

HISTORY OF  
UNITED STATES-MEXICAN NEGOTIATIONS  
RELATIVE TO THE COLORADO RIVER

by  
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## P R E F A C E

This thesis is concerned with the equitable distribution of the waters of the Colorado River on an international basis. While it does not pretend to explore all of the ramifications of the problem, its purpose is to give proper perspective to the issues which have arisen because of economic growth and an expanding need of the inhabitants to make greater use of the water.

Interest in international water rights is of comparatively recent growth. Before the Twentieth Century, the main importance of rivers lay in non-consumptive uses, above all navigation, and, to a certain extent, in fishing and floatage, while consumptive uses of water were relatively unimportant. This has radically changed in the last few decades. The increasing exploitation of hydro-electric power has led to the making of a large number of international treaties. The use of water for irrigation purposes has become a matter of increasing international concern--about 230 million acres of irrigable land are already under artificial irrigation and further extensive projects are planned.<sup>1</sup> In consequence of these increased

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<sup>1</sup>"It is only in the last fifty years since the increased development of hydro-electric power and since the introduction of systematic irrigation planning for the large arid areas of Asia, Africa and America that water relations between states have come to form an extensive

uses, water has become more scarce and disputes over the distribution of water are becoming increasingly frequent.

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legal problem. This problem still contains many uncertainties and unsolved questions and is, in view of the ever increasing shortage of water throughout the world, one of the most important fields of research in international law at the present time." F. J. Berber, Rivers in International Law (New York: Oceana Publications Inc., 1959), p. 10.

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## A B S T R A C T

There were three major periods of negotiation on the distribution of Colorado River waters between the United States and Mexico: 1908 to 1913, 1925 to 1930, and 1939 to 1945. The product of the final stage was a formal agreement which assured Mexican water users a minimum allocation of 1,500,000 acre-feet annually.

Mexico's position dated from the 1904 Concession, whereby she was entitled to half the capacity of the international canal which carried water to Imperial Valley lands. Political and operating questions arose because of the record floods from 1905 to 1911.

When the free flow of the River was interrupted by the building of Boulder Dam, Mexico was using a maximum of 750,000 acre-feet of water per year. However, the Dam's capacity for storage alleviated the flood problem and made it possible for more water to be used south of the border.

Relying on the old agreements, Mexico in the 1930's claimed amounts as high as 3,600,000 acre-feet from the Colorado. A bargaining point was that although the United States had control of the headwaters of the Colorado, Mexico had similar control of the lower Rio Grande. The consideration of both rivers together in

order to further the "Good Neighbor" policy resulted in a solution unacceptable to all parties concerned, except to American water users on the Rio Grande.

The 1945 Treaty created new riddles and stirred up the old controversy between Arizona and California. Yet unresolved is the question of what quality of flow Mexico may expect from the Colorado River under the Treaty.

## CHAPTER I

### THE MIGHTY COLORADO

The Colorado River rises high in the snow-capped Rocky Mountains of north central Colorado, flows nearly 1,400 miles southwest, and empties into the Gulf of California in Mexico far to the south. It is the second longest river in the United States outside the Mississippi River system. This mighty river has gouged the rock of the mesas into gorges and chasms, most spectacular of which is the world-famous Grand Canyon in Arizona, a titanic cleft over 200 miles long, as much as twelve miles wide, and a mile deep.<sup>1</sup>

The Colorado River drains a vast area of 244,000 square miles, 242,000 square miles in this country--one-twelfth of the area of Continental United States--and 2,000 square miles in northern Mexico. The basin from Wyoming to below the Mexican border is some 900 miles long and varies in width from about 300 miles in the upper section to 500 miles in the lower section. It is bounded on the north and east by the Continental Divide in the Rocky Mountains, on the west by the Wasatch Range,

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<sup>1</sup>U.S., Department of the Interior, (Bureau of Reclamation), The Colorado River: A Comprehensive Report (1946), p. 31.

and on the southwest by the San Jacinto Mountains, a range of the Sierra Nevada. Tributaries extend into seven of the large Western States including Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming--which comprise the "Colorado Basin".

