputes Resolved.* Concerning specific water disputes, the Treaty prohibited either country from using Niagara River waters in such a way as to affect the flow of that river or lower the level of Lake Erie.<sup>64</sup> It also allocated rights between the two countries on the St. Mary and Milk Rivers.<sup>65</sup>

*General Principles Adopted.* Several general principles were adopted to serve as guides in the resolution of future conflicts. Some of these were designed specifically for use by the International Joint Commission, while others were more general in nature. The latter included (1) the mutual assurance of navigational freedom on all boundary waters, connecting canals and on Lake Michigan;<sup>66</sup> (2) the creation of a right in an injured downstream party to a remedy in the upstream state for injuries caused by an upstream diversion of the waters;<sup>67</sup> (3) a proscription against any pollution of boundary or successive waters which might injure health or property in the territory of the other signatory;<sup>68</sup> and (4) a proscription against dams or other obstructions in one country<sup>69</sup> that would raise the water level of the waterway involved in the other country, unless a permit was first obtained from the International Joint Commission.<sup>70</sup> The Treaty pro-

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<sup>63</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, 36 Stat. 2448, T.S. No. 548.

<sup>64</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. V, 36 Stat. 2448, T.S. No. 548.

<sup>65</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. VI, 36 Stat. 2448, T.S. No. 548. See text accompanying note 42 *supra* for a description of these disputes.

<sup>66</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. I, 36 Stat. 2448, T.S. No. 548.

<sup>67</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. II, 36 Stat. 2448, T.S. No. 548.

<sup>68</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. IX, 36 Stat. 2448, T.S. No. 548.

<sup>69</sup> *Ibid.*

<sup>70</sup> *Ibid.*

vided that both countries were to have equal rights in the boundary waters, and an "order of precedence" of water uses was established.<sup>71</sup>

- 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 irrigation purposes.

*International Joint Commission Created.* The balance of the Treaty dealt with the new International Joint Commission.<sup>72</sup> Composed of three members from each country, the Commission possesses judicial, investigative, administrative and arbitral powers.

Under its judicial powers<sup>73</sup> it passes on applications for the use of, or permission to obstruct the boundary waters under articles III and IV of the Treaty. In approving such applications it can attach appropriate conditions, including the payment of compensation for prospective damage.<sup>74</sup> Numerous applications have been considered by the Commission, covering such matters as booms,<sup>75</sup> a bridge,<sup>76</sup> dams,<sup>77</sup> diversions,<sup>78</sup> dredging a channel,<sup>79</sup> fishways,<sup>80</sup> a power canal,<sup>81</sup> a power house,<sup>82</sup> protection of navigation,<sup>83</sup> weirs,<sup>84</sup> drainage districts,<sup>85</sup> and reclamation works.<sup>86</sup>

<sup>71</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. VIII, 36 Stat. 2448, T.S. No. 548.

<sup>72</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, arts. VII-XII, 36 Stat. 2448, T.S. No. 548.

<sup>73</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. VIII, 36 Stat. 2448, T.S. No. 548.

<sup>74</sup> *Ibid.*

<sup>75</sup> Watrous Island Boom Co., No. 2, I.J.C. April 6, 1912; International Lumber Co. (Rainy River Boom), No. 12, I.J.C. Aug. 28, 1916.

<sup>76</sup> Buffalo & Fort Erie Public Bridge Co., No. 21, I.J.C. June 20, 1925.

<sup>77</sup> Rainy River Improvement Co. (Kettle Falls Dam), No. 1, I.J.C. Apr. 4, 1912; Michigan Northern Power Co., No. 6, I.J.C. June 30, 1930; Algoma Steel Corp., No. 8, I.J.C. Oct. 7, 1913.

<sup>78</sup> Greater Winnipeg Water District (Shoal Lake Diversion), No. 7, I.J.C., Sept. 8, 1913.

<sup>79</sup> St. Clair River Channel, No. 13, I.J.C. Dec. 29, 1916.

<sup>80</sup> St. Croix River Fishways, No. 18, I.J.C. June 19, 1923.

<sup>81</sup> St. Croix Water Power Co., No. 10, I.J.C. and Sprague's Falls Mfg. Co., Ltd., No. 11, I.J.C. Jan. 29, 1915.

<sup>82</sup> Canadian Cotton Ltd., No. 16, I.J.C. Mar. 22, 1919, and No. 32, I.J.C. Aug. 16, 1934.

<sup>83</sup> Rainy River Improvement Co. (Kettle Falls Dam), No. 1, I.J.C. Apr. 4, 1912; Watrous Island Boom Co., No. 2, I.J.C. Apr. 6, 1912.

<sup>84</sup> St. Lawrence River Power Co. (Massena Weir), No. 15, I.J.C. Aug. 9, 1918, and No. 24, I.J.C. Jan. 25, 1928.

<sup>85</sup> Creston Reclamation and Dyking Ltd., No. 42, I.J.C. Apr. 13, 1940.

<sup>86</sup> Creston Reclamation (Duck Lake), No. 48, I.J.C. May 12, 1942, No. 62, I.J.C. July 25, 1950, No. 70, I.J.C. Mar. 23, 1954.

Under its investigative powers the Commission investigates and reports on "any . . . questions or matters of difference arising between"<sup>87</sup> the two nations. Either country, alone, can make a reference for this purpose. Significantly, the Commission's investigative powers are not confined to water questions. Any question of concern to the two countries may be referred to it under this power.<sup>88</sup> The Commission has considered questions involving: the apportionment of waters,<sup>89</sup> dams,<sup>90</sup> drainage,<sup>91</sup> diversion of upstream waters in transboundary rivers,<sup>92</sup> design of remedial works to preserve Niagara Falls,<sup>93</sup> irrigation,<sup>94</sup> regulation of lake levels,<sup>95</sup> navigation,<sup>96</sup> power projects,<sup>97</sup> pollution of atmosphere,<sup>98</sup> pollution of boundary waters,<sup>99</sup> water resources of a whole river basin,<sup>100</sup> and waterways.<sup>101</sup>

Under its administrative jurisdiction the Commission has only one responsibility—to measure and apportion the waters of the two transboundary rivers, the St. Mary and the Milk, in accordance with article VI of the Treaty.<sup>102</sup> After holding hearings and gathering relevant data the Commission issued an order on October 4, 1921, concerning the measurement and apportionment of these two rivers. This order is carried out by irrigation officers of the two countries.

The Commission has arbitral powers under article X of the Treaty. As with its investigative power, the power of arbitration is not limited to water disputes but covers "any questions or matters of difference

<sup>87</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. IX, 36 Stat. 2448, T.S. No. 548.

<sup>88</sup> *Ibid.*

<sup>89</sup> Souris River, No. 41, I.J.C. Jan. 15, 1940; Souris-Red Rivers, No. 58, I.J.C. Jan. 12, 1948.

<sup>90</sup> St. Lawrence River Navigation and Power Investigation, No. 17, I.J.C. Jan. 22, 1920; Columbia River, No. 51, I.J.C. March 9, 1944.

<sup>91</sup> Roseau River Drainage, No. 26, I.J.C. Jan. 2, 1929.

<sup>92</sup> *Ibid.*; Columbia River, No. 51, I.J.C. March 9, 1944.

<sup>93</sup> Preservation and Enhancement of Niagara Falls, No. 64, I.J.C. Oct. 10, 1950.

<sup>94</sup> Sage Creek, No. 54, I.J.C. April 8, 1946.

<sup>95</sup> Lake of the Woods Levels, No. 3, I.J.C. July 19, 1912; Lake Ontario Levels, No. 67, I.J.C. June 25, 1952.

<sup>96</sup> Livingston Channel, No. 5, I.J.C. Oct. 16, 1912; St. Lawrence River Navigation and Power Investigation, No. 17, I.J.C. Jan. 22, 1920.

<sup>97</sup> Columbia River, No. 51, I.J.C. March 9, 1944.

<sup>98</sup> Trail Smelter Investigation, No. 25, I.J.C. Aug. 7, 1928; Air Pollution, No. 61, I.J.C. Jan. 12, 1949.

<sup>99</sup> Pollution of Boundary Waters, No. 4, I.J.C. Aug. 2, 1912; No. 53, I.J.C. Apr. 1, 1946.

<sup>100</sup> Water Resources of the Saint John River Basin, Quebec, Maine, and New Brunswick, No. 63, I.J.C. Sept. 24, 1950.

<sup>101</sup> Champlain Waterways, No. 37, I.J.C. Jan. 2, 1936.

<sup>102</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. VI, 36 Stat. 2448, T.S. No. 548.

arising between the . . . Parties.”<sup>103</sup> Both governments must join in an arbitration reference. To date no references for arbitration have been made to the Commission.

### III. THE 1944 REFERENCE<sup>104</sup>

#### *A. The Background*

At the time of the creation of the International Joint Commission in 1909, neither public opinion nor the state of engineering technology had progressed to the point where integrated river basin planning was feasible. Although a few prophets had spoken out for such a concept during the conservation movement of the early 1900's, it was not until the late 1920's that significant action occurred.<sup>105</sup> Following the great Mississippi flood of 1927 Congress authorized studies which later culminated in the famous "308" reports of the Corps of Engineers. Changes in public and professional attitudes continued to occur throughout the 1930's, and by 1944 the idea of long-range, integrated river basin planning was the prevailing philosophy.

Comprehensive planning on the Columbia was delayed by other factors, too, not the least of which was the Second World War. Neither Canada nor the United States needed this source of power at that time. The United States had numerous other sources of hydro-power in the Columbia Basin to fill its growing energy needs, and British Columbia still had little demand for large blocks of hydro power. In addition, much of the Columbia Basin in Canada was then virtually unexplored territory.<sup>106</sup>

However, as 1944 approached, an increasing number of applications were submitted to the IJC by the United States for the construction of dams or other works in the Columbia Basin which would have affected the flow or level of water on the other side of the border. The number and interrelationship of these projects suggested the need for comprehensive long-range planning in the Basin. Between 1927 and 1944 eleven applications were put before the Commission concerning the

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<sup>103</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. X, 36 Stat. 2448, T.S. No. 548.

<sup>104</sup> Columbia River, No. 51, I.J.C. March 9, 1944.

<sup>105</sup> This change in public attitude and in engineering technology is summarized in Hufschmidt and Weber, *United States Papers for United Nations Conference on Science and Technology* Vol. II (1963).

<sup>106</sup> See testimony of Larratt Higgins, *Hearings Before the Standing Committee on External Affairs*, House of Commons (Can.), 26th Parl., 2d Sess. 876 (1964) [hereinafter cited as 26th Parl. Hearings].

Kootenay River.<sup>107</sup> On the main stem of the Columbia the United States had applied for permission to flood Canadian lands behind Grand Coulee Dam.<sup>108</sup> Just to the west of the basin, on the Skagit River, the city of Seattle had applied to the Commission for permission to flood Canadian lands behind Ross Dam.<sup>109</sup>

Little public attention was attracted in 1944 when the governments of Canada and the United States referred the question of joint development of the Columbia River to the IJC. The reference was in line with a longstanding practice of handing to the Commission questions of joint development or potential conflict. The reference directed the Commission to investigate and make recommendations concerning the further development of the river.

### *B. Possible Advantages From Joint Development*

Although some of the problems and opportunities of joint development may not have been foreseen in 1944, by 1959 when the engineering report was completed it was apparent to all that joint action could have a significant impact on the benefits to be derived from the river. Essentially, the problem was this: the numerous generators built on the United States portion of the river could not be fully utilized because of the great seasonal fluctuations in flow. If these generators had been designed to utilize the maximum annual flow they would go unused throughout most of the year when the water level was low. They were, in fact, built to handle more nearly an average flow, and thus during the high water periods great volumes of water passed over them without generating power. The obvious solution was the construction of storage reservoirs on the upper river which would level the flow; however, most of the good storage sites were in Canada. The success of this approach was dependent upon Canada's willingness to construct, or authorize construction of dams that would bestow very substantial benefits on the United States.

Canadian storage could also be used to control floods in the United States. The threat of flood damage in Canada is of small consequence, but in the United States is serious. Canadian storage would reduce

<sup>107</sup> I.J.C. Doc. Nos. 23, 27, 29, 30, 34, 39, 42, 43, 45, 47, 48.

<sup>108</sup> Grand Coulee Dam and Reservoir, No. 44, I.J.C. Sept. 30, 1940.

<sup>109</sup> Skagit River Dam & Reservoir, No. 46, I.J.C. May 26, 1941.

Note that the draft was amended on the suggestion of counsel for the City of Seattle to include the following:

Provided the Ross Dam shall not be raised beyond the height at which the water impounded by it would reach British Columbia unless and until a binding agreement has been entered into between Seattle and British Columbia and private interests.

this threat and thereby bestow a major economic and social benefit on the United States.

On receiving the Columbia River Reference, the International Joint Commission created the International Columbia River Engineering Board to carry out the required studies. The Board was instructed to produce a report and return with recommendations concerning the best way to develop the river, especially with regard to power and flood control. The Engineering Board submitted its report in 1959. During the period 1944 to 1959 the international controversy over the Columbia continued and increased in intensity.

### *C. Signs of the Coming Storm—The Libby Dam Proposal*

Signs of the coming storm appeared in 1951 when the United States applied for International Joint Commission approval of Libby Dam.<sup>110</sup> The dam was to be built on the central portion of the Kootenay, where the river dips briefly into the United States. It would have raised the water level at the border some 150 feet, and would have created a large storage reservoir extending forty-two miles into Canada, thereby rendering communication between a few Canadian communities more difficult.

The United States offered to compensate the Canadians (1) for the lands flooded; (2) for highway and railway relocations; and (3) for resettlement of displaced persons. Nothing was offered for the 150 foot "head" of water that would generate a substantial amount of at-site and downstream power in the United States. Canadian plants downstream on the West Kootenay would have been permitted by the United States to utilize, without charge, the benefits of Libby storage.

Canada's reaction was prompt, and adverse. Both the federal and provincial governments insisted that Canadians were entitled to share Libby power in return for the physical contribution of British Columbia natural resources. After a number of hearings in the United States and Canada, where these objections were discussed and alternatives considered, the United States temporarily withdrew its application with a view to submitting a different one at a later date.

Later the United States, through the Army Corps of Engineers, re-designed the dam, locating it several miles further upstream, and on May 22, 1954, submitted a second application. The offer—or lack of it—of compensation for use of British Columbia natural resources

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<sup>110</sup> Libby Dam, No. 65, I.J.C. Jan. 15, 1951.

remained essentially unchanged. Again, Canada responded by insisting on a share of Libby power. This time, in addition, Canada insisted on a share of benefits to downstream United States dams resulting from the Canadian "head." Lastly, and most disturbing to the Americans, was the suggestion of a possible diversion of the Kootenay into the Columbia at Canal Flats. This would entirely deprive Libby and other Kootenay dams of the diverted waters. The diverted water would, of course, go through other United States dams on the main stream. According to Canada, studies of the feasibility of the diversion had been commenced and consideration of the Libby proposal had to await their completion.

United States protests that the demand for a share of Libby power and other downstream benefits was contrary to the 1909 Treaty, which anticipated only money compensation, were to no avail. Canada maintained that the Commission had approved other forms of compensation in the past, specifically in the Grand Falls Dam<sup>111</sup> case, where the arguments for such relief were less compelling than here.<sup>112</sup> Canada further maintained that in that case Mr. Hackworth for the United States had tried to establish a United States "right" to share in downstream benefits. Thus, both reason and precedent were advanced in support of the Canadian claim.

As arguments were made and countered by each side, emotions began to run high, evoking from the chief Canadian protagonist, General A. G. McNaughton, Chairman of the Canadian section of the IJC, the accusation that on Libby the United States "want us to give them a gold watch for the price of a bit of tinsel."<sup>113</sup> Other concurrent

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<sup>111</sup> In the Grand Falls case a Canadian dam was approved for construction three miles below the point where the river leaves the international boundary. The dam would raise the water level along the boundary somewhat above low water mark, but not to exceed high water mark. The United States through its counsel, Mr. Hackworth, claimed to be entitled to a share of the power generated at Grand Falls. The Commission was not required to decide the question because in fact the applicant agreed to make available 2000 h.p. for purchase and use in Maine and the commission order took note of that agreement. Grand Falls Power Dam, No. 19, I.J.C. Feb. 20, 1925.