The River flows across the international boundary six miles west of Yuma, Arizona, and for eighteen miles is a boundary stream. It then passes wholly into Mexican territory and continues through its delta lands to the Gulf of California about 100 miles south of the boundary line. There are no tributaries of any nature or character in Mexican territory.<sup>2</sup>

The entire water supply comes from the United States, about 80% being contributed by the States of Wyoming and Colorado. The mountain watershed, which forms the principal gathering ground of this water, occupies a very large territory which is nominal in land value except for its influence on irrigation development.

Because of the wide variation in flow<sup>3</sup> the river has little value in irrigation in its natural state.

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<sup>2</sup>For information on physical characteristics of the River, its geologic history, its native plant and animal life, and its climate, consult U.S., Department of the Interior, (Bureau of Reclamation), The Colorado River: A Comprehensive Report (1946), especially pp. 31-41.

<sup>3</sup>U.S., Congress, House, Report of the American Section of the International Water Commission, 71st Cong., 2d Sess., 1930, House Doc. 359, p. 132. The long-time average virgin flow of the Colorado River annually, as measured at the Mexican border, has been estimated at 17,720,000 acre-feet.

The highest measured run-off when snows are melting is nearly 200 times the lowest, whereas the demands of irrigation in the lower section of the river continue throughout the year, and for more than half the year are nearly uniform. The existing developments depend quite largely on storage.<sup>4</sup>

The Colorado River, flowing through the Grand Canyon and the portion immediately below, grinds at a very steep slope the rocks and boulders which it finds in its path into what has been termed "rock flour". This material is immense in quantity, so the Colorado carries as heavy a load of silt as any stream in the world, if not a greater proportion, than any other river known.<sup>5</sup> After the river crosses into Mexico it ceases to have well-defined banks. The water is, therefore, allowed to spread out on the sides, the current velocity is diminished and the silt load is deposited. The result of this is that the river is constantly building up its bed so as to form a sort of cone which is higher than the surrounding country.

Before Boulder Dam, the deposit of material was so rapid that the river, within less than six years, had built up its bed nine feet above the ground on which levees were founded. This building up of the land caused

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<sup>4</sup>Ibid., p. 24.

<sup>5</sup>Ibid., p. 26.

the river bed to approach the top of the levee so closely that in a few years the levee became inadequate to withstand the floods which came against it and was in danger of being overtopped and of being breached. Owing to the silty character of the soil and its permeability it was impossible to give the levees any considerable height, as the river would "blow out" underneath them.

The levees in Mexico have been built by private interests engaged in the agriculture of the Imperial Valley and Mexican territory.<sup>6</sup> These levees have been placed more with regard to the protection of the cultivated lands than to provide a permanent regimen for the river, so there was imminent danger of flood.

The valley in Mexico has an area of about 1,500,000 acres of which over 900,000 are classed as irrigable. All of the irrigable lands lie below the level of the water surface of the river where it crosses the upper international boundary line, and over 800,000 acres lie more than fifteen feet below this river water level. A small part of the area near Mexicali is below sea level and the larger part of the area is only from naught to fifty

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<sup>6</sup>Ibid. In Mexico, over 830,000 acres had been owned since the turn of the century by a band of Los Angeles investors. Chief among these was Harry Chandler of the Times, although the syndicate included others of the same groups which had subdivided San Fernando Valley.

feet above sea level.<sup>7</sup> The river through the valley is flowing on a ridge with the lands generally sloping away to either side so that it is possible and practical to construct works in the river banks to divert water for the irrigation of the valley lands.<sup>8</sup>

In one respect Mexico is in a better position than the United States with respect to water from the Colorado. Its boundaries contain in the extensive deltaic plain an underground storage, resulting from the passage of water over permeable silt soil which absorbs the water like a sponge, as the river flows over it, thus acting as a natural regulator in controlling the fluctuating discharge of the stream. Produced from this percolation, the water plain is only a few feet below the surface, enabling its pumpage from this underground storage at slight expense. This supply is renewed by the next high water surge of the river and is

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<sup>7</sup>U.S., Congress, Senate, Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 79th Cong., 1st Sess., 1945, pp. 920-25. The Mexicali Valley includes lands in both the States of Sonora and Lower California, Mexico, and is that part of the Colorado River delta which lies in Mexico. It is bounded on the east by the Yuma and Sonora mesas, on the west by the Cocopa Mountains, on the south by the Gulf of California, and on the north by the boundary line between the U.S. and Mexico. The valley is separated from Imperial Valley only by the international boundary. The area is totally dependent upon irrigation due to little rainfall, extremely hot summers and relatively high temperatures throughout the year. Ibid.

<sup>8</sup>Ibid.

thus captured for use without the necessity of artificial regulation or costly storage.<sup>9</sup>

Long before the silt and flood dangers of the Colorado River were known, the stream had begun to play an important part in the exploration and development of the Southwest. The American pioneers who settled in the Imperial Valley of California and diverted water from the river to irrigate the desert lands were not the first white men to reach the lower Colorado region and to traverse its vast deserts. Before the middle of the sixteenth century the Spanish conquerors of Mexico had pushed northward by land and by sea in a fruitless search for the cities of gold which supposedly existed somewhere in this unexplored territory. On July 8, 1539, Francisco de Ulloa sailed from Acapulco, Mexico, with a fleet of three vessels, and shortly thereafter reached the head of the Gulf of California.<sup>10</sup> He did not see the Colorado River, but the turbid condition of the water at the head of the Gulf convinced him that there was a great river near by. In 1540, Hernando de Alarcon sailed to the head of the Gulf of California, discovered the mouth of the Colorado, and

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<sup>9</sup>U.S., Congress, House, Report of the American Section of the International Water Commission, 71st Cong., 2d Sess., 1930, House Doc. 359, p. 27.

<sup>10</sup>U.S., Congress, House, First Annual Report of the Reclamation Service, 57th Cong., 2d Sess., 1902, House Doc. 79, pp. 121-25.

sailed up the stream for over 200 miles. He was the first European navigator of the River. Other explorers who reached the Colorado during the sixteenth century traveled mainly by the overland routes. During the seventeenth and eighteenth centuries a number of Spanish padres explored the Colorado region, and attempted to establish missions there. Early in the nineteenth century American trappers appeared on the river, and soon afterward many American travelers selected the lower Colorado route for their journeys to and from the West Coast.<sup>11</sup>

From 1846 until the beginning of the Civil War, the lower Colorado was visited and surveyed by exploring parties under the direction of the War Department. In 1850-51 a reconnaissance of the Gulf of California and the Colorado was made under the direction of Lt. George H. Derby of the Topographical Engineers. The purpose of the expedition was to find a route for transportation by water of supplies to Fort Yuma. The trip was made in the schooner "Invincible," which drew too much water to proceed beyond the mouth of the river. It was concluded that the Colorado was not navigable to ocean boats,<sup>12</sup> but river

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<sup>11</sup>Paul L. Kleinsorge, The Boulder Canyon Project (Stanford, Calif.: Stanford University Press, 1941), p. 16.

<sup>12</sup>U.S., Congress, Senate, Report of the Secretary of War, 32d Cong., 1st Sess., 1852, Senate Exec. Doc. 81, pp. 2-22.

steamers could be used, and were used, in spite of the shallowness of the stream, the rapids, and the shifting channel. In 1850 a stern-wheeler named "Yuma" came up the river to Fort Yuma, and in 1851 similar trips were made by the "Uncle Sam."<sup>13</sup> In 1857 Lt. J. C. Ives navigated the Colorado from its mouth to Las Vegas Wash in a metal steamboat named "Explorer," which had been built in Philadelphia and shipped in sections to the mouth of the Colorado via San Francisco.<sup>14</sup> In 1866 Captain Thomas E. Trueworthy in the steamboat "Esmeralda" went up the Colorado as far as Callville, near the mouth of the Virgin River, several miles above the highest point attained by Ives;<sup>15</sup> but the chief river traffic, which developed about 1860 and lasted until about 1880, was confined to the section of the river between the Gulf and El Dorado, a mining town some 344 miles above Yuma.<sup>16</sup>

Before the railway reached the Colorado River at Yuma in 1877, all supplies sent from San Francisco to the

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<sup>13</sup>E. C. LaRue, Colorado River and Its Utilization (Wash. D.C.: U.S. Govt. Printing Office, 1916), pp. 19-21.