<sup>112</sup> Canada argued thus:

In Grand Falls the St. John was a boundary river and the United States was only entitled to half of the benefits from it. The Kootenay is a transboundary stream and thus Canada as the upstream country owns the whole flow. Thus it should receive a share of the whole increase in level instead of only half the increase, as the United States desired in Grand Falls.

<sup>113</sup> General McNaughton also said in *Hearings Before the Standing Committee on External Affairs*, House of Commons (Can.), 23 Parl., 1st Sess., ser. 3 at 33 (1953): "This project is one in which we are invited to present, that is, to make a gift to our friends to the south of the line of the rights in perpetuity to a large flow of Canadian origin capable of being used in Canada. By this action, if we should take it, we would divert a resource of very great value from ourselves to the service of industry in another nation."



developments gave further impetus to the growing need for consideration of the overall Basin plans of the two countries.

*D. Kaiser Aluminum—Arrow Lakes Dam Proposal*

Prior to 1954, the Kaiser Aluminum and Chemical Corporation contacted the British Columbia government with a proposal to build a dam at Castlegar for Arrow Lakes storage. The American company offered British Columbia 20 per cent of the additional power generated downstream as a result of the dam. Although this offer seemed attractive to the British Columbia government, others in Canada took a different view, contending that Canadians should get much more.<sup>114</sup>

*E. Puget Sound Utilities Council—Mica Dam Proposal*

At about the same time as the Kaiser proposal, the Puget Sound Utilities Council engaged the British Columbia and Federal Canadian governments in discussions aimed at permitting the Council to build Mica Creek Dam. The Council offered to pay an estimated 250 million dollars for construction, and to give the completed dam to British Columbia. British Columbia was to receive no money or power for the 1,790 kilowatts of additional power that would eventually be generated in the United States as a result of Mica's storage.<sup>115</sup>

Controversy over these three dams generated considerable thinking on both sides of the boundary about joint development of the basin. South of the border the Americans were becoming more aware of the benefits that might be theirs without charge, if and when the Canadians decided to put dams on the upper river. There was possibly a degree of smug satisfaction in the notion that Canada would certainly want to put dams on the Columbia to meet its own growing power demands, and when this happened, the downstream United States facilities could generate about two million additional kilowatts of power, at very modest additional cost. On the Canadian side quite the opposite reaction took place. The Canadians were irritated at first, and then outraged, at the notion that no one south of the border seemed inclined to share the benefits that might be bestowed on them.

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<sup>114</sup> See Bourne, *The Columbia River Controversy*, 37 CAN. B. REV. 444, 448 (1959).

<sup>115</sup> Stevens, Power Program for the Puget Sound-Cascade Region, 157-61, March, 1955.

*F. International River Improvements Act, 1955*

As the situation deteriorated, the Canadian Parliament, fearful that precipitate action (or at least action without the approval of the federal government) might be taken by the British Columbia Government, passed the International River Improvements Act of 1955.<sup>116</sup> This act prohibited construction of dams or other works on international rivers without a federal license. It effectively stopped further negotiations between the British Columbia government and United States interests on the Mica Creek and Arrow Lakes dams, substituting the federal government as the Canadian negotiator. There is little doubt, evidenced by subsequent events, that the Provincial British Columbia government was not entirely happy with this result, and tried, with substantial success, to continue playing a major role in the international negotiations.

The Canadians' anger and frustration at the American attitude continued to be epitomized by General McNaughton. His views on the obligation of the United States to share downstream benefits, particularly with regard to Libby Dam, were voiced so forcefully that a deep split opened between him and his counterpart Len Jordan, chairman of the United States section. By 1956, this split had widened to a chasm, prompting Mr. St. Laurent, the Prime Minister, to suggest that it might be time to move the negotiations to a "higher level . . . . There was a feeling that the chairmen of the two sections had publicly expressed views so diametrically opposed to each other that there was little probability of their being able to make the kind of progress we would hope would be made in arriving at a solution to these problems."<sup>117</sup> Mr. St. Laurent noted that he and President Eisenhower had agreed to hold a meeting concerning the Columbia and were working out the details of time and place.

#### IV. THE FRASER DIVERSION SCHEME

It was General McNaughton who in the mid-1950's, after continuing United States' refusal to meet Canadian demands for sharing downstream benefits, pressed the idea of diversion of the Columbia into the Fraser River.<sup>118</sup> Under this plan the Kootenay was also to be diverted.

<sup>116</sup> 3 & 4 Eliz. II, c. 47 (Can.).

<sup>117</sup> H.C. DEB. (22d Parl.) (Can.).

<sup>118</sup> General McNaughton played a central role in the negotiations throughout. In hearings before a subcommittee of the Senate Interior Committee on the snail-paced treaty negotiations, the General was singled out repeatedly as "that man . . . . He was

By damming the Kootenay somewhere below Canal Flats, probably at Bull River, the lake created would be higher than Columbia Lake, and the water would thus flow north across Canal Flats into the latter. This water would then run down the Columbia to the northernmost tip of the big bend where a dam would be built at Mica Creek. Tunnels from the lake would carry the water through the Monashee Mountains into Eagle Creek, Thompson River and then into the Fraser. General McNaughton estimated that fifteen million acre-feet of "surplus" water would be diverted during the three peak-flow months of each year.<sup>119</sup>

Not unexpectedly, American reaction to the diversion scheme was hostile, to say the least. Heated argument was generated both in and out of the Commission.<sup>120</sup> The protagonists settled on two issues: first, Canada's alleged "legal right" to divert, and second, the potential effect of diversion on downstream United States facilities.<sup>121</sup> These issues will be considered seriatim.

#### *A. Impact of Diversion on the United States*

Much of the difficulty arose from the skimpy data that was available on the impact of any potential diversion. Such studies as had been made were carried out in the highly charged atmosphere of the time and were released only piecemeal, usually in the midst of argument.

On the United States side, Len Jordan claimed that Grand Coulee Dam needed all the natural flow of the Columbia to keep its storage reservoirs full and its generators in full operation. He argued that during a low-flow year there would be a direct conflict between Grand Coulee operation and the proposed Canadian diversion. The critical winter months, when the Grand Coulee reservoir should be filling, would be the same period when the Columbia waters would be drained off into the Fraser diversion.

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admired, cussed, rebuked, and praised . . . was called a nationalist in the extreme sense, and also the most determined man." *Financial Post* (Can.), May 17, 1958, p. 31, col. 1-3.

See also *Victoria Daily Times* (Can.), April 15, 1959, on the General's role in the negotiations.

<sup>119</sup> Proceedings of the International Joint Commission, April 5, 1955, p. 32. This, incidentally, is about the same amount that Canada will store for the United States under the 1961 Treaty.

<sup>120</sup> *Seattle Times*, Dec. 26, 1954, p. 8, col. 1; *id.*, Oct. 5, 1955, p. 14, col. 1; *Financial Post* (Can.), Feb. 15, 1958, p. 11, col. 1.

<sup>121</sup> These issues received attention in the United States Senate. See testimony of Sen. Neuberger on the Columbia—Fraser diversion scheme and its effect in the United States, given before the Senate Committee on Foreign Relations, *Hearings on the Upper Columbia River Development*, 84th Cong., 2d Sess. 13-25 (1956).

McNaughton took quite a contrary view. He questioned Len Jordan's data as to the quantity of water needed to keep Grand Coulee operating at capacity. Furthermore, he argued that the exaggerated United States' demands could be met, even in a low-flow year, if Canada built adequate storage reservoirs on the upper Columbia. These reservoirs could store water from the high-flow years for release in drier years.

The arguments raged back and forth. The principal difficulty with those from either side was their lack of accurate, dependable data. It is probably fair, however, to say that McNaughton's position was that (1) if managed properly there was enough water available in the Columbia to meet the needs of both countries, and (2) even if some slight risk of cyclical shortage to United States facilities might occur, that would not deprive Canada of its legal right to divert under article II of the Boundary Waters Treaty.<sup>122</sup>

### B. Legal Arguments

1. *The Canadian View.* Professors Bourne,<sup>123</sup> and Cohen,<sup>124</sup> Mr. Austin,<sup>125</sup> and other Canadians<sup>126</sup> argued that article II of the Boundary Waters Treaty clearly gave Canada the legal right to divert without consent of the United States. Mr. Austin contended that in view of the applicability of the Boundary Waters Treaty, general international law did not apply. He then argued that:<sup>127</sup>

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<sup>122</sup> Armstrong, Langford & Pennington, *The Columbia River Dispute*, 1 OSCOON HALL L.J. (No. 1) 1, 27-28 (1958):

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 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.

<sup>123</sup> Bourne, *supra* note 114, at 450-61. Bourne, Proceedings, Pac. Northwest Regional Meeting, A.S.I.L. 26 (June 1956).

<sup>124</sup> Cohen, *Some Legal and Policy Aspects of the Columbia River Dispute*, 36 CAN. B. REV. 25 (1958).

<sup>125</sup> Austin, *Canadian—United States Practice and Theory Respecting the International Law of International Rivers: A Study of the History and Influence of the Harmon Doctrine*, 37 CAN. B. REV. 393 (1959).

<sup>126</sup> See Goldie, *Recent Developments on the Columbia Diversion*, Proceedings, Pac. Northwest Regional Meeting, A.S.I.L. (June 1958); Ladner, *Diversion of Columbia River Waters*, *id.* at 1 (June 1956).

<sup>127</sup> Austin, *supra* note 125, at 439. In preface to his argument Austin wrote, *id.* at 438:

In the light of the history of [article II] it is abundantly clear that no legal limits can be set to Canada's right to divert the waters of the Columbia as she sees fit and that no regard need be had to downstream uses [except navigation] or prior appropriations of any sort. . . .

2. *The American View.* Professor Martin,<sup>128</sup> Mr. McKay,<sup>129</sup> and Mr. Jordan<sup>130</sup> on the United States side, agreed that Canada's right to divert was indicated by the history and language of article II. On the other hand, some United States writers argued that Canada had no right to divert. William Griffin of the United States State Department was the principal exponent of this view. In a State Department Memorandum in 1958<sup>131</sup> he set out at length the history of the negotiations leading to the 1909 treaty, concluding with the comment, "It is clear the record does not support the Canadian position." In speaking of the negotiations toward the 1909 treaty he argued that:<sup>132</sup>

it is reasonable to assume that if either point of the Canadian position had expressly engaged the negotiators' attention, their views would occupy a prominent place in the record. However, the record is devoid of any express consideration of either point of the Canadian position.

He argued that neither the United States nor Canada had seriously urged the Harmon Doctrine in the negotiations over the Boundary Waters Treaty, and he supported this position by claiming that the disputes over the Milk and St. Mary's Rivers (which were settled in the Boundary Waters Treaty) were approached by both sides, and settled, on the basis of equitable apportionment. He also argued that the Treaty provisions permitting the downstream injured party to use the courts of the upstream country to seek redress for injuries suffered as a result of diversion was not a confirmation of the Harmon doctrine,

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In actual fact, the rights and obligations of the two nations do not rest on the general principles of international law, which are irrelevant to the matter, but on the definitive Boundary Waters Treaty of 1909 which was agreed to by both states in order to set out the principles which would bind them in the regulation of disputes concerning their international water resources. It is to this treaty then that we must turn.

<sup>128</sup> Martin, *The Diversion of Columbia River Waters*, Proceedings, A.S.I.L. 2-8 (April 1957).

<sup>129</sup> McKay, *Recent Developments in the Columbia River Controversy*, Proceedings, Pac. Northwest Regional Meeting, A.S.I.L. 3 (June 1958), 49 PACIFIC NORTHWEST QUARTERLY 104 (1958).

<sup>130</sup> See Len Jordan's comments in *Report of the Joint Hearings Before the Senate Committee on Interior and Insular Affairs and a Special Subcommittee of Senate Committee on Foreign Relations, Upper Columbia River Development*, 84th Cong., 2d Sess. 40 (1956).

<sup>131</sup> Griffin, *Legal Aspects of the Use of Systems of International Waters*, S. Doc. No. 118, 85th Cong., 2d Sess. (1958).

<sup>132</sup> *Id.* at 59.

but a denial of it. In many instances, because of the different legal systems used in the two countries, no legal redress would be available to the downstream injured party. In such cases the intent of the Treaty was that the question should be referred to the International Joint Commission for report and recommendation in line with general principles of international law; these principles, he argued, were "equitable apportionment," not the Harmon Doctrine.<sup>133</sup>

3. *Canadian Rebuttal*. Rebuttal of the Griffin thesis was not long in appearing. Both Bourne and Austin, in carefully reasoned articles based on an examination of virtually the same history examined by Griffin, came to the opposite conclusion. Austin argued.<sup>134</sup>

Article 2 of the treaty was the provision which gave the most difficulty in drafting and which nearly caused the wreck of the treaty as a whole. It declares in words so clear that they would even satisfy Mr. Harmon himself of the exactness of their meaning . . . .

Thus whatever might be the case for boundary waters, the situation as to rivers flowing across boundary lines was based on the Harmon doctrine of exclusive jurisdiction. The second part of the paragraph is however a modification of Attorney General Harmon's view that individuals had no right of action and that there could be no claim to rights under national law. It is clear that individuals are granted the same status to sue in the courts of the diverting country as they would have if they were citizens of that country. . . .

It is clear from the discussion above that the United States argued for and insisted upon the Harmon doctrine as a general principle of international law and that it sought and achieved its embodiment in the Boundary Waters Treaty under article 2. But what was Canada's position respecting the Harmon doctrine? Why did it agree to accept it when it seemed a principle obviously injurious to its interests, permitting as it did the United States to justify its diversions at Chicago and to interfere with the flow at other places?

Sir Wilfred Laurier, Prime Minister of Canada, set out in crystal-clear terms, the reasons which motivated Canadian action:<sup>135</sup>

I may say that it was only after careful and exhaustive consideration on my part that I agreed to accept the treaty as it has been written. I would have regarded the international law as my hon. friend opposite

<sup>133</sup> *Id.* at 62:

The "use and diversion" in each country of such waters is subject to applicable principles of customary international law; except that neither country may assert through diplomatic channels, on behalf of private parties sustaining injury in its territory, the international legal responsibility of the other country if there is available to them compensation under the law of the latter country.

<sup>134</sup> Austin, *supra* note 125, at 420-22.

<sup>135</sup> 1 H.C. DEB. (Sess. 1910-1911) 911-12 (Can.) (emphasis added).

[Mr. Borden] does, that is to say, that the same principle should prevail in international law as prevails in the common law and the civil law, namely, that a man may make such use as he pleases of the water which flows over his property so long as he does not do so to the detriment of anybody else. . . .

But 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 shall 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 choose to divert a stream that flows into your territory you shall have no right to complain, you shall not call upon us not to do what you do yourselves. . . . What wiser course could have been adopted?*

Bourne similarly argued that article 2, both in its language and history clearly embodied the Harmon doctrine.<sup>136</sup>

4. *Additional Arguments—Both Sides.* Several other legal arguments were advanced both for and against the diversion right. Some were made in the hearings of the International Joint Commission;<sup>137</sup> others appeared elsewhere. Summarized, the arguments on behalf of the United States were:

(a) The diversion contemplated in article II refers only to normal uses of the water, as for irrigation or industry, and not to a major alteration in the flow such as Canada is considering.

(b) The United States has never, in practice, followed the Harmon doctrine embodied in article II of the Treaty, and did not, in fact, follow it even in the negotiations with Mexico when the doctrine is said to have originated. Moreover, the doctrine is not a principle of contemporary international law. Hence article II cannot be invoked to support such a diversion as the one contemplated by Canada.

(c) Under the principle of *rebus sic stantibus* the Treaty can be abrogated by the United States in view of the substantial changes that have occurred in the circumstances under which it was con-

<sup>136</sup> Bourne, *supra* note 114, at 450-51.