<sup>14</sup>Lt. J. C. Ives, Report on the Colorado River of the West (Wash. D.C.: U.S. Govt. Printing Office, 1859), p. 86.

<sup>15</sup>U.S., Congress, House, Freight to Salt Lake City by the Colorado River, 42d Cong., 2d Sess., 1872, House Exec. Doc. 166, p. 2.

<sup>16</sup>Kleinsorge, The Boulder Canyon Project, p. 18.

interior of Arizona traveled by ocean steamer to the head of the Gulf of California, and were there transferred to the river boats of the Colorado Steam Navigation Company to be left at various points along the river and freighted overland to their destinations.<sup>17</sup> Most of the traffic was between the Gulf and Yuma, where overland transportation started for Tucson. Above Yuma the most important port was Ehrenberg, where goods and passengers for Prescott were landed. Farther up the river the development was small, the traffic was very light, and obstructions in the river made navigation so difficult that the business was not worthwhile. As soon as the Southern Pacific Railroad reached Yuma, the most profitable part of the river business disappeared. The railroad took over the steamship company, and all traffic from the Gulf to Yuma was discontinued. Traffic above Yuma continued for two or three years longer; but by 1883, when the Santa Fe Railroad crossed the Colorado at Needles, transportation by river steamers on the lower Colorado was nearly at an end.<sup>18</sup>

Plans for navigation of the Colorado River were not abandoned immediately, however, with the advent of

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<sup>17</sup>U.S., Congress, House, Annual Report of the Chief of Engineers to the Secretary of War, 46th Cong., 2d Sess., 1879, House Exec. Doc. 1, pp. 1774-76, 1778-79.

<sup>18</sup>Kleinsorge, The Boulder Canyon Project, pp. 19-20.

the railroads. The belief persisted that, with some improvement of the stream bed and banks, transportation on the Colorado could be made to pay. Several years before, in 1866, Colonel James F. Rushing, Inspector of the Quartermaster's Department, Camp Douglas, Utah, reported that the river was navigable far above Callville and that steamers could sail easily to a point not over 350 miles from Salt Lake City. From this point merchandise for Salt Lake City would have to be taken overland. He intimated that the tales concerning the unsuitability of the river for navigation were circulated by the Colorado Steam Navigation Company and other parties who wished to maintain the monopolies they had established.<sup>19</sup> In 1878 Congress passed an act directing the Secretary of War to survey the Colorado River from Yuma to El Dorado and to estimate the cost of the needed improvements.<sup>20</sup> In 1884 Congress appropriated \$25,000 for the improvement of the Colorado River above Yuma, but the money available was too small to permit any great improvements. Investigations showed that the possible traffic development was not worth the tremendous sums necessary to improve the river for navigation.<sup>21</sup> In 1890 W. H. H.

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<sup>19</sup>House Exec. Doc. 166, Freight to Salt Lake City by the Colorado River, 1872, pp. 1-3, 6-8.

<sup>20</sup>U.S., Statutes at Large, XX, 160-62.

<sup>21</sup>U.S., Statutes at Large, XXIII, 144. Kleinsorge, Boulder Canyon Project, p. 23.

Benyaurd, Lieutenant Colonel, Corps of Engineers, reported that there were two small steamers on the Colorado which carried supplies occasionally to mining camps along the river; but again it was concluded that the traffic was so small that the river was not worthy of improvement.<sup>22</sup>

The treaty of Guadalupe Hidalgo in 1848 and the subsequent treaty for the Gadsden Purchase in 1853 both laid down the theory of navigability of the Rio Grande and the Colorado River, and the Boundary Convention of 1884 confirmed but limited somewhat navigation rights. Navigation was a matter of considerable importance at the time these treaties were concluded as freight movements by boat, however precarious, were vastly more economical and efficient than by ox-cart over undeveloped roads which then formed the only other means of transit. At the time these treaties were made, too, most of the entire natural flow of the rivers was discharged into the ocean.

The 19th Century treaties establish no restriction upon the complete sovereignty of the United States over the river or its water within its territorial boundaries, but they do grant, in perpetuity to the vessels and to the citizens of the United States a right of free and uninterrupted navigation through Mexico by way of the

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<sup>22</sup>U.S., Congress, House, Colorado River, Arizona, 51st Cong., 2d Sess., 1890, House Exec. Doc. 18, pp. 2-3.

Gulf of California and the Colorado River. They show no acknowledgment or grant of any right in Mexico to any part of that river or its waters except such as are incidental to its territorial sovereignty over a portion of its channel; there is no provision for Mexico to navigate the boundary portion of the stream and no obligation on the United States to maintain the navigability of the river.<sup>23</sup>

The treaty of Guadalupe Hidalgo, the Gadsden Purchase treaty and the 1884 Boundary Convention together reveal:

1. No restriction upon the complete territorial sovereignty of the United States over the river or its waters within the boundary lines established by the treaty of 1853.

2. A grant in perpetuity by Mexico to the vessels and to the citizens of the United States of a right of passage through Mexico, restricted to passage by navigating the Gulf and Colorado River.

3. An obligation upon the United States to enforce against its co-grantee--the citizens of the United States--the restrictions of the aforementioned grant, but only to enforce them along the boundary portion of the Colorado River.

4. The aforementioned grant is further limited, along the boundary portion of the river, to the actually navigable main channels of the river,

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<sup>23</sup>U.S., Statutes at Large, IX, 922-29. (Treaty of Guadalupe Hidalgo: particularly Articles V, VI, and VII.)

U.S., Statutes at Large, X, 1031. (Treaty of the Gadsden Purchase: particularly Articles I and IV.)

U.S., Statutes at Large, XXIV, 1011. (Boundary Convention of 1884, particularly the last paragraph of Article V.) For pertinent portions of the foregoing, see Appendix.

but such channels may be navigated even though they lie wholly within Mexican territory.

5. No acknowledgment, grant, or stipulation of any right in Mexico, of, in, or to any part of the Colorado or its waters, except such as are incident to its territorial sovereignty over a portion of the same.

6. No provision for Mexico to navigate the boundary portion of the Colorado River.<sup>24</sup>

The Convention of 1889, supplementing the one of 1884, created the International Boundary Commission.<sup>25</sup> After a series of conventions, on November 21, 1900, an agreement was signed which indefinitely extended the life of the International Boundary Commission, United States and Mexico.<sup>26</sup>

From 1848 to at least 1930, the position of the Mexican Government was one which held to the theory of navigability on the Colorado. On April 14, 1898, the Mexican Government expressed concern about the activities of the "Arizona Improvement Company" in erecting south

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<sup>24</sup>Report of the American Section of the International Water Commission, 1930, House Doc. 359, p. 253, Karl F. Keeler, Memorandum on Treaty Rights in the Colorado River.

<sup>25</sup>U.S., Statutes at Large, XXVI, 1512. (Boundary Convention of 1889, particularly Article II. The remainder of the Boundary Convention defines the powers of the International Boundary Commission.)

<sup>26</sup>U.S., Statutes at Large, LVI, Part 2, 41. (Convention of 1900 expressly extends for an indefinite period the 1889 "Water Boundary Convention." The other conventions, from 1889 to 1900, merely extend the life of the Commission for short, defined periods. There were five of these interim Conventions.)

of Yuma "two powerful centrifugal pumps, capable of pumping up a continuous column of water" in order to supply an irrigation canal. The United States, through Secretary John Sherman, was requested to warn the company not to let the works "hinder or interrupt the free navigation of that portion" of the River, which was considered by Mexico as "navigable for the citizens of both countries."<sup>27</sup> On June 8, Arizona's Governor Myron H. McCord reassured the Secretary of State that the use of these pumps would in no way impair the navigability of the Colorado at any point.<sup>28</sup>

On November 27, 1901, the Embassy of Mexico in Washington addressed Secretary of State John Hay concerning the activities of a concern styled "Imperial Canal System" of Los Angeles. The diversion and conveyance of water by the concern was objected to as being "in contravention of the stipulations set forth in Article IV" of the 1853 Gadsden Treaty. The Mexican Government feared that these "canalization works would bring about a change in the course or the complete exhaustion of the Colorado River to the serious injury of Mexican territory and the inhabitants thereof..." The United States was formally

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<sup>27</sup>Report of the American Section of the International Water Commission, 1930, House Doc. 359, p. 259, Letter of M. Romero to John Sherman, April 14, 1898.