<sup>137</sup> A summary of most of the arguments may be found in BLOOMFIELD & FITZGERALD, *BOUNDARY WATER PROBLEMS OF CANADA AND THE UNITED STATES (THE INTERNATIONAL JOINT COMMISSION 1912-1958)* 167-70 (1958).

cluded. These changes include, *inter alia*, the tremendously increased importance of hydro-electric power, and the enormous investment the United States has already put into its installations on the lower Columbia.

(d) If for any of the above reasons the Treaty does not control the rights of the parties, then Canada would be denied a right to divert under any one of the three major water systems extant in the Western world, and shared to some extent by both Canada and the United States.

(e) Canada has no right to divert a major portion of the Columbia's flow, causing substantial injury to the United States, under the common law riparian doctrine whereby the riparian owners on a river are entitled to prohibit any upstream use that substantially and unreasonably interferes with their own uses.

(f) The prior appropriation doctrine would also deny Canada a right to divert, as the United States has already appropriated the water of the Columbia to its use and is entitled to continue that use so long as it does not waste the water.

(g) Likewise, the equitable apportionment principle, requiring that the waters of a drainage basin be shared equitably by the basin states, would bar a Canadian diversion of the size contemplated. Thus, Canada would have the right to make reasonable diversions, but the proposed diversions are unreasonable and, moreover, the doctrine does not contemplate unilateral determination of the reasonableness of diversions.

The Canadian replies to these arguments may be summed up as follows:

(a) The Treaty controls the rights of the parties. Whether the United States continues to look with favor on the Harmon Doctrine is academic, although that doctrine has been relied on in recent years by counsel for the United States Government appearing before the International Joint Commission. It is not the Harmon Doctrine of absolute sovereignty, but a solemn treaty which has been adhered to for nearly fifty years, that determines the rules applicable in the Columbia case.

(b) Neither the riparian nor appropriation doctrine is applicable to the case, since they are doctrines of municipal law, not international law.<sup>138</sup> The prior appropriation doctrine is also irrelevant

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<sup>138</sup> Goldie, *Effect of Existing Uses on the Equitable Apportionment of International Rivers*, 1 U.B.C. L. REV. 399 (1960).



because the water to be diverted by Canada has not been put to use yet by the United States.

(c) The principle of equitable apportionment is not an established principle of international law, but is primarily a product of interstate cases before the United States Supreme Court. Even if this principle is applied to the Columbia diversion, Canada could still divert the amounts of water in question, as the diversion would be neither inequitable nor unreasonable as to the United States.<sup>139</sup>

Further argument ranged over the legal remedies that would be available to the United States if Canada were to go ahead with the diversion, and turned on the construction of article II. The first sentence of the article identifies Canada and the United States as the "High Contracting Parties," all in capital letters. Concerning remedies it provides:<sup>140</sup>

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 diversions of waters on the other side of the boundary the effect of which would be productive of material injury to the navigation interests on its own side of the boundary.

The United States argued<sup>141</sup> that the rather limited remedy prescribed above did not apply to it because this remedy was designed for injured "parties" (in lower case) meaning individuals, whereas reference to the United States as a sovereign nation was by means of the phrase, "High Contracting Party," (in upper case). Professor Cohen<sup>142</sup> and others<sup>143</sup> soon pointed out difficulties with that position. Cohen observed that there was another, "disturbing 'p' in the last line

<sup>139</sup> See Goldie, *op. cit.* *supra* note 126, at 2.

<sup>140</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art. II, 36 Stat. 2448, T.S. No. 548.

<sup>141</sup> The United States argument based on big "P" vs. little "p" was originated by Mr. Roy Vallance, a State Department legal adviser. *Financial Post (Can.)*, Feb. 15, 1958, p. 11, col. 1-3. He probably took it from the comments of Mr. Chandler Anderson in 1909.

<sup>142</sup> Cohen, *supra* note 124.

<sup>143</sup> Armstrong, Langford & Pennington, *supra* note 122; see also Johnson, *The Columbia River System*, Proceedings, A.S.I.L. 120 (1960).

of the first paragraph of article II where the word 'parties' with a small 'p' is used apparently to designate the High-Contracting Parties who may have special agreements with each other with respect to particular diversions of trans-boundary waters."<sup>144</sup>

Professor Bourne followed up the argument on remedies by referring to the law of British Columbia, which, under the Treaty, would control the right of either the United States, or an individual United States citizen, in a suit for damages under article II. The suit would have to be brought in British Columbia courts and would be controlled by provincial law. That law, embodied in the Water Act of 1948, and its predecessor, the British Columbia Water Privileges Act of 1892, provides that only the holder of a license issued by the British Columbia Comptroller of Water Rights has a right to the use and the flow of water in any streams in the province. In the absence of such a license, a downstream American claimant would be out of court. Bourne thought it conceivable, but unlikely, that a British Columbia court might give "licensee" status to a downstream American who held a valid appropriative right.<sup>145</sup>

One of the interesting things about the diversion argument was that virtually no one suggested that the 1909 Treaty should be terminated, although article XIV of the 1909 Treaty<sup>146</sup> provides that it may be terminated on twelve months' written notice. Presumably, the United States could have suggested termination if it felt its position on the diversion question was untenable. The lack of any serious move in this direction can be attributed, no doubt, to the longstanding good relations between the countries, the proven value of other provisions of the Treaty in resolving conflicts, and recognition of the International Joint Commission as a useful institution.

### *C. Comment on Legal Arguments*

The legal arguments waxed hot and heavy through the mid-1950's, but by 1958 an increasing number of people had begun to realize the inadequacy of the 1909 Treaty to solve the complex problems of development of a great river system such as the Columbia. Thus, one writer after another urged a sensible, neighborly, and political, rather

<sup>144</sup> Cohen, *supra* note 124, at 30.

<sup>145</sup> Bourne, *Columbia River Diversion: The Law Determining Rights of Injured Parties*, 2 U.B.C. LEGAL NOTES 610 (1958).

<sup>146</sup> Treaty with Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada, Jan. 11, 1909, art XIV, 36 Stat. 2448, T.S. No. 548.

than a "legalistic" approach to the matter. The Canadian view noted the impasse in which the negotiators found themselves on the legal issues and urged the adoption of a more sensible method.<sup>147</sup> Similar sentiments were voiced on the American side.<sup>148</sup>

Even while the debate raged over the diversion issue, there were many Americans who concluded that the issue was moot because Canada never would divert the Columbia. Three reasons for this conclusion were suggested: First, the Fraser River sockeye salmon runs would be damaged if not destroyed,<sup>149</sup> since high dams on the Fraser, needed to take advantage of the additional water from the Columbia, could not be surmounted by spawning fish. The British Columbia voters, many of whom rely on fishing for a living, would vigorously protest any such action. Second, the Americans had serious doubts about the economic feasibility of such a diversion,<sup>150</sup> and learned later that a Canadian study on this subject confirmed their doubts.<sup>151</sup> The study showed, for example, that power generated from such a diversion would cost over seven mills per kilowatt-hour delivered to Vancouver, about double the cost of obtaining power by non-diversion schemes. Even Canadians now admit the Fraser diversion was "unrealistic."<sup>152</sup> Third, any diversion was certain to create ill will on the American side of the line. This ill will might well be permanent too, as the Americans would be reminded of the diversion each year that the flow of the river happened to be too low to operate their generators to capacity.

<sup>147</sup> Cohen, *supra* note 124.

<sup>148</sup> Johnson, *op. cit. supra* note 143, at 133.

<sup>149</sup> See generally HAIG-BROWN, *THE LIVING LAND* 160 (1961); Sherman, "Columbia River Power Plan—A Special Report," *The Province* (Vancouver, B.C.), Jan. 24, 1963, p. 1, col. 3 (Supp.); *Pacific Fisherman*, Jan. 1, 1958, p. 11.

<sup>150</sup> On March 31, 1960, the author wrote General McNaughton asking for any available information on the economic feasibility of the Fraser diversion. The General replied, Letter from A.G.L. McNaughton to the author, April 14, 1960: The Commission was informed some time ago that Canada was studying the feasibility of the diversion of waters from the Columbia to the Fraser system. In this connection I can only say that information on these studies has not been communicated to the Commission. I think you might assume that the Canadian government would use the results of that study in evaluating the benefits to Canada of any arrangement that may be proposed for cooperative development within the Columbia River System.

I appreciate your difficulty in obtaining "authoritative answers" to some of the questions contained in your letter. . . .

<sup>151</sup> This study was only released in February 1964. See B.C. Engineering Board Ltd., *Report on an Investigation of Columbia to Fraser Diversion Project, 1956*, summarized in Can. Dep'ts of External Affairs and Northern Affairs and National Resources 164 (Feb. 1964). (Hereinafter cited as Protocol and Related Documents.)

<sup>152</sup> Can. Dep'ts of External Affairs and Northern Affairs and National Resources, *The Columbia River Treaty and Protocol: a Presentation* (1964) [hereinafter cited as *Presentation*], where the following was said, at 51:

Nonetheless, the diversion threat and its ensuing debate caused many Americans to think twice about their refusal to share with Canada the Columbia's downstream benefits. It was about this time the Canadians devised an even more telling argument in their favor: the Peace River alternative! It played a major part in bringing the Americans to a more tractable point of view.

#### V. THE PEACE RIVER ALTERNATIVE<sup>153</sup>

The Peace River lies about 650 miles north of the border, and flows north into the Arctic Ocean. Studies by the Wenner Gren interests under contract with the British Columbia Provincial Government in the late 1950's indicated that dams and generators on the Peace could supply British Columbia with all its power needs for many years to come—at costs competitive with Columbia power. As the Peace River is entirely in Canada, no treaty or joint action with the United States would be necessary.<sup>154</sup> The Americans quickly realized that if the upper Columbia was to be fully developed first, the Canadians would have to be offered some special incentive. This is not to suggest that the Peace River proposal originated as a maneuver, like the Fraser diversion scheme, to change the United States attitude about the Columbia. The provincial government has since made clear that this proposal was being pushed on its own merits. Nonetheless, it had the incidental effect of posing a real alternative to Columbia River development and did, in fact, influence opinion in the United States.

As to the effect of the Peace proposal on American opinion, R. G. Williston, Minister of Lands and Forests for British Columbia, commented:<sup>155</sup>

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Although the results of the studies which were undertaken for the Federal Government by the B.C. Engineering Company in 1956 indicated that it would be physically possible to accomplish the diversion, they also showed that the economic advantage of such a diversion would not be sufficiently attractive to recommend it for inclusion in any plan for optimum development of the hydro resources of the Columbia River basin.

In addition to the fact that no economic benefit would accrue to Canada from such a diversion it must also be recognized that the many political, legal, fisheries and other technical problems associated with such a diversion have rendered the proposal unrealistic.

<sup>153</sup> The Peace River project is enormous. Much controversy arose in British Columbia about the timing for it. In summary, Bennett pressed for immediate development, either before or simultaneously with the Columbia. Vancouver (B.C.) Sun, Dec. 6, 1958, p. 6, col. 1. Many others believed the project should be delayed because of the vast sums of money involved and the large blocks of power that would become available in an area with limited markets. See Johnson, *op. cit. supra* note 143.

<sup>154</sup> The Peace River has no salmon runs so development of it poses no problems as on the Fraser. HAIG-BROWN, *op. cit. supra* note 149, at 161.

<sup>155</sup> Address by R. G. Williston, Throne Debate, B.C. Legislative Assembly, Feb. 3, 1960, reported in Johnson, *op. cit. supra* note 143, at 130-31.

When the history of this last few years is written, no one will be able to argue that the Peace River power potential has not had great influence on international negotiations concerning the Columbia River. I first indicated need for a realistic alternative to Columbia River power when reporting to this House on my 1957 meeting in Washington. I was convinced at that time there never would be international agreement on a downstream benefit return related to value created so long as the Americans felt Canadians would be forced to develop the River for their own power needs within a period of ten to fifteen years. Any such Canadian development would have automatically afforded the Americans some of the necessary storage on the River at no cost and would thus have destroyed our bargaining position.

You will recall that plans were prepared which would allow for the diversion of part of the flow of the Columbia River to the Fraser. It was hoped this would bring the Americans to the bargaining table seeking an agreement to the benefit problem which would be acceptable to Canada. However, such a proposal only succeeded in making them angry. When they examined the plan seriously, they soon became convinced that Canada would not divert Columbia water to the Fraser because of the very valuable fish runs which would be affected adversely by any power development constructed to use the water.

However, as soon as the power potential of the Peace River was known, a change in American strategy became evident. The desire to negotiate finally became so keen that it has been difficult to find time to formulate and adopt a united Canadian position on the best Columbia plan of development . . . .

#### *A. Progress Toward Agreement*

About the time of the United States' change in attitude, rapid progress began to be made toward joint development of the Columbia. In March 1959, the International Columbia River Engineering Board submitted to the International Joint Commission its report "Water Resources of the Columbia River Basin."<sup>156</sup> In December 1959, the Commission issued its "Report on Principles for Determining and Apportioning Benefits from Cooperative Use of Storage of Waters and Electrical Interconnection Within the Columbia River System."<sup>157</sup> And on January 17, 1961, the Columbia River Treaty<sup>158</sup> was signed in Washington.

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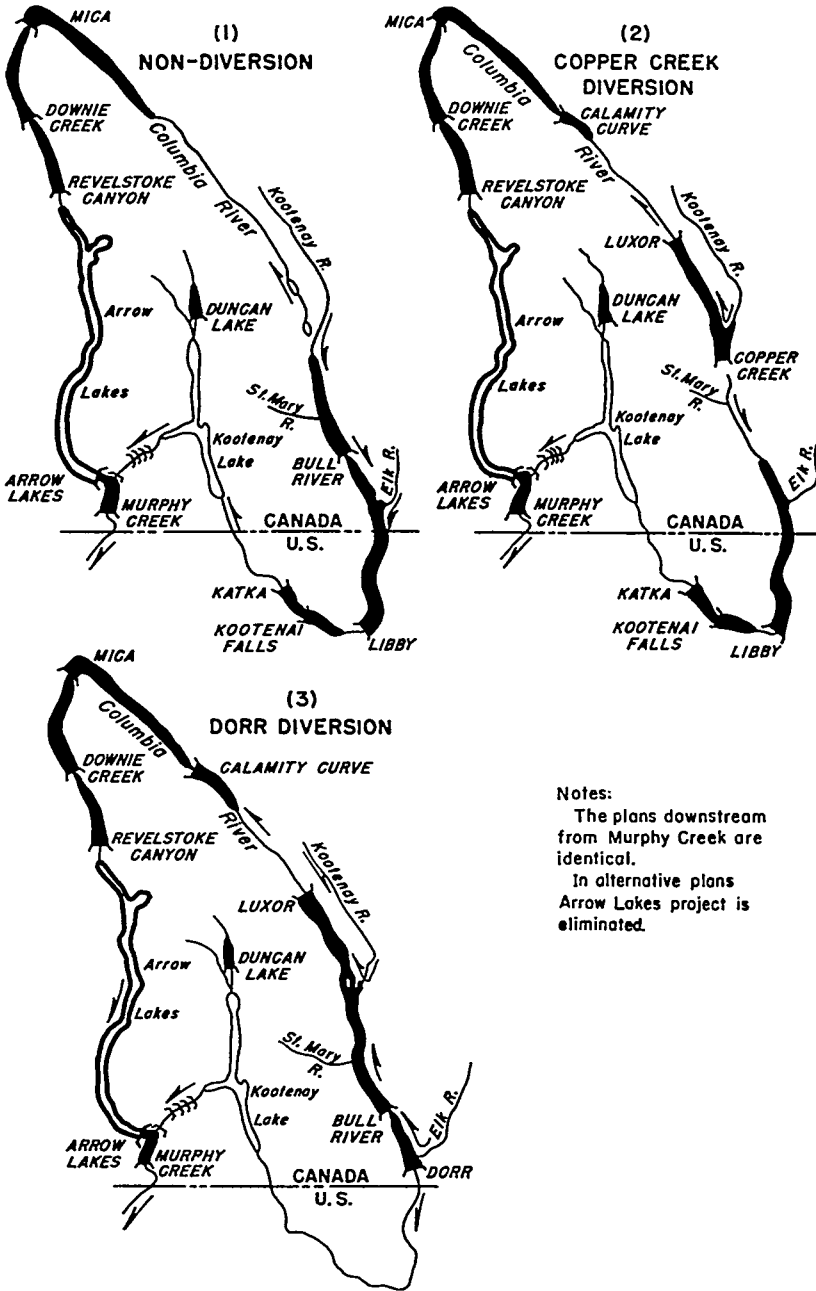
Others agreed that the Peace River alternative was the lever that changed United States opinion. See Vancouver (B.C.) Sun, Dec. 6, 1958, p. 6, col. 1; Victoria (B.C.) Daily Times, Dec. 11, 1958, p. 11, col. 5.