<sup>28</sup>Ibid., p. 260, letter of Myron McCord to William R. Day, June 8, 1898.

requested "to restrain" the activities of the "Imperial Canal System."<sup>29</sup>

On April 16, 1904, the Mexican Government, through its Washington Embassy, again voiced a protest against "the bill introduced in the House of Representatives on March 8, which solicited the Congress of the United States to give its approval to a diversion of the waters of the Colorado and their use for the irrigation of arid lands" in the river basin.<sup>30</sup>

These messages were then followed by a similar one from De Aspiroz, the Mexican Ambassador, on July 7.<sup>31</sup> Because of the Laguna Project, the Mexican Department of Foreign Relations instructed its United States Ambassador to warn that, under the treaties of 1848 and 1853, "no work is to be executed by which the navigable conditions of the Colorado River or the rights to the river which appertain to Mexico...may be impaired."<sup>32</sup>

With the decline in importance of navigation on the Colorado River, the rise in importance of water for

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<sup>29</sup>Ibid., p. 254, letter of M. de Aspiroz to John Hay, Nov. 27, 1901.

<sup>30</sup>Ibid., pp. 254-55, letter of de Aspiroz to Hay, April 16, 1904.

<sup>31</sup>Ibid., pp. 256-57, letter of Aspiroz, July 7, 1904. At this time, Laguna Dam was about to be constructed under the direction of the U.S. Interior Department in order to irrigate arid lands in Arizona and California.

<sup>32</sup>Ibid., These aforementioned letters illustrate the Mexican interpretation of the 19th Century Treaties.

irrigation began.<sup>33</sup> Naturally there was a conflict in interests, since the greater the diversions, the poorer the navigability of the stream, especially during the periods of low flow.

In 1875-76 a government survey was made by Lt. Eric Bergland, Corps of Engineers, United States Army, to determine whether or not it was practical to build a canal entirely within American territory from the Colorado River to the Imperial Valley of California.<sup>34</sup> The report was unfavorable. It pointed out that deep cuts or tunnels would have to be dug through a sandhill area and that the cost of such a canal would be prohibitive. However, it was shown that there was a practical route through Mexican territory along some of the old overflow channels.

The effort to get water to Imperial Valley continued. In 1892 Mr. C. R. Rockwood, an engineer, investigated the Alamo Channel route through Mexico to the Salton Sink. On the basis of this report the Colorado River Irrigation Company was organized, and Rockwood was sent back to make another survey. This company, hastily organized during a landboom, was not properly financed. Enough stock was sold to finance the Rockwood survey, but

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<sup>33</sup>This was true for both sides of the line, despite Mexican claims to the contrary. See George Kennan, The Salton Sea (New York: Macmillan Co., 1917), pp. 20-22.

<sup>34</sup>U.S., Congress, House, Appendix to Report of the Chief of Engineers, 44th Cong., 2d Sess., 1876, House Exec. Doc. 1, Part 2, pp. 337-38.

no funds were available to carry on the work. The company failed; and the surveys, which were its most valuable asset, were acquired by a new corporation, the California Development Company, organized on April 24, 1896, under the laws of New Jersey.<sup>35</sup>

Between 1896 and 1902 the Imperial canal system was designed, and construction was begun. The original canal headed at Hanlon's Crossing in California, about five hundred feet north of the Mexican border. Here a wooden head gate, known as the Chaffey Headgate, was built. The canal crossed the border, and extended along the Alamo channel through Mexico until it turned north at Sharp's Heading, where the water was carried back into the United States through several smaller canals. Some water was delivered to Mexican lands in 1901, and by 1902 water reached the lands of some 2,000 people who had settled in Imperial Valley.