<sup>156</sup> ENGINEERING REPORT.

<sup>157</sup> This report is reprinted in Protocol and Related Documents 39.

<sup>158</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

PRELIMINARY PLANS OF DEVELOPMENT



Notes:  
 The plans downstream from Murphy Creek are identical.  
 In alternative plans Arrow Lakes project is eliminated.

VI. THE ENGINEERING REPORT, APRIL 1959<sup>159</sup>*A. Introduction*

Fifteen years of work culminated in the Engineering Report, the document which served as a basis for the negotiations, as well as for the disagreements over the treaty. This comprehensive report was prepared by a "Board" of four engineers, two from the United States and two from Canada. A subgroup, called the International Columbia River Engineering Committee, was created to assist the Board, particularly in its field operations. This Committee also consisted of four members, two from each country. Some time later a Work Group of Committee Assistants was established to assist in field work.

Not surprisingly, the Board relied heavily on studies previously made by the United States Army Corp of Engineers on the Columbia, especially the portion in the United States. Accordingly, numerous references to such studies are made throughout the Report.

*B. The Board's Findings*

Instead of recommending merely one plan, the Engineering Board recommended three alternatives, any of which would produce benefits nearly equal in terms of total effect in the basin. Also, any of the three plans would "approach the most extensive use of Columbia Basin water resources for power and flood control considered practical in the foreseeable future."<sup>160</sup> Cooperative development, the Report said, would permit "greater use of the waters of the Columbia River system . . . in the three important fields of water power, flood control and irrigation . . ."<sup>161</sup> All of the three plans were based "solely on engineering and economic feasibility," and took "no cognizance of the international boundary."<sup>162</sup> The Board was concerned with the maximum possible development of the available flow and head in the Basin, not with the development of an optimum scheme. No attempt was made, for example, to recommend a formula for apportioning downstream benefits between the two countries, although some of the data suggested the desirability of such an apportionment.<sup>163</sup>

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<sup>159</sup> ENGINEERING REPORT.

<sup>160</sup> *Id.* at 97.

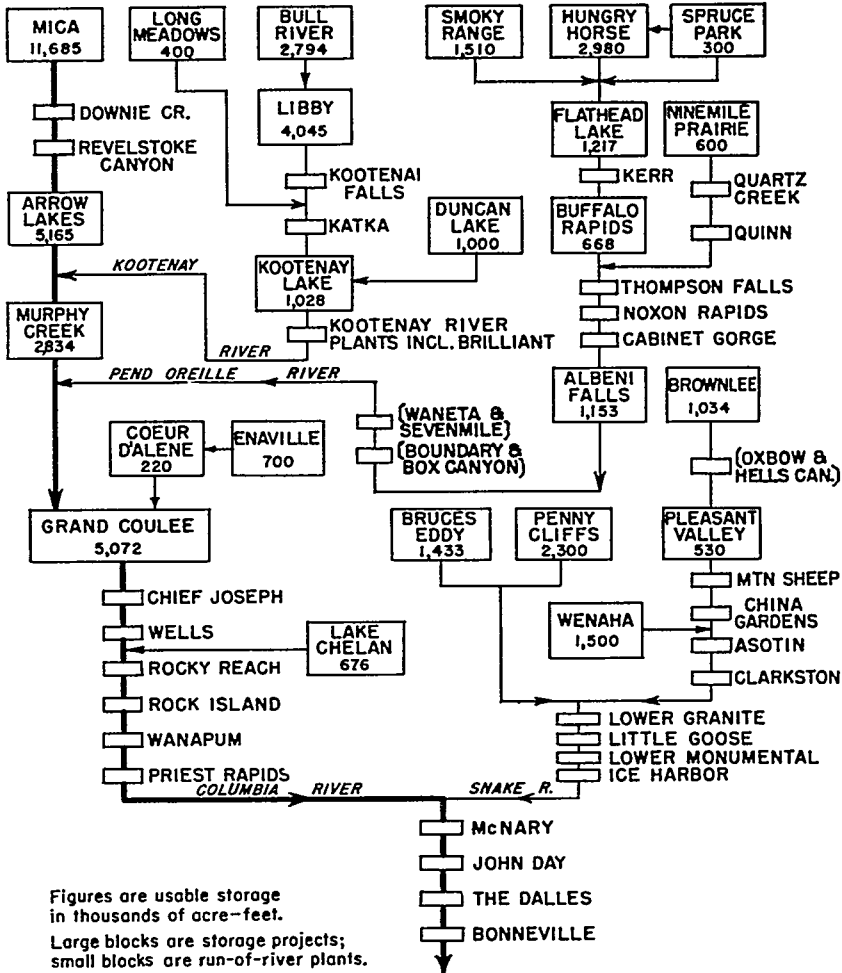
<sup>161</sup> *Id.* at 109.

<sup>162</sup> *Id.* at 4.

<sup>163</sup> *Id.* at 106:

Some of the storage projects in Canada would produce substantial flood control benefits in the United States without creating any significant flood control benefits in Canada. Similarly, regulation from Canadian storage projects such as "High Arrow" would add substantially to the power-producing ability of down-

# FLOW DIAGRAM POWER STUDIES SEQUENCE VII (Non-Diversion)



Figures are usable storage in thousands of acre-feet. Large blocks are storage projects; small blocks are run-of-river plants.



Any of the three plans would contribute to a system of power plants that, fully developed, would produce an average of more than 16 million kilowatts, utilizing about 50 million acre-feet of storage in the basin.<sup>164</sup> Opportunities for upwards of 23 million acre-feet of storage would be possible in the Canadian part of the basin. And, over a thirty year period it is estimated that some 130 billion kilowatt hours of usable energy (at a load factor of 48 per cent) could be generated at downstream United States facilities as a result of such Canadian storage.<sup>165</sup> The completed system would control the equivalent of the disastrous 1894 flood (1.24 million cubic feet per second) to a discharge of less than 600,000 second-feet at The Dalles and could practically eliminate flood damage in the populous Portland-Vancouver area, as well as elsewhere on the lower river.<sup>166</sup>

The three plans had much in common, including, within each, the controversial High Arrow alternative. The major difference was the extent to which the Kootenay would be diverted into the Columbia. High Arrow Dam, around which much of the later controversy has centered, would be located at Castlegar, at the south end of the Arrow Lakes. It was considered as "one of the most economical storage reservoirs in the plans for development,"<sup>167</sup> would cause flooding of 27,000 acres of Arrow Valley, and would provide about five million acre-feet more usable storage than Low Arrow. Virtually all the benefits from High Arrow storage would occur in the United States.<sup>168</sup>

1. *Plan No. 1, Non-Diversion.*<sup>169</sup> Plan No. 1, called the "Non-Diversion Plan" would not divert the Kootenay into the Columbia. Thus, the Kootenay would run in its normal channel south into Montana and be controlled by a low-power-producing dam at Bull River, forty-two miles north of the border. The United States would build Libby Dam, backing water up over the border to the base of Bull River Dam. Kootenay Falls Dam would be built by the United States a few miles downstream from Libby. Four or five Canadian dams would be built on the Columbia, at Mica Creek, Downie Creek, Revelstoke Canyon, Murphy Creek, and possibly Arrow Lakes, and Duncan

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stream plants in the United States without significant effect in Canada. . . .

The amount of downstream benefits contributed by a particular storage project will depend on size, position in the system relative to downstream head, timing of development and whether operation is cyclic. . . .

<sup>164</sup> *Id.* at 48, 109.

<sup>165</sup> *Presentation* 98.

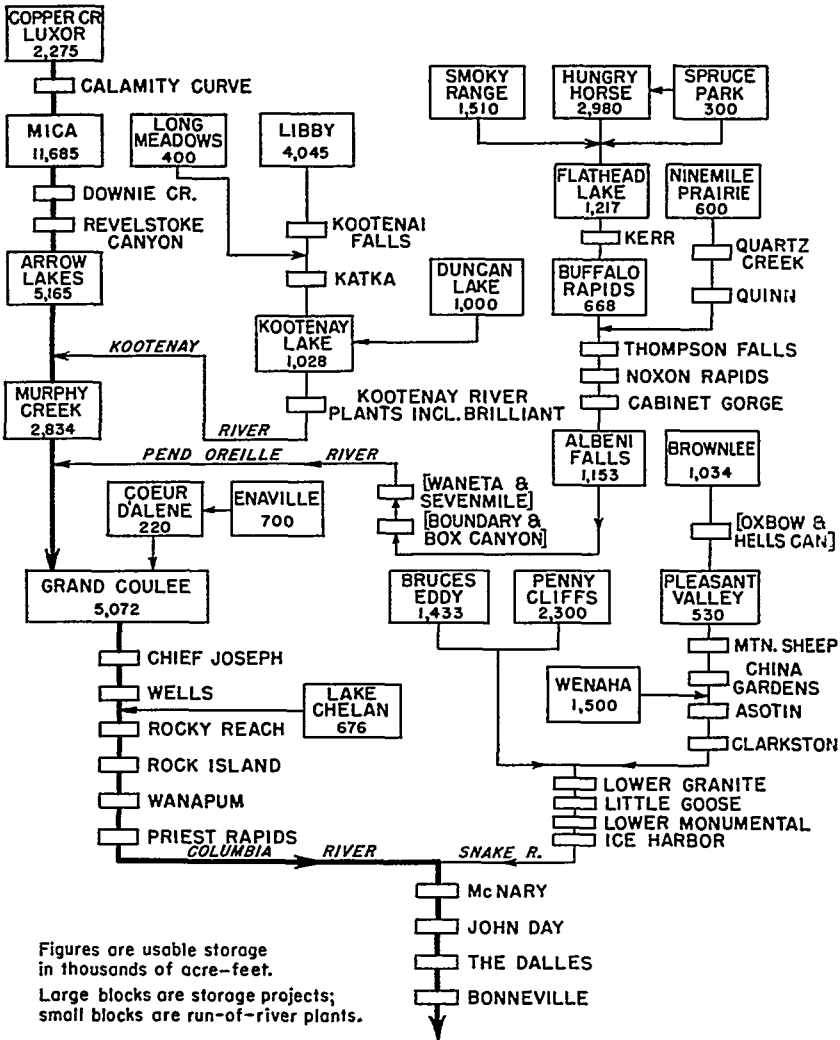
<sup>166</sup> *ENGINEERING REPORT* 99-100.

<sup>167</sup> *Ibid.*

<sup>168</sup> *Id.* at 99.

<sup>169</sup> *Id.* at 65.

# FLOW DIAGRAM POWER STUDIES SEQUENCE VIII (Copper Creek Diversion)



Figures are usable storage in thousands of acre-feet.  
Large blocks are storage projects; small blocks are run-of-river plants.

Lake Dam would be built at the north end of Kootenay Lake.

This plan, using the High Arrow alternative, would provide 51,244,000 acre-feet of storage at a total cost of about 3,853.8 million dollars. Average annual power output over a twenty-year period would be 16,733 megawatts.

2. *Plan No. 2, Copper Creek Diversion.*<sup>170</sup> Plan No. 2, the Copper Creek Diversion plan, would include construction of four of the same dams as would Plan No. 1 (Mica, Downie Creek, Revelstoke Canyon, Murphy Creek) and possibly High Arrow. The difference is that about 3,600 second-feet of the Kootenay would be diverted into Columbia Lake by a dam at Copper Creek. Accordingly, the increase in the Columbia's flow would permit construction of dams at Luxor, on the north end of Columbia Lake, and at Calamity Curve. The United States would still build Libby and Kootenay Dams, but less water would pass through them and thus less power would be generated.

This plan, using the High Arrow alternative, would provide 50,725,000 acre-feet of storage and would entail a total cost of about 3,880.4 million dollars. The average annual output for twenty years would be 16,863 megawatts.

3. *Plan No. 3, Dorr Diversion.*<sup>171</sup> Plan No. 3, the Dorr Diversion plan, would still include the four, or alternatively five, dams on the Columbia, Mica, Downie Creek, Revelstoke Canyon, Murphy Creek and possibly High Arrow. However, neither Libby nor Kootenay Falls would be built. Instead, the Kootenay would be dammed at Dorr, just north of the border, and virtually all of its flow (about 8,000 second-feet) would be backed up to Bull River Dam, pumped over that dam and into the enlarged Columbia Lake to flow then down the Columbia. This plan, as with No. 2, would also include dams on the Columbia at Luxor and Calamity Curve.

Using the High Arrow alternative, this plan would provide 49,282,000 acre-feet of storage at a total cost of about 3,559.8 million dollars. Average annual output over twenty years would be 16,753 megawatts.

4. *Power Generation Possibilities.* The three plans were very close in the total benefits they could create. Nonetheless, there were differences. As to power benefits:<sup>172</sup>

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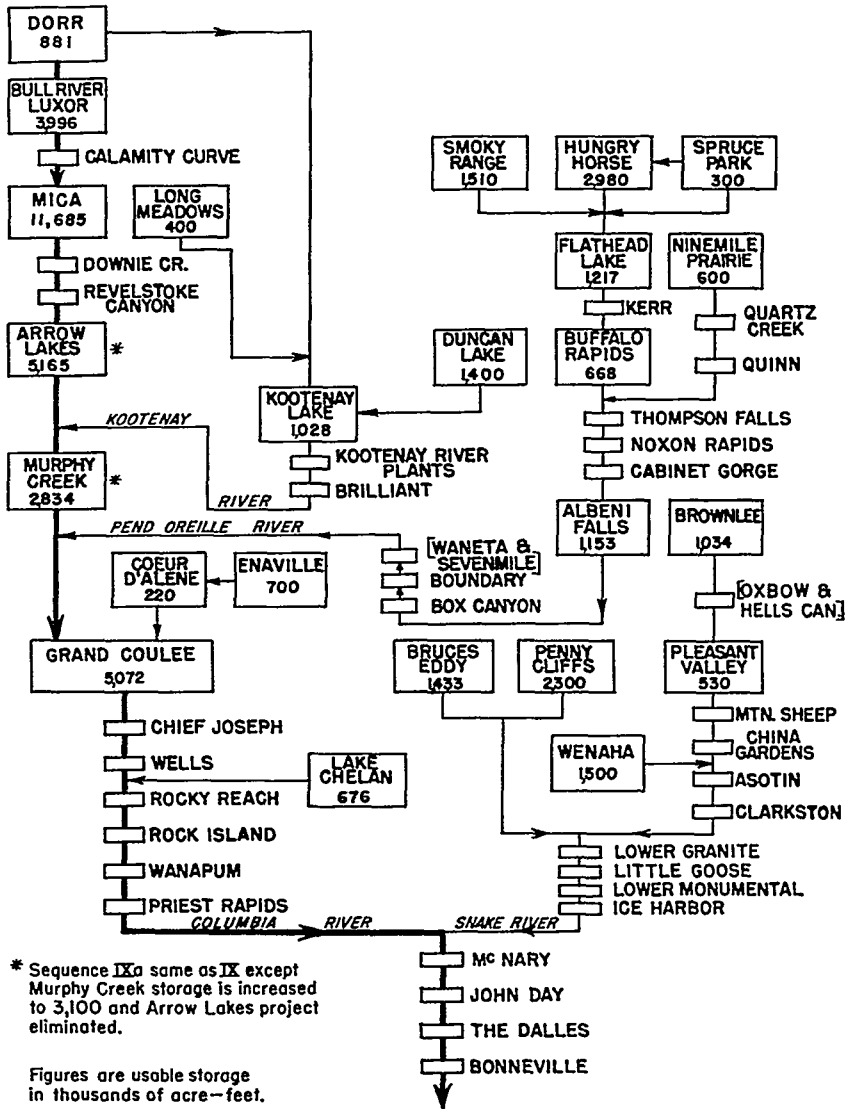
The Copper Creek Diversion plan shows the greatest over-all power

<sup>170</sup> *Ibid.*

<sup>171</sup> *Ibid.* See diagram, p. 734 *infra*.