Irrigation interests seemed to be gaining the upper hand; but in 1903 the War Department held that the Colorado River was a navigable stream and that diversions of water which would interfere with navigation were unlawful.<sup>36</sup> Because of this decision, the California Development Company, which was promoting the development

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<sup>35</sup>U.S., Congress, Senate, Problems of Imperial Valley and Vicinity, 67th Cong., 2d Sess., 1922, Senate Doc. 142, p. 71.

<sup>36</sup>Ibid., p. 34.

of Imperial Valley, sought action by Congress in 1904 to confirm its appropriation of water. A bill was introduced to have the waters of the Colorado declared more valuable for irrigation than for navigation; but it failed to pass.<sup>37</sup>

On May 17, 1904, the California Development Company, through its Mexican subsidiary known as La Sociedad de Riegos y Terrenos de la Baja California,<sup>38</sup> was granted the right by the Mexican Government to divert 10,000 cubic feet of water per second from the Colorado below the international boundary.

The Mexican concession provided that water could be diverted from canals running through Mexican territory to be used in irrigating lands in Lower California, and it was stipulated that the diversion should be without injury to navigability. The amount of water to be diverted in Mexico, however, was limited to one-half of the volume passing through the canals. The area irrigated from the

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<sup>37</sup>U.S., Congress, Senate, Irrigation in Imperial Valley, California: Its Problems and Possibilities, by C. E. Tait, 60th Cong., 1st Sess., 1908, Senate Doc. 246, pp. 12-13.

<sup>38</sup>The Mexican corporation had a concession to divert nearly three times the amount of water that the river carried at an extreme low stage; yet, in later negotiations, Mexico adhered to the fiction of navigability. (Sometimes, "La Sociedad" was called "La Compania"). The International Canal followed the gravity route for approximately fifty miles through Mexican territory, see U.S. National Resources Board Report, Dec. 1, 1934 (Wash. D.C.), pp. 283-85.

Imperial canal system in the United States greatly exceeded the area irrigated from that system in Mexico; the amount of water needed in Mexico was much less than half of the total.<sup>39</sup>

There had been no agreement entered into between the United States and Mexico under which Mexico granted to the United States or any of its citizens the right to conduct water across Mexican territory. Neither had there been a direct grant of any such right to an American corporation. The concession was made to a Mexican corporation, whose operations were confined entirely to Mexico.<sup>40</sup>

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<sup>39</sup>It is evident the American owners of Mexican lands were vigilant in protecting their interests. In 1904 Harrison Gray Otis, founder of the Los Angeles Times, wrote to President Roosevelt asking "just consideration" of the Government, but not its "direct aid" in protecting his interests. (Problems of Imperial Valley and Vicinity, 1922, Senate Doc. 142, p. 112, letter of April 9, 1904, from files of Secretary of Commerce, Wash., D.C.)

<sup>40</sup>The 1904 Concession had the force of law, for it was approved by the Congress of Mexico upon submission by the President under date of June 10, 1904. According to Mexican law, the stock of the Mexican companies could not be owned by the American corporations. The stock was held by the individual members of the board of directors of the California Development Co. (later by the individual members of the board of directors of the Imperial Irrigation District), and each director on leaving the board assigned his interest to his successor. A complete staff of officials had to be kept in Mexico, all business with the Mexican company was transacted in Spanish, and the metric system was used in all operations in Mexico. (U.S., Congress, Senate, Colorado River in Its Relation to Imperial Valley, 65th Cong., 1st Sess., 1917, Sen. Doc. 103, pp. 5, 15-17.)

Two dredger cuts were made under the concession. The first, known as the upper Mexican heading, was just below the border; and the second, known as the lower Mexican heading, was about four miles below.