<sup>172</sup> *Id.* at 98-99.

### FLOW DIAGRAM POWER STUDIES SEQUENCE IX (Dorr Diversion)



\* Sequence IXa same as IX except Murphy Creek storage is increased to 3,100 and Arrow Lakes project eliminated.

Figures are usable storage in thousands of acre-feet.  
Large blocks are storage projects;  
small blocks are run-of-river plants.

potential; its average annual estimated output is about 130 megawatts greater than that of the Non-diversion plan and about 110 megawatts greater than that of the Dorr Diversion plan.

... The Copper Creek Diversion plan shows the greatest total increase in average power output of any of the plans. The Non-Diversion plan shows the greatest power increase in the United States and the least in Canada. The Dorr Diversion plan shows the greatest power increase in Canada and the least in the United States. The differences in average output between the plans and the differences in the increases in one country or the other depend upon the extent of diversion of Kootenay River water to the Columbia River in the several plans. The Copper Creek Diversion plan allows the fullest resource development of all, because in this plan the Calamity Curve project becomes justified economically, yet the Libby and Kootenay Falls projects remain feasible.

The report nonetheless concluded that the apparent superiority of the Copper Creek plan took into account only physical and economic factors, and in any case the margin of superiority was small. These factors, combined with the practical limits of accuracy of the studies, suggested that no one plan represented the most desirable of the sites and water resources discussed in the report.<sup>173</sup>

5. *Flood Control Possibilities.* All plans are considered to solve equally the major flood problems of the Basin.<sup>174</sup>

### C. Reaction to the Report

For the most part the Engineering Report was well received.<sup>175</sup> It was comprehensive, detailed, and had the admirable quality of posing three alternatives for consideration by the political decision makers. The authors of the Report freely confessed its one limitation<sup>176</sup>—that it adopted a system analysis rather than an incremental analysis,<sup>177</sup> *i.e.*, it provided comparative data between the three plans, as if each were to go into operation fully completed. Data were not supplied on the effect of sequential development. Needless to say, any system would be built on a sequential, rather than an all-at-once basis, and

<sup>173</sup> *Id.* at 109-10.

<sup>174</sup> *Id.* at 99.

<sup>175</sup> Vancouver (B.C.) Province, March 21, 1959, p. 21, col. 4-6; Vancouver (B.C.) Sun, March 21, 1959, p. 1, col. 1. Support was not, however, unanimous. See Seattle Times, March 20, 1959, p. 39, col. 7-8.

<sup>176</sup> See Sherman, *op. cit. supra* note 149, at p. 1, col. 3 (Supp.).

<sup>177</sup> ENGINEERING REPORT 105:

[I]f the timing of construction were to be considered, incremental analysis might show several projects, such as Dorr, Libby, Spruce Park, Ninemile Prairie, Long Meadows, and Enaville, lacking in sufficient added benefits for the costs involved. This report has not attempted to deal with this aspect; all projects were considered to be constructed simultaneously.

thus the omitted information would be vital to determine which projects should come first. Conceivably, some projects might be found uneconomic to build at all if constructed late in the program. Professor Eckstein has pointed out that if the system as a whole is being planned, criteria cannot be constructed for individual projects unless a specified set of assumptions is made about the order of construction. Typically the first project in a system will reap very large benefits, while later additions will run into diminishing returns.<sup>178</sup>

Dr. John Krutilla of Resources for the Future, Inc., (formerly an economist with the Tennessee Valley Authority and a water resources consultant to the United Nations) said the reason normally given by engineers for this deficiency is their inability to predict what projects the politicians will decide to build first. Nonetheless, he argued:<sup>179</sup>

It is true that second-guessing political events is not the function of river basin planning and project evaluation. But their function certainly should be to define a system in which benefits are maximized; this in turn requires specifying the most economical sequence as well as the most economical projects in a system of works. Regardless of whether the most efficient sequence will in fact be followed, the bases for determining the costs of departures from the most economical sequence should be available for consideration by those ultimately charged with responsibility for deciding on a plan of action.

## VII. THE PRINCIPLES OF APPORTIONMENT<sup>180</sup>

### *A. Introduction*

By January 1959, the official United States attitude toward sharing with Canada the Columbia's downstream benefits had softened considerably. The United States now agreed that "some" such benefits should be returned to the North.<sup>181</sup> For several months previously, many knowledgeable Americans had known that some sharing was essential. Senator Richard Neuberger, for example, had suggested in May 1958, the possibility of a figure somewhere between 20 per cent and 32 per cent.<sup>182</sup> As much as 50 per cent was also mentioned from

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<sup>178</sup> ECKSTEIN, *WATER RESOURCE DEVELOPMENT* 123-27 (1958).

<sup>179</sup> Krutilla, *Sequence and Timing in River Basin Development with Special Application to Canadian-United States Columbia River Basin Planning*, Resource for the Future, Inc., 1960, p. 2.

<sup>180</sup> *Report of the International Joint Commission on Principles for Determining and Apportioning Benefits from Cooperative Use of Storage of Waters and Electrical Interconnection Within the Columbia River System*, (Dec. 29, 1959), reproduced in Protocol and Related Documents 39-55.

<sup>181</sup> Vancouver (B.C.) Province, Jan. 29, 1959.

<sup>182</sup> Financial Post (Can.), July 17, 1958, p. 31.

the United States side, although not officially. Observers in Canada had also mentioned the 50 per cent figure.<sup>183</sup>

Between May 1958, and December 1959, the American attitude continued to move toward the equal sharing idea. It was during this period, in late January 1959, that the two governments requested the IJC to recommend "principles" for the apportionment of electrical generation and flood control benefits between them.<sup>184</sup> It was not surprising to find the 50 per cent, share-and-share-alike formula as the main theme of these "principles" when they were forwarded to the two governments in December 1959.

### *B. The Principles*

The most important principle thus recommended was that downstream power and flood control benefits in the United States resulting from Canadian storage should be divided equally between the two countries.<sup>185</sup> Other important principles were also recommended, such as that each country should bear the cost of its own facilities,<sup>186</sup> and that dams and generators should be added in the order of the most favorable benefit-cost ratio.<sup>187</sup> The report also acknowledged the obvious: that before joint development should be undertaken, both nations should be satisfied that cooperation should produce savings to each compared with go-it-alone alternatives.<sup>188</sup>

### *C. Reaction to the Principles*

Many Americans felt this agreement represented a major concession

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<sup>183</sup> *Ibid.*

<sup>184</sup> Protocol and Related Documents 39: "In identical letters to the United States and Canadian Sections of the [I.J.C.], dated 28 January 1959 and 29 January 1959 respectively, the Secretary of State for the United States and the Secretary of State for External Affairs for Canada referred to the general objectives of the Columbia River Reference of 9 March 1944, and requested a special report as follows:

The Governments of the United States and Canada, as a part of their continuing discussions, have agreed to request the [I.J.C.] to report specially to the Governments at an early date its recommendations concerning the principles to be applied in determining:

(a) the benefits which will result from the cooperative use of storage of waters and electrical interconnection with the Columbia River System; and (b) the apportionment between the two countries of such benefits more particularly in regard to electrical generation and flood control."

In the preparation of the "Principles" the Commission used all the information available to it, including the Report of the Engineering Board as well as studies of other agencies in both Canada and the United States. A special work group was established to prepare summaries of the available data. The Commission approached the problem of formulating principles within the context and intent of the Boundary Waters Treaty of 1909."

<sup>185</sup> Power Principle No. 6, *id.* at 49; Flood Control Principle No. 4, *id.* at 53.

<sup>186</sup> Power Principle No. 6, *id.* at 49.

<sup>187</sup> General Principle No. 1, *id.* at 41.

<sup>188</sup> General Principle No. 2, *id.* at 42.

on their part. Certainly it was a long step from their mid-1950 refusal to offer anything for downstream benefits. Some Canadians, however, still argued that Canada was being unfairly treated.<sup>189</sup> Canadian economist Higgins argued, for example, that the equal sharing principle failed to recognize that Canada would be investing far more in the program than the United States, and in fairness should receive a greater share of the benefit.<sup>190</sup> His position was that Canada would have to invest about 394.4 million dollars to build the three dams that would provide 15.5 million acre-feet of storage necessary to create the "downstream benefits" at issue. The United States, on the other hand, would only spend about 130 million dollars in expanding existing generating facilities in order to capitalize on the Canadian storage.

The difficulty with this argument was that few people could agree on the costs to be attributed to each partner. Canadian costs were more easily identified because they involved new installations. South of the border, however, it was much harder to decide how much credit the United States should receive for the cost of existing installations. American negotiators pointed out that their country had already spent some 2.7 billion dollars on existing installations needed to realize the benefits from Canadian storage. Canadians countered that the United States had incurred these costs for its own benefit without any plan of integrating the facilities into an international system, and thus they should not be weighed against Canadian costs to be incurred in connection with such a system. They conceded inclusion only of a few "attributed costs," *i.e.*, some part of the costs of a few installations built in recent years specifically to take advantage of possible Canadian storage.

The argument rapidly became lost in a maze of statistics, too complex even for the proponents of one side to agree upon. Then too, some Canadians disagreed on a different ground with the basic thesis of the Higgins approach. In their opinion, adoption of anything other than an arbitrary fifty-fifty basis, would "create a situation wherein every expenditure of the past or future and all planning in either country would be subject to international scrutiny and approval . . ."<sup>191</sup>

The voices of dissent were not strong enough to change the equal

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<sup>189</sup> See report on Canadian views in Johnson, *op. cit. supra* note 143, at 123. See also Higgins, *Columbia River Treaty, A Critical Review*, 191 INTERNATIONAL JOURNAL 399.

<sup>190</sup> Higgins, *supra* note 189, at 404.

<sup>191</sup> *Id.* at 431.



sharing notion of The Principles. Thus, the Treaty which appeared some thirteen months later carried this basic idea within it.

## VIII. THE TREATY

### *A. Negotiations*

Once the essential principles for an international agreement had been accepted by both sides, the negotiations moved swiftly. Teams of negotiators were appointed by both nations. On the Canadian side were Mr. E. Davie Fulton, Canada's Minister of Justice, chairman; Mr. R. Gordon Robertson, Deputy Minister of the Department of Northern Affairs and National Resources; Mr. A. E. Ritchie, Assistant Under-Secretary, Department of External Affairs; and Mr. E. W. Bassett, Deputy Minister of Lands and Forests of the Province of British Columbia. On the United States side were Mr. E. F. Bennett, Under-Secretary, Department of Interior, chairman; Mr. I. B. White, Assistant Secretary, Department of State; and Lieutenant General E. C. Itschner, Chief, United States Army Corps of Engineers.<sup>102</sup>

Because of the complexities of the negotiations, a small army of technical advisors gathered around the two negotiating teams. In addition, the Federal-Provincial Policy Liaison Committee was created to bring the British Columbia Provincial Government directly into the matter, and to present a united front to the United States team.<sup>103</sup> The negotiators first met on February 11, 1960. On September 28, 1960, they issued a "Joint Progress Report" which was accepted by both governments on October 19, 1960. On January 8, 1961, the negotiators reported a treaty text to the two governments.

With surprising speed the Columbia River Treaty was signed in Washington on January 17, 1961, by Prime Minister Diefenbaker and President Eisenhower.<sup>104</sup> With some exceptions, it incorporates the fifty-fifty principle and joint development ideas recommended by the International Joint Commission.

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<sup>102</sup> Protocol and Related Documents 57. General McNaughton was conspicuously absent from the negotiating team, raising the criticism that Canada's "best qualified" person "with respect to the Columbia River Treaty" was not there, whereas America's "best qualified" man, General Itschner, was on the United States team. See 26th Parl. Hearings 893.

<sup>103</sup> This liaison committee included Gen. A. G. L. McNaughton; Mr Howard Green, External Affairs Minister; Mr. Alvin Hamilton, Northern Affairs Minister; Mr. Robert Bonner, Attorney General for B.C.; Mr. R. G. Williston, Lands and Forests Minister for B.C.; Dr. Hugh Keenleyside; Mr. J. V. Fisher, Premier Bennett's Economic Advisor; and A. F. W. Plumtree, Federal Assistant Deputy Minister of Finance.

<sup>104</sup> Protocol and Related Documents 58.

### *B. Summary of the Treaty*

The scheme incorporated in the Treaty involves a combination of Plans No. 1, Non-Diversion, and No. 2, Copper Creek Diversion, submitted in the 1959 Engineering Report. Rejected was Plan No. 3, the Dorr Diversion. During the first twenty years of operation Plan No. 1 will be effected. Thus, Canada will not be permitted to make any diversion of the Kootenay during this period. After twenty years, the Copper Creek Diversion suggested in Plan No. 2 will be possible. Canada is then authorized to build a small dam at Copper Creek and to divert up to 20 per cent of the flow. The diversion can be increased to 75 per cent and 90 per cent in sixty and eighty years, respectively. Furthermore, the Treaty plan includes construction of High Arrow, the alternative included in all three of the Engineering Report proposals. Finally, diversion of the Columbia into the Fraser River is not permitted during the life of the Treaty.<sup>195</sup> The Treaty is to be in force for sixty years and thereafter until either side gives ten years' notice of termination.<sup>196</sup>

Under the Treaty plan, Canada will provide 15.5 million acre-feet of storage for the benefit, primarily, of the downstream installations in the United States.<sup>197</sup> The United States agrees to operate the twenty-four power generating plants on the main river and tributaries and any additional ones to be built so as to make the most effective use of the storage.<sup>198</sup> Canada will receive its share based on the assumption of such use; thus, if the United States fails to make the most effective utilization of the Canadian storage, it will lose, not Canada. The downstream power benefits in the United States will be shared with Canada on a fifty-fifty basis.<sup>199</sup>

The Treaty provides that about 8.5 million acre-feet of the 15.5 million acre-feet of storage provided by Canadian dams will be avail-

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<sup>195</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. VIII, para. 1, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638 (effective Sept. 16, 1964) (by implication).

<sup>196</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. XIX, para. 2, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>197</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. II, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>198</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. III, para. 3, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>199</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. V, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

able for flood control in the United States,<sup>200</sup> in return for which the United States will pay to Canada 64 million dollars.<sup>201</sup> Canada also agrees to provide other storage on an "on call" basis in the event of special emergencies. For each of the first four "calls" the United States will pay about 1.9 million dollars, plus compensation for any actual power losses in Canada.<sup>202</sup> These flood control provisions are to continue beyond the sixty-year minimum life of the Treaty.<sup>203</sup> After that period, the United States will pay Canada's operating costs for any call made, plus compensation for any power losses.

Promptness of construction is required by the Treaty.<sup>204</sup> The Arrow and Duncan Lakes Dams must be built within five years of ratification; for each month late Canada is to be penalized 192,100 dollars and 40,800 dollars, respectively. The Mica Dam must be built within nine years. However, the penalty there is only at the rate of 4,500 dollars a month.

Under the Treaty, the United States is given the option of building Libby Dam on the Kootenay within five years.<sup>205</sup> This would flood lands up to forty-two miles into British Columbia—which Canada will clear at an estimated cost of 13 million dollars. Libby Dam would generate about 550,000 kilowatts of prime power in the United States which would not be shared by Canada.<sup>206</sup> Further downstream from Libby, after the Kootenay again flows into Canada, the storage provided by Libby (5 million acre-feet) would produce an extra 270,000 kilowatts at West Kootenay plants near Nelson, which would not be shared with the United States. In addition, the flood control benefits that would result in Canada from Libby, as well as those in the United

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<sup>200</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. IV, para. 2, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>201</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. VI, para. 1, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>202</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. VI, para. 3, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>203</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. XIX, para. 4, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>204</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. IV, para. 6, and art. VI, para. 2, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>205</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. XII, para. 1, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>206</sup>Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. XII, para. 2, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

States, are not to be shared. Libby is thus completely outside the fifty-fifty sharing provisions of the balance of the Treaty.

Each country is to designate "operating entities" under the Treaty. These will carry out the terms of the agreement on behalf of their respective countries. A formidable list of powers and duties to be assigned these entities is set out in article IV, section 2. On the United States side, the power responsibilities will be assigned to the Bonneville Power Administration and the flood control responsibilities to the Army Engineers. Canada will designate the British Columbia Hydro and Power Authority as the Canadian operating entity.<sup>207</sup>

A Permanent Engineering Board is also to be established, consisting of four members, two from each country, that will have a variety of investigating, inspecting and reporting duties.<sup>208</sup> The objective of this Board will be to facilitate the settlement of differences between the operating entities of both countries.

Differences under the Treaty may be referred by either nation to the International Joint Commission for decision. If that Commission does not render a decision within three months, either country may submit the difference to arbitration.<sup>209</sup>

### *C. The United States Ratifies the Treaty*

Action on the United States side with regard to the Treaty was prompt. A public hearing was held by the Senate Foreign Relations Committee, on March 8, 1961. Senators from the four Northwestern states, government officials concerned with the drafting and negotiation of the Treaty, and a number of private witnesses were heard in support of the Treaty. No witnesses appeared against it. On March 14, 1961, the Committee voted unanimously to recommend to the Senate that advice and consent to ratification be given.

On March 16, 1961, the United States Senate gave its advice and consent to the Columbia River Treaty's ratification by a vote of ninety to one. On a roll-call vote, Senator Wallace F. Bennett of Utah cast the only dissenting vote.

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<sup>207</sup> Protocol and Related Documents 103.

<sup>208</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. XV, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>209</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. XVI, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

*D. Criticism from the United States Side*

Some modest criticism of the Treaty developed on the United States side of the border. For example, Dr. M. E. Marts of the University of Washington voiced concern over "uncertainties" in the Treaty, including:<sup>210</sup>

1. The problem of an agreement between the Federal Government at Ottawa and the British Columbia Provincial Government.
2. The absence of any specific obligation on the part of the United States to install additional machinery to make effective use of the Canadian storage, while Canada is obligated to provide the full amount of storage within a specified period of time.
3. The effect of the Peace River proposal on the future market for Columbia River power in British Columbia.
4. The conflict between on-site power at Mica Creek and releases of Mica storage to meet the Canadian commitment to the United States.
5. The inclusion of the Libby Dam, which may become an important concession by Canada and even a luxury to the United States.
6. The need for arrangements to recover downstream benefits from non-federal plants in the United States.
7. The equivocal position of the sponsors of potential projects in the United States until future power needs are met by this international development. In the meantime, the search for additional power in the Northwest must continue.

Dr. John V. Krutilla, writing in 1961, raised doubts about the desirability of the Treaty for the United States. Admitting that some of his conclusions were only "first approximations," because of the inadequacy of data, Dr. Krutilla postulated that "there will be no economic advantage to the United States" from joint development. "In fact," he said, "the total cost of power is likely to be greater over time through cooperative development than through reliance upon United States resources alone." He suggested that "a temporary advantage to the United States appears to be offset by a longer-range increase in costs over what the United States could have done relying upon its own resources."<sup>211</sup>

Writing in 1963, however, Dr. Krutilla seemed somewhat more optimistic about the value of the Treaty plan to the United States, but still expressed doubts, largely on the basis of the inadequacy of data collected so far. He concluded that the Treaty plan was probably

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<sup>210</sup> Water Power, Feb. 1961, pp. 56, 58-59.

<sup>211</sup> Krutilla, *Columbia River Development: Some Problems of International Cooperation*, in *Land and Water: Planning For Economic Growth* 91, 118-19 (Papers of the 1961 Western Resources Conference 1961).

“second best,” although “how far it falls short of an optimum cannot be adequately assessed without complete systems analyses.”<sup>212</sup> As far as the United States was concerned he concluded that the “Treaty appears to provide results of uncertain economic merit.” Nonetheless, given the data available, and the politics of the matter, Dr. Krutilla urged conclusion of the Treaty.<sup>213</sup>

### *E. Reaction in Canada*

Compared to the fairly uniform acceptance of the treaty in the United States, the reaction in Canada was “mixed.” There was substantial strong support. There was also stiff opposition, although it did not develop until a year or two after the United States’ ratification. Most critical, however, were the questions about “how to do it” that were raised by the British Columbians. They wanted to know: Who is to pay for construction of Canadian facilities? and what is to be done regarding the Canadian entitlement to downstream benefits? Perhaps it is more appropriate to say they had definite answers to these questions, but were unable to obtain ready agreement from the federal government. Since neither of the questions was answered in the Treaty, they had to be decided within Canada, between the federal and provincial governments. Their resolution proved so difficult that it delayed approval of the Treaty for more than three years, and eventually necessitated the conclusion of a supplemental “protocol” with the United States.<sup>214</sup>

### *F. The British Columbia-Ottawa Impasse*

1. *Background.* A word of background about this federal-provincial impasse is appropriate to explain how it could occur. Such a dispute could not, for example, take place in the United States although that country is also a federation of states. The essential difference is that in Canada the provincial and national governments are fairly evenly matched on water resource issues, whereas in the United States the national government holds unquestionable supremacy.

In the western part of the United States the combination of extensive power held by the federal government under the commerce clause of the federal constitution, plus vast federal land holdings, permit the central government to control river development with only slight re-

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<sup>212</sup> Krutilla, *The Columbia River Treaty: An International Evaluation* 21 Resources for the Future, Inc., Reprint No. 42, Sept. 1963.

<sup>213</sup> *Id.* at 22.

<sup>214</sup> Protocol and Related Documents 110.

gard to conflicting state policies.<sup>215</sup> The constitutional supremacy of the federal government in water resource developments is clear. For the states to advance their policies, they must therefore move in the political arena, usually through their Senators and Representatives. Because there are only ten Canadian provinces as compared with fifty states, and because British Columbia is one of the larger and more important provinces, its relative political power is much greater than that held by all but the most populous of the United States. In addition, British Columbia has important legal powers through which it can assert its policies as against conflicting federal plans.

The British North America Act of 1867, sometimes called the Canadian Constitution, granted the provinces ownership of the natural resources including rivers within their borders.<sup>216</sup> On the other hand, the federal government, where the national interest was involved, was given jurisdiction over certain uses of these resources. Thus, it has power to act in regard to navigable streams, international waters, and probably inter-provincial waters.<sup>217</sup> In addition, the federal government has treaty-making powers, although its treaty-implementing powers are severely limited on matters coming within provincial jurisdiction.

The Canadian practice, contrary to that in the United States, has been for the provincial governments to license the development of large hydro-electric dams. In this connection it should be noted that British Columbia was acting in accordance with this practice in 1955 in negotiating with the Kaiser Aluminum Company for construction of the Arrow Lakes Dam when the federal government, contrary to prior practice, determined that it should have a say in international river development, and passed the International River Improvements Act. This required a federal license thereafter for works constructed on international rivers.

Instead of ending the battle, however, this act was merely the opening shot in a long war between federal and provincial interests over the Columbia. The federal government eventually realized that, although it could make treaties with the United States, relating to river development, it could not easily implement them without provincial cooperation. Before the Columbia program could go forward, therefore, an entente between these governments was essential.

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<sup>215</sup> See *FPC v. Oregon*, 349 U.S. 435 (1955); *Oklahoma ex. rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508 (1941); *United States v. Rio Grande Dam and Irr. Co.*, 174 U.S. 690 (1899).

<sup>216</sup> British North American Act, 1867, 31-33 Vict. c. 3, § 92(10), (13), (16) (Can.).

<sup>217</sup> British North American Act, 1867, 31-33 Vict. c. 3, § 92(10c) (Can.).

2. *The Issues.* Much of the Ottawa-British Columbia controversy can be attributed to the actions and dreams of Premier W. A. C. Bennett of British Columbia, and to the personal feud that developed between him and the federal government's representative on the Columbia, Mr. Davie Fulton.<sup>218</sup>

About the time the Treaty was signed, Premier Bennett became convinced that the interests of British Columbia lay in the simultaneous development of the Peace and Columbia Rivers. Yet, if they were developed simultaneously the large quantities of power generated could not possibly be marketed in British Columbia.<sup>219</sup> In addition, British Columbia would not be able to raise the financing for both projects at one time. The obvious answer, possibly to both problems, lay in the sale of the "surplus" power to the United States. The federal government, however, opposed such a sale, arguing (1) that the power could better be used for industrial growth inside Canada,<sup>220</sup> and (2) if once committed to the United States this power could probably never be recovered.<sup>221</sup>

The federal government apparently thought it had obtained British Columbia's acceptance of its "no sale" point of view when it negotiated the Treaty. It will be recalled that a Federal-Provincial Policy Liaison Committee had been created to bring the provincial government into the negotiations and to present a united front on the part of Canada. Nonetheless, a conflict over who would pay for the construction of the new dams had flared just a few weeks before the Treaty was signed<sup>222</sup> and, as hindsight showed, had been far from resolved during the final

<sup>218</sup> The feud was widely reported in the press. See for example Vancouver (B.C.) Province, Oct. 28, 1960, p. 4, col. 1-2. On one occasion when Mr. Fulton was looking for Mr. Bennett to discuss some aspects of the Columbia plans, the latter was conspicuously absent, prompting such local headlines as "Bennett Pulls Vanishing Act," Vancouver (B.C.) Sun, Dec. 10, 1960, p. 4, col. 1; "Missing Premier Intriguing Case," Vancouver (B.C.) Sun, Dec. 13, 1960, p. 8, col. 1. Mr. Fulton accused Mr. Bennett of being "extremely rude." Daily Colonist (Victoria, B.C.), Dec. 9, 1960, p. 1, col. 5.

During the months of negotiations Bennett accused Fulton of "just playing politics" on the Columbia. Vancouver (B.C.) Sun, Dec. 13, 1960, p. 12, col. 1. Fulton responded by charging that Bennett "falsified" and "misinterpreted" the facts. Daily Colonist (Victoria, B.C.) Dec. 9, 1960, p. 1, col. 5. Later, Fulton accused Bennett of "reversing his stand on the [treaty], using scattergun technique, coloring the study, dragging out red herrings, raising smoke screens and generally clouding the issues on the Columbia." Vancouver (B.C.) Sun, Sept. 29, 1961, p. 6, col. 1.

<sup>219</sup> See report of Gibb, Merz, & McLellan, prepared for the B.C. Energy Board, *Columbia and Peace River Power Projects, Report on Power Costs, and Appendices* (July 1961), and *Supplement to Consultant's Report on Power Costs* (Aug. 1961).

<sup>220</sup> Vancouver (B.C.) Province, Feb. 11, 1960, p. 4, col. 1-2; Jan. 24, 1963, p. 4, col. 3 (Supp.).

<sup>221</sup> Vancouver (B.C.) Sun, Aug. 30, 1961, p. 12, col. 8.

<sup>222</sup> Vancouver (B.C.) Province, Oct. 25, 1960, p. 1, col. 7-8; and Oct. 28, 1960, p. 4, col. 1-2.



weeks of negotiations. In fact, just a few days before the signing, Premier Bennett wrote Mr. Diefenbaker saying he was "alarmed" about the financial implications of the treaty.<sup>223</sup> Mr. Diefenbaker nevertheless signed the treaty, probably expecting to bring Mr. Bennett around to his point of view in the next few months.

3. *Premier Bennett's Strategy.* Mr. Bennett, however, then became convinced of the desirability of simultaneously developing the Peace and the Columbia, and of selling Columbia power to the United States.<sup>224</sup> Recognizing that development of British Columbia's water resources could not easily take place without his consent he was in a very strategic position. The federal government, on the other hand, had signed a treaty with the United States and was exposed to the risk of international embarrassment if the treaty was not ratified by Canada. One solution suggested was that the federal government might undertake the entire project, thus building and operating the dams, much as the United States might do in a similar situation. However, since the practice in Canada had in the past been different, and the federal government did not wish to give the appearance of usurping provincial authority, this idea was quickly shelved.

During this period of indecision, Mr. Bennett, acting with great surprise, expropriated both the British Columbia Electric Company and the Peace River Power Company.<sup>225</sup> By this swift stroke he significantly altered the political chess board in his favor.

As pointed out above, Mr. Bennett was faced with Ottawa's reluctance to export power from British Columbia. At the same time, on his home front, he had to contend with the reluctance of two large private companies, the British Columbia Electric Company and the Peace River Power Company, to go along with his scheme of simultaneous development. The British Columbia Electric Company served the

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<sup>223</sup> Vancouver (B.C.) Province, Jan. 24, 1963, p. 4, col. 3. (Supp.).

<sup>224</sup> *But cf.* Davie Fulton's testimony before the External Affairs Committee, 26th Parl. Hearings 1118:

One point that should be emphasized is that this controversy developed only after the treaty had been signed. . . . It was not until after the treaty was signed that any real question . . . was raised. Then, not only was the question raised by the government of British Columbia, but their position was completely reversed. It became apparent that, instead of using Columbia River power including downstream power as the next major source of hydro power to supply British Columbia's requirements, the decision had been taken in Victoria to give priority to the Peace river development for this purpose. This decision, hitherto concealed, of course meant that the domestic British Columbia requirements would be physically met by Peace river power (although at higher cost) and that our share of Columbia power, if it was to be developed, must therefore be sold en bloc in the United States.

<sup>225</sup> Power Development Act, 1961, B.C. Stats. 1961, 2d Sess., c. 4, p. 39.

lower mainland of British Columbia, the largest power market in the province. As explained by Dr. Derrick Sewell, formerly an economist with the Water Resources Branch of the Canadian Federal Government and now at the University of Chicago:<sup>226</sup>

This company . . . indicated that it had cheaper alternative sources, such as thermal power based on coal from the Hat Creek deposits. With an embargo on the export of power, and with no immediate market in the lower mainland, it is probable that the Peace River project would have been shelved, for the time being at least.

The expropriation of both these companies provided Bennett with the answer by bringing both the source of power from the Peace River, and its potential market, into the hands of the provincial government. That government immediately placed the assets of the expropriated companies under the control of a newly-formed agency, The British Columbia Power Corporation,<sup>227</sup> which was instructed to carry out Mr. Bennett's plans. The Peace River project was thus assured of the lower mainland market.

Meanwhile, Mr. Bennett suggested that power from the Columbia River project, which would now be surplus for at least twenty years<sup>228</sup> in Canada, could be sold during that time to the United States. Revenue from the sale could be used to finance dam construction in Canada on the Columbia, leaving the British Columbia government free to look elsewhere for Peace River financing. Thus, the federal government was forced to accept a *fait accompli*, since the only possible market for Columbia River power, other than in the United States, was now under Bennett's control.

4. *Agreement is Reached.* The Canadian government was required to change its policy on exporting power to the United States in September 1962<sup>229</sup> thereby permitting resumption of negotiations with the United States.

In the meantime, the details of the Ottawa-British Columbia agreement had to be worked out. The responsibility for carrying out the terms of the Treaty had to be clearly understood, as well as who was to receive the benefits.<sup>230</sup> Agreement including these points was finally

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<sup>226</sup> Sewell, *The Columbia River Treaty and Protocol Agreement*, 4 NATURAL RES. J. 309, 321-22 (1964).

<sup>227</sup> This company has now combined with the British Columbia Power Commission and is called the B.C. Hydro and Power Authority. Power Development Act, 1961, B.C. Stats. 1961, 2d Sess., c. 4 as amended, B.C. Stats. 1962, c. 50, p. 251.

<sup>228</sup> Sewell, *supra* note 226, at 322.

<sup>229</sup> Speech from the Throne (Can.), Sept. 1962.

<sup>230</sup> See *Presentation* 32.

reached, and signed on July 8, 1963.<sup>231</sup> A supplemental agreement, spelling out further details was concluded on January 13, 1964.<sup>232</sup>

It was now time for final agreement with the United States. In fact, in the United States pressure had been mounting for some time to "junk" the Columbia River Treaty and go it alone. Although it was generally agreed south of the border that the Treaty plan was the optimum one for the United States, each year that passed without action meant a loss of power and revenue in the United States. Some storage sites did exist in the United States, and voices were heard urging their use as an alternative to the Canadian sites.<sup>233</sup>

If these sites had been actually employed, the chances for consummating a treaty with Canada would have greatly lessened. The first-added storage on a river has greatest value. Each project thereafter has successively less value. Thus, if additional storage facilities were built in the United States before the Treaty was signed, there would be less incentive for the United States to concede Canada anything for the upper Columbia storage. Undoubtedly, knowledge of the growing restiveness south of the border spurred both the federal and provincial Canadian governments to greater efforts in resolving their internal dispute.

## IX. THE PROTOCOL

### *A. Its Terms*

Once British Columbia and the Canadian federal government had reached accord it was essential that this agreement, or at least the parts that concerned the United States, be incorporated into the Columbia River Treaty. The Treaty could, of course, be renegotiated, but this would be embarrassing in the United States, where ratification had already occurred. It was decided that a supplemental Protocol would be preferable, making such alterations of the Treaty as were essential and adding certain provisions. The additions were necessary

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<sup>231</sup> Protocol and Related Documents 100.

<sup>232</sup> *Id.* at 107.

<sup>233</sup> Vancouver (B.C.) Province, Sept. 27, 1961, p. 19, col. 6.

In October, 1963, the State of Washington engaged H. Zinder & Associates to study plans for the development of the Columbia—without the Canadian treaty. Under an \$8,000 contract the consulting firm studied both flood control and power development in the basin. In announcing the study Earl Coe, Washington State Director of Conservation said "We've heard constantly for the past three years that Canada was about to ratify the treaty. Mr. Bennett has changed his mind on one pretext or another each time it looked like Canada was going to sign." Public Power News (Seattle, Wash.), Oct. 1963, p. 4, col. 1-2.

to set out the terms of sale of Canada's downstream-power-entitlement to the United States.

The Protocol Agreement established the terms of sale of Canada's downstream benefits to the United States,<sup>234</sup> and cleared away some other objections that had been raised in Canada to the Treaty. On October 1, 1964, the United States paid to Canada 254.4 million dollars (United States) for Canada's downstream-power-entitlement during the first thirty years of the Treaty. The 64.4 million dollars (United States) provided in the Treaty for flood control benefits<sup>235</sup> was also paid at that time. These funds are sufficient to finance the construction of the three Canadian Treaty projects, Mica Creek, High Arrow, and Duncan Lake, as well as half the cost of generators for the Mica Dam. It has been estimated that about 20 billion kilowatts of energy per annum can thus be delivered to the Vancouver area at a total cost of less than three mills per kilowatt-hour, or about half the present cost of power in that area.<sup>236</sup>

The Protocol confirms the Treaty provision that Canada may divert Columbia basin waters for irrigation, domestic, and industrial uses.<sup>237</sup> This was originally unclear in the Treaty but was clarified here to show exactly the circumstances under which diversion could occur. Specifically, this provision assures the government of Saskatchewan availability of Columbia waters for use in the prairie province. That government has contended that water is in short supply there and must be imported soon. The likelihood, however, of a transfer to Saskatchewan from the Columbia seems remote in view of its relative high cost (10.5 dollars per acre-foot delivered to the prairie) compared to possibilities of obtaining water from the Athabasca River (3.5 dollars per acre-foot) or the Peace River (4.6 dollars).<sup>238</sup>

Under the Protocol, Canada's control over its own storage facilities is confirmed: Canadians decide which reservoirs are to release water for downstream power generation in the United States. The Protocol also makes clear that United States "calls" for flood control storage shall be made only in emergencies, *i.e.*, when the flow at The Dallas, Washington exceeds 600,000 cubic feet per second. In order that

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<sup>234</sup> Protocol and Related Documents 117-20.

<sup>235</sup> Treaty with Canada Relating to Cooperative Development of the Water Resources of the Columbia River Basin, Jan. 17, 1961 [1964], art. VI, para. 1, 15 U.S.T. & O.I.A. vol. 2, T.I.A.S. No. 5638.

<sup>236</sup> Sewell, *supra* note 226, at 323.

<sup>237</sup> Protocol and Related Documents 113.

<sup>238</sup> See Crippen Wright Engineering Ltd., *Report to Saskatchewan Power Corp.* (1962), summarized in *Presentation* 52-53.

Canadian power generation shall not be unduly disturbed, the United States agrees not to call for Canadian storage until all its own storage facilities are being used to capacity.<sup>239</sup> The protocol arrangement to sell Canada's downstream benefits to the United States means, of course, that these benefits will be utilized south of the border. Canada will no longer require the standby service provided for in the Treaty, and, of course, need not pay for it, thereby saving some 2 million dollars per annum.<sup>240</sup>

### *B. Action Required in the United States*

1. *Northwest to California Power Intertie.* The sale of Columbia power to the United States necessitated certain preparatory work south of the border. First, a market for this power had to be found. The Pacific Northwest had no current market for such large blocks of power, and no transmission lines existed between the Northwest and the potential markets in California.

It was therefore necessary to arrange for transmission lines to be constructed to the south. This required a major policy change in the United States. At that time no major power transmission lines crossed the Oregon border into California. The people of the Pacific Northwest had carefully kept all their power in their own region, fearing that if they once permitted intertie connections with the powerful and rapidly growing California markets, this power could never be recaptured. The Northwest was eventually induced to go along with the intertie idea on condition that a "preference" clause be enacted into law saying that, if and when the Northwest needs and requests the power, it can have it, the California markets notwithstanding.<sup>241</sup>

2. *United States Financing of Power Purchase.* The United States had to raise a lump sum of 254 million dollars (United States) to purchase the Canadian share of the downstream benefits for the first thirty years of the life of the Treaty. A non-profit corporation called the Columbia Storage Power Exchange was formed to raise the necessary funds and handle the sale of the Canadian power entitlement in the United States. It issued some 330 million dollars in bonds and transferred 254 million dollars of the proceeds to Canada as advance payment for the power,<sup>242</sup> on October 1, 1964 as provided in the protocol.

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<sup>239</sup> Protocol and Related Documents 111.

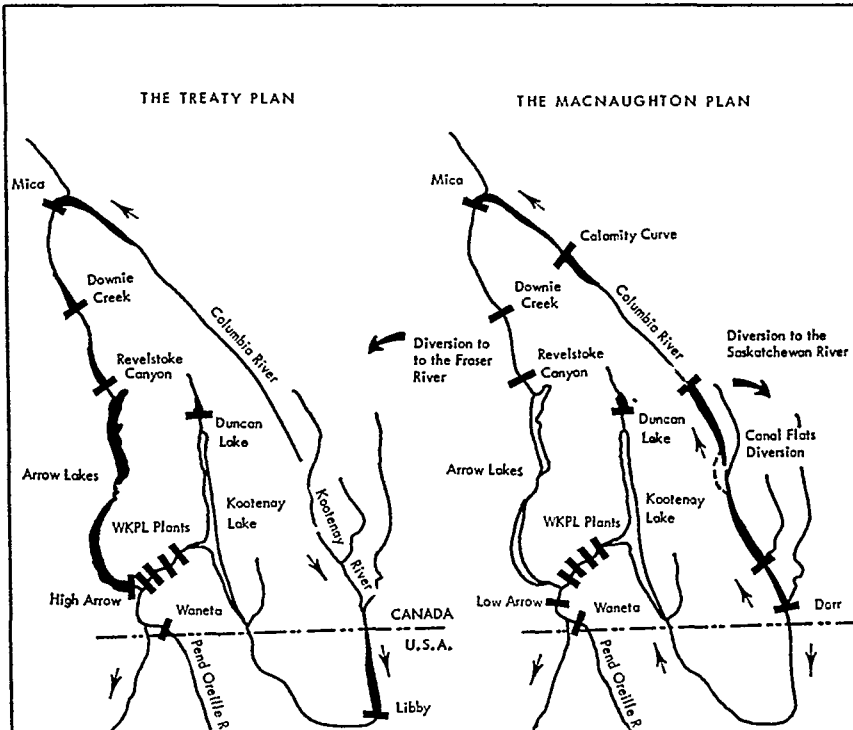
<sup>239</sup> *Id.* at 112.

<sup>241</sup> 78 Stat. 756 (1964). For a discussion of some of the problems involved in bringing about the California Intertie see Sewell, *Regional Inter-Ties and National Supergrids*, Water Power, July 1963, p. 287.

<sup>242</sup> Public Power News (Seattle, Wash.) June 1964, p. 1, col. 3.

### X. THE TREATY GOES TO PARLIAMENT

After the two British Columbia-Canadian agreements had been signed, the province became an enthusiastic supporter of the Treaty. On the national level the out-of-office Conservative party might have been expected to raise objections to the agreement, but it had been in office when the Treaty was negotiated and thus was fully committed to its support. When the hearings on the Treaty and Protocol were held before the External Affairs Committee in March, April and May 1964, only a few dissenting voices were heard. Among them was the economist, Mr. Larry Higgins, who presented a carefully prepared brief and testimony against the Treaty;<sup>243</sup> and General McNaughton, who was the principal spokesman for the opposition.



<sup>243</sup> Mr. Higgins was an economist with the Ontario Hydro Company. In 1958 he was on loan to the Department of Trade and Commerce (Can.) from the Imperial Tobacco Co. as a technical advisor and worked on an interdepartmental committee on the Columbia River. Mr. Higgins criticized various aspects of the Treaty. In his conclusions he said, 26th Parl. Hearings 883-84:

The provisions of the Columbia river treaty of 1961 and the protocol of 1964 are so interwoven that it is doubtful if they could be amended to produce a treaty

### *A. McNaughton Opposes*

The General recommended in the strongest terms that the Treaty be rejected.<sup>244</sup> He charged in his testimony that some of the Treaty provisions were "shocking"<sup>245</sup> in their unfairness to Canada, and took the view that Canada should develop the Canadian section of the Columbia basin unilaterally, acting jointly with the United States only where some clear advantage to Canada could be shown. As far as he was concerned no such advantage could be shown. In fact, he said:<sup>246</sup>

I do take the strongest exception to reducing Canada to a state of a storer of water for the United States. I think that would be a very, very serious servitude to place on Canada. . . . To throw the burden of the operation of the storages on Canada to the extent which is contemplated and which will result from this, literally is suicide for Canada, and it reduces it to a primitive country with all that goes with it.

After raising a number of specific objections to Treaty projects, he offered his own "McNaughton" plan as a much preferred alternative. This plan was essentially the "Dorr Diversion" scheme, one of the three plans originally outlined by the 1959 Engineering Board report, combined with the Low Arrow alternative, also suggested in that report.

The General, as well as Mr. Higgins,<sup>247</sup> objected to Libby Dam and Canada's agreement to allow the Kootenay to flow south across the border to service that dam. He said, "The effect [of this] is, I would warn you [to permit] an immense irreplaceable resource of ever increasing value to pass out from the sovereignty of Canada for no proper return and for all time . . . this is a most grievous matter."<sup>248</sup> He also argued that even for the United States the Libby project would be an "extravagantly expensive matter which is strongly opposed by

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which would protect Canada's legitimate interests and meet urgent requirements in the United States.

Other arrangements could be made quickly involving the building of Mica creek dam, Dorr dam, and the Bull river dam (for ultimate incorporation in the Bull river-Luxor reservoir).

The treaty arrangements contain grave legal, economic and political defects. In the interest of friendly relations with the United States in the long run, and the safeguarding of irreplaceable Canadian assets for future generations, I respectfully recommend that the standing committee on external affairs recommend to the House of Commons that the Columbia river treaty and protocol be rejected.

In general Mr. Higgins supported the McNaughton approach to the Columbia development.

<sup>244</sup> See Gen. McNaughton's extensive testimony, *id.* at Nos. 9-12, 26, 29.

<sup>245</sup> *Id.* at 1324.

<sup>246</sup> *Id.* at 653.

<sup>247</sup> See, *c.g.*, *id.* at 875-77, 893-95, 911.

<sup>248</sup> *Id.* at 1320.

responsible authorities in the United States . . . ."<sup>249</sup> The United States, he said, could only afford to build Libby on the assumption that Canada would, directly as well as indirectly, carry "the burden of this extravaganza."<sup>250</sup>

He protested the construction of High Arrow Dam on the ground that it would destroy the "long established communities in the Arrow Lakes area with nowhere available in the vicinity for their re-establishment"; that it would "compromise recreational facilities through the destruction of beaches, spawning beds for fish, cover for wildlife and the like"; and that the size of the dam, combined with the unstable terrain on which it was to be built, would necessitate "very elaborate designs" and would result in a "very expensive" dam. He pointed out that High Arrow provides "little advantage to Canada other than to produce benefits to downstream power in the United States which may be sold."<sup>251</sup>

The McNaughton plan, the General argued, would produce some 360,000 to 400,000 kilowatts more power in Canada than the Treaty plan.<sup>252</sup> It would keep greater control of the river in Canada, and would not permit the steal by the United States that was about to occur on flood control benefits under the Treaty plan.<sup>253</sup>

All the General's arguments were countered by government witnesses and others favoring the Treaty plan.<sup>254</sup> A study by the Department of Northern Affairs and National Resources, for example, showed that the McNaughton plan might actually produce 68,000 kilowatts less than the Treaty plan—with the Canal Flats diversion (possible twenty years after the Treaty).<sup>255</sup> In addition, of course, the Treaty plan would bring Canada substantial downstream benefits from the United States which the McNaughton plan would not.

Once again, as in the Ottawa-British Columbia fight of previous years, the arguments rapidly became lost in a vast cloud of statistics, understandable at best only to the experts. The public, and the political decision-makers, had, of necessity, to rely on these experts rather

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<sup>249</sup> *Ibid.*

<sup>250</sup> *Ibid.*

<sup>251</sup> *Id.* at 1321.

<sup>252</sup> *Id.* at 548.

<sup>253</sup> *Id.* at 1318-42.

<sup>254</sup> See the paragraph by paragraph rebuttal by the Water Resources Branch, Department of Northern Affairs and Natural Resources (Can.), *id.* at 1475-1503, immediately following Gen. McNaughton's article *The Proposed Columbia River Treaty*, reprinted *id.* at 1463-74. Numerous witnesses testified in favor of the Treaty plan and against Gen. McNaughton's ideas.

<sup>255</sup> Vancouver (B.C.) Province, Jan. 24, 1963, p. 2, col. 4. (Supp.).



than on the incomprehensible reams of data put before them. There were, however, two aspects of General McNaughton's approach which weakened it considerably in the eyes of many. It expressed, for example, a strong "go-it-alone-Canada" philosophy, and reflected a deeply-felt nationalism, as well as a distrust of the basic fairness of the United States. This view was contrary to the prevailing Canadian attitude, which tended to idealize the existing peaceful relationship between the two countries, and sought to encourage further joint enterprises and international cooperation.

In addition General McNaughton was embarrassed by an incident that took place in a meeting of the advisors to the negotiating team (including General McNaughton) a few days before the signing of the Treaty in 1961. The purpose of the meeting was to offer the advisors an opportunity to raise objections to the Treaty plan. Mr. Davie Fulton, chairman of the treaty negotiating team, announced that the team was ready to recommend a treaty plan to the government and asked the advisors, who were aware of the plan, "are you prepared to join the recommendations of the treaty? . . ." <sup>256</sup> Mr. Fulton said, "Not one of those present opposed the recommendation that the Treaty should be accepted and signed." <sup>257</sup> He was reinforced by the journalist, Paddy Sherman, who stated he "spoke to most of the advisors who were at that meeting. They were unanimous that the General refused to vote against recommending the plan." <sup>258</sup> Fulton, who said he asked the question mainly for McNaughton's benefit, claims the General said he did not favor the treaty, as everyone knew, but that he would not vote against it. <sup>259</sup>

When questioned on this point before the External Affairs Committee, General McNaughton had considerable difficulty explaining away the inconsistency. For the most part, he claimed they did not tell the whole truth. <sup>260</sup> He indicated that he believed the appropriate place to

<sup>253</sup> 26th Parl. Hearings 652.

<sup>257</sup> *Id.* at 572.

<sup>258</sup> Vancouver (B.C.) Province, Jan. 24, 1963, p. 1, col. 4 (Supp.).

<sup>259</sup> *Ibid.*

The question naturally arises: Why didn't he register such violent objections when offered the opportunity by Fulton at the Ottawa advisors meeting? Also why did he wait until his term as IJC chairman ended, 12 months after the treaty was signed?

One explanation offered by a close confidante of the general's is that it took McNaughton several months to grasp the fine points of the small print in the Treaty. Others equally close to the Treaty and the IJC discussions reject this excuse.

<sup>260</sup> 26th Parl. Hearings 572. Gen. McNaughton's own recollection of this crucial meeting is as follows, *id.* at 652:

[W]hen Mr. Fulton pointed his pencil at me—and I can see it yet—and said

voice his objections was before the External Affairs Committee, before whom he was then speaking, hoping that no "positive action" would be taken before he had a chance to express his views there.<sup>261</sup> Needless to say, objections at such a late date could not possibly have as much impact as they would have had if made prior to the signing of the Treaty.

Yet, in the eyes of many Canadians, General McNaughton remained the true hero of the negotiations, even though nearly all disagreed with his negative attitude toward the Treaty. They could not forget his determination and leadership in the early part of the negotiations, when the United States had refused to concede anything; nor could they forget that it was McNaughton's Fraser diversion scheme that may have started the change in United States' attitude.<sup>262</sup>

### *B. Other Objectors*

The small New Democratic Party joined General McNaughton in voicing opposition to the Treaty,<sup>263</sup> as did a few individuals. Local opposition also arose from the residents of Arrow Valley which would be flooded by the High Arrow reservoir. However, the forces urging ratification were too powerful to be denied.

### *C. The Treaty is Approved*

After three months of testimony before the External Affairs Committee, and a brief debate, the House of Commons voted on June 10, 1964, to approve both the Treaty and Protocol.

## XI. SUMMARY AND CONCLUSIONS

Finding the origin of an international river dispute is often a difficult and tedious task. Social, political, economic and technical issues be-

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"are you prepared to join the recommendations of this treaty?" or something of the sort, I said "no". And I may have expressed some words of annoyance after to the effect of "to hell with the likes of this thing," or something like that. I do not recollect now, but I do know I was very positive.

I know that immediately after the meeting I took occasion to let people know at that time I was hoping that this business would get before this committee before any positive action was taken, and I made it very clear that I felt it my duty to Canada to oppose this treaty with the provisions it had in it by every means which were open to me, and I have held to that view consistently ever since.

<sup>261</sup> *Ibid.*

<sup>262</sup> British Columbia newspapers reflected this view in articles headlined "McNaughton's Trump Card Had U.S. Running Scared," and "General Bluffed on Weak Hand in Columbia Deal." Vancouver (B.C.) Sun, Jan. 1964.

<sup>263</sup> Vancouver (B.C.) Sun, Jan. 25, 1964, p. 1, col. 6; March 4, 1964, p. 3, col. 5-6; March 6, 1964, p. 16, col. 1-2. Bert Herridge, M.P. for Kootenay West, was the most quoted N.D.P. critic. He claimed the Treaty was a "sellout" of Canadian resources to the United States.

come so confused as to defy rational analysis. This is not, however, true of the Columbia River controversy. Both the starting event and the causes of the disagreement can be traced with relative ease. It all started when the United States applied to the International Joint Commission for approval of Libby Dam, and did not include in the application an offer to share with Canada the benefits to be derived from the 150 feet of "head" that would be located in Canada. Canadian objections opened the conflict that continued until the Treaty was ratified in 1964. Although the focal point of the dispute shifted from Libby Dam to encompass the whole of the Columbia basin, the basic issue remained the same throughout, *i.e.*, should the United States share the downstream benefits made possible by Canadian storage?

In a broad way the moves and countermoves of the countries can be summarized as follows. In 1951 the United States applied to the International Joint Commission for permission to construct Libby Dam. Canada objected, holding up the application on the ground that the United States should share with Canada the downstream benefits. In 1953 and 1954 the Kaiser Aluminum and Chemical Corporation negotiated with the government of British Columbia and the federal Canadian government in discussions aimed at permitting the corporation to build Arrow Lakes Dam.

By 1955 both Canada and the United States had recognized the substantial benefits Canadian storage might bestow on the United States. However neither side could understand the other's arbitrary position on the matter of sharing these benefits. The Canadians said it would be unfair to them if they were to build a series of dams giving the United States extensive power and flood control benefits unless the latter shared them with Canada. The United States argued to the contrary, that it should not suffer for the accident of history through which its own development of the lower part of the river was first; *i.e.*, it should not have to pay Canada for incidental benefits that probably would have been free if Canadian development had been earlier.

As is often the case with international river disputes, there was no rule or principle of law that provided a neat formula for settlement. Yet international law played a major role in the dispute, and received a great deal of attention by lawyers, statesmen, and others throughout. The question of what legal principles ought to apply to this and similar disputes provided the focal point for lengthy debates and numerous articles. Because of the time, talent and energy devoted to these

writings, a survey of those areas where a concensus was reached is especially useful.

The Harmon Doctrine suffered an ignominious rout during the controversy. Although most lawyers and statesmen on both sides of the border agreed that article II of the Boundary Waters Treaty incorporated this doctrine, they also agreed that it was not appropriate for resolution of the Columbia problem. Application of the Harmon Doctrine would have made joint planning and development an impossibility. This principle, it was felt, expressed a philosophy of absolute sovereignty more in tune with the pre-industrial revolution era of the eighteen and nineteenth centuries than with the close economic, social and political ties that characterize our present, rapidly shrinking world.

Similarly the municipal law systems of riparian and appropriative rights were subjected to extensive scrutiny by legal scholars and others, and were rejected as inadequate for the task. This view, incidentally, was consistent with United States Supreme Court decisions in interstate water cases during the past thirty years, where the riparian and appropriation theories were rejected in favor of the more flexible equitable apportionment principle. Equitable apportionment thus emerged as the widely favored principle. This concept, embodying the notion of fair sharing, was extolled almost without exception by lawyers, scholars, and statesmen on both sides of the border. They did not agree on whether it was already an accepted principle of international law, but they did agree that it should be.

The equitable apportionment concept played an important part in the resolution of the Columbia dispute. As applied here it was not thought to set a rigid formula for settlement. Rather it set a tone and created an atmosphere that made negotiations easier and permitted compromise of even the most knotty problems. Once the disputants had accepted equitable apportionment as their basic premise, they were encouraged, if not required, to move away from extreme positions toward the middle range of alternatives more acceptable to the other side. Given this climate for negotiations, the specific plan of the Treaty had to be thrashed out in the political arena. Each side wanted something the other had; they simply had to negotiate the price of the trade.

The legal argument arising out of the diversion question, which centered on whether article II of the 1909 treaty incorporated the Harmon Doctrine, turned out to be less important later than it seemed

at the time. We now know that Canada probably never would have diverted the Columbia, regardless of what course of action the United States had taken. The primary restraints on Canada were economic and political, not legal. Not only would the cost of electrical power from the Fraser diversion be higher compared to that from alternative sources, but diversion would also damage or destroy the valuable Fraser River salmon runs.

Nonetheless, the diversion issue did accomplish something: It brought wide public attention and interest to bear on the Columbia conflict. The intensity of interest engendered in the United States brought home to the Canadians the potential importance of the upper Columbia to the United States, the huge costs and potential benefits to Canada connected with the development, and the permanent, irreversible nature of any international cooperation arrangement. Along with this increased understanding, came the notion that Canadian federal as well as provincial interests were involved, and that the federal government should be a participant in any agreement with the United States. This was the reason that Parliament, in 1955, passed the International River Improvements Act requiring federal licenses for all dams or other works on international rivers. That act served to unify and possibly strengthen the Canadian position, but it did not bring any change in the United States' refusal to share downstream benefits. Canada had to improve its bargaining position yet further. Not long thereafter, the Canadians came up with the Peace River alternative. The United States soon realized that if this alternative plan was adopted, the upper Columbia might lie fallow for many years.

By this time, the United States had awakened to the potential benefits that might be derived from Canadian storage, and conversely the loss it might suffer if Canadian action were long delayed. The Americans knew that if the Peace River proved adequate to supply British Columbia's energy needs for several years, the loss to the United States could be very great. It was apparent that unilateral Canadian development of the upper Columbia would not necessarily maximize the river's benefits. Accordingly, the United States was interested in coordinated development, as well as coordinated operation. The wrong set of dams, or the right set of dams operated in the wrong way, could mean considerable loss of power and flood control in the United States.

With the United States thus convinced of the desirability of coordinated development and the apparent necessity of paying for it, the negotiators were finally able in 1960 to arrive at agreement on a set of guiding principles. These were later incorporated into the 1961 Treaty. This still, however, left unresolved the Ottawa-British Columbia quarrel over who was to pay for the facilities, and exactly what was to be done with Canada's downstream-power-entitlement.

The Canadian federal government initially was opposed to the sale of any of this power-entitlement to the United States. The power, it argued, could best be used for industrial growth in Canada. However, Premier Bennett of British Columbia wanted the Peace River developed simultaneously with the Columbia, and insisted that such development would necessitate the sale of Columbia River power to the United States. The funds from the sale would help finance dams on the Columbia so that British Columbia's other financial resources could be freed for the Peace River. Otherwise it would not be possible to finance development of both rivers at the same time.

Premier Bennett outmaneuvered his federal opponent in this conflict by (1) expropriating the privately owned Peace River Power Company so that he controlled the source of power from the Peace River, and (2) expropriating the privately owned British Columbia Electric Company so that he controlled the market for this power. At that point, unless the federal government wished to renege on its treaty with the United States, it had to go along with Bennett's plan. This it finally agreed to do.

Subsequent negotiations with the United States established the price and other terms of sale. Inside the United States arrangements were made for financing the purchase and for building the long distance transmission lines necessary to wheel the power to the big California markets. A supplemental agreement, the 1964 Protocol, was executed embodying these new arrangements.

It would be remiss to conclude this study without noting one of the relevant but often overlooked aspects of the United States-Canadian relations that had a direct bearing on the Columbia dispute, *i.e.*, the tendency of the Americans to overlook and take for granted Canadian attitudes and problems. The reason is not difficult to determine. American newspapers, magazines, television, movies, and radio report exhaustively on events inside the United States. With some exceptions, they devote comparatively little time to news from north of the border.

These news media are so numerous and disseminate such quantities of United States news to the north, that their Canadian counterparts simply cannot meet the overwhelming competition. The result is that the American public often remains uninformed about its northern neighbor, whereas Canadians, like it or not, are kept quite abreast of attitudes, conditions and problems in the United States.

In part, this situation explains the surprise in the United States at Canada's insistence on payment for, or sharing of downstream benefits. The American public, as well as others in the United States who might have been expected to know better, were unaware whether Canada had even built any facilities on the upper Columbia. Development of the United States portion of the river had been carried forward with so little regard for what might have resulted upstream that one knowledgeable writer commented "it is as if the Columbia surged full-blown from some underground cavern at the boundary." One can speculate that this ignorance south of the border was one of the reasons why the Americans took such a negative view of the question of sharing downstream benefits. When they became better informed, they were inclined to concede that Canada had some basis for its claims.

Many factors contributed to this process of educating the American public, not the least of which were the activities of the International Joint Commission and the publicity given the heated controversy between General McNaughton and Mr. Len Jordan. Two other contributing events were the two international law conferences held in Seattle, Washington in 1956 and 1958. These meetings, organized by Dr. Charles Martin of the University of Washington, were well attended and widely reported in the American press. The excellent papers presented covered nearly all the major international issues in the dispute, and assisted materially in bringing to the American audience the Canadian viewpoint.

Still another facet of Canadian-United States relations which played a part in setting the tone of the conflict was the Canadian fear of the disparate economic and political power of the United States. Many Canadians fear that too close cooperation might bring about a gradual loss of identity of Canada and of Canadian institutions. Some of the more fearful even suggest that to ask Canada to cooperate closely with the United States is like asking a rabbit to cooperate with a fox.

This fear for Canadian independence was one of the major hurdles deterring joint development of the Columbia. General McNaughton,

as well as many other Canadians, felt that Canada would be better off "going it alone," lest the United States gradually come to control still another important segment of the Canadian economy. Despite this concern, however, the mainstream of both Canadian and American thought gradually turned toward the concept of joint planning. It accepted the argument that development of the basin should be maximized from an engineering and economic point of view, and the boundary should be used only to determine the division of benefits; otherwise both countries would suffer irreparable economic loss.

#### *A. The Basin Approach to River Development*

The resolution of the Columbia dispute illustrates that the basin approach to river development has advantages in some areas, and seems to make little difference in others. For power generation, the most economically valuable use of the Columbia, the advantages of integrated basin planning are clear. The great seasonal fluctuation in the flow of the river means that its firm power-producing capacity is small when the flow is unregulated. To even-out the flow requires storage reservoirs, and these obviously must be located in the basin. On the Columbia the best sites for storage, other than at Grand Coulee, are in Canada. Integrated planning is thus essential for optimum power development.

On the other hand, the *distribution* of power has little to do with the basin as such. Once power is generated it can be wheeled anywhere. Some of the largest consumers of Columbia power are located outside the basin. Under the 1964 agreement, much of this power will be wheeled from the Northwest to the large population and industrial centers in Southern California, a distance of over 700 miles from the basin.

Flood control is also best accomplished under basin planning, and for much the same reasons. Control of flooding on the Columbia calls for a storage capacity of 18 to 21 million acre-feet. This might conceivably be provided inside the United States on tributaries to the river; however, the cost of doing so would apparently be greater than if Canadian sites were utilized.

For irrigation, navigation, fishing and recreation, basin planning is considerably less important. Although substantial recreational plans have been developed over the past few years within the basin, especially concerning that part within the United States, there is little



evidence to show that joint international planning provides any significant advantages over unilateral action.

These observations suggest the need for a careful analysis of each function to be performed in a river basin or in the overall region. Power generation and flood control probably will be found to require basin planning and action, whereas there is less likelihood that other functions will benefit from such coordinated action.

### *B. The Role of the International Joint Commission*

The International Joint Commission played a significant role in the Columbia River dispute. It will be recalled that the issue of joint development was referred to the Commission as early as 1944, and remained with that organization throughout the period of controversy, until its final report in 1959. Although during this period the Commission was criticized for its slowness and lack of imagination, it nonetheless performed several useful functions. For example, it conducted an investigation of the facts, gathering and sifting a mountain of technical data; for a time it provided a forum for a continuing dialogue (and thus public education) about the issues; and it evaluated various proposals made during the course of negotiations, and eventually identified a formula from which the treaty plan was devised.

### *C. The Future*

The Treaty envisions an era of extensive international cooperation on the Columbia for at least sixty years. During this period, both countries must work closely together to maximize the power and flood control benefits from Canadian storage. The Permanent Engineering Board, created to administer the arrangements under the Treaty, will provide a continuing point of contact, information exchange, and decision making.

Beyond these specific arrangements there is little doubt that the Columbia controversy, with its peaceful settlement, helped to continue the excellent relations of the two nations that have characterized their contacts over the past century. On both sides of the border there is a better understanding of the attitudes, problems and hopes of those living across it, and there is a better understanding of the economic advantages that can accrue to both sides through intelligent cooperation.