A reorganization of the California Development Company in 1905 had placed the control of its affairs into the hands of the Southern Pacific Company, since the land company had borrowed some \$200,000 from the Southern Pacific in June of that year.<sup>41</sup> As a result of this loan and the large flood-control burden that followed, the Colorado Development Company was forced into receivership in December, 1909. Yet in spite of these financial difficulties and the ever present flood hazard, the agricultural development of the valley proceeded rapidly. By 1906, 130,000 acres were under cultivation and water rights had been purchased through mutual water companies for over 200,000 acres. By 1910 the irrigated area exceeded 180,000 acres, exclusive of about 15,000 acres in Mexico which were also being supplied by the Imperial Canal.<sup>42</sup> It was therefore apparent that although the Colorado was still legally, technically, and by treaty a navigable stream, navigation on the lower Colorado was no longer of importance; all plans to improve the river for navigation alone had faded from the picture.

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<sup>41</sup>Irrigation in Imperial Valley. . ., by Tait, 1908, Sen. Doc. 246, p. 24.

<sup>42</sup>Kennan, The Salton Sea, p. 39.

In 1905 the Colorado River broke through the lower Mexican heading of the Imperial Valley Canal and eventually discharged its full volume into the Salton Sink by way of two of its old overflow channels, the Alamo and the New River.<sup>43</sup>

In 1904 the original intake of the Imperial Valley Canal at Hanlon's Crossing, California, had become so silted that the Canal could not deliver sufficient water for the needed fall irrigation. A steeper grade, which a heading in Mexico would have provided, was needed. Therefore, a new cut was made in Mexican territory at the lower Mexican heading of the canal, called "Intake Number 3." The cut was made in October under the supervision of Mr. C. R. Rockwood, engineer for the California Development Company. High water was not expected until the spring of 1905, and few precautions were taken against an unexpected rise. Three unseasonal rises caused by floods in the Gila River, followed by exceptionally heavy summer floods in the Colorado, delayed the work. The soft soil was eroded easily by the floods, and the artificial cut widened and deepened rapidly to accommodate the entire flow of the river. By July 30, 1905, the canal was taking 86% of the river flow, or 15,020 out of 17,500 second feet; and on October 25, the full river discharge

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<sup>43</sup>LaRue, Colorado River. . ., p. 52.

was going through the break.<sup>44</sup>

All attempts in 1905 to close the breach failed. Late in November a diverting dam of brush, wire, piles, and gravel, designed to throw the river away from the entrance to the canal, had been nearly completed when a flood from the Gila raised the Colorado some fourteen feet in twenty-four hours, and swept the dam away. With the hope of diverting some of the flow back to the Gulf, a short channel was dug from the Alamo to the Padrones River to turn the water into Volcano Lake, a depression ten miles long, six miles wide, and about thirteen feet deep on the rim of the Salton Basin. A dam was built across the New River outlet of the lake so that the lake would discharge to the south and east into the Gulf, through an old channel called Hardy's Colorado, and not to the northwest through the New River channel leading to the Salton Sink. However, the Padrones broke a new channel across country north of Volcano Lake to the New River, from where it continued to the bottom of the Salton Basin.<sup>45</sup>

In the meantime the Southern Pacific Railroad Company had drawn on its resources to help close the break, but by December 1905, the closure had not been

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<sup>44</sup>Ibid., p. 54.

<sup>45</sup>"Runaway River," Engineering News, LV (Feb. 22, 1906), 216. After 1905, all levies built were located in Mexico to protect lands both in Mexico and the U.S.

made. The Southern Pacific was vitally interested in the safety of the Imperial Valley; its main line tracks ran through the valley and were threatened with submergence by the rising waters of the Salton Sea. The railroad advanced money to the California Development Company to fight the river and received as security a majority of the stock of the company. In this way the Southern Pacific gained control of the California Development Company and took charge of the situation. Rockwood resigned, and Mr. H. T. Cory took over the work in the spring of 1906 under a mandate from the railroad to close the break at any cost.<sup>46</sup> Nothing could be done until the high waters had subsided; so the spring months were spent in gathering materials while the valley was forced to face another inundation. A part of Mexicali was undermined and destroyed, and Calexico was seriously threatened. The growing channels of the Alamo and of the New River destroyed many acres of rich agricultural land, and the Salton Sea flooded the plant of the New Liverpool Salt Company which had been located on its shores.

Cory's plan was to build a new head gate across the break. Unfortunately a weakness developed in the head gate, and on October 11, 1906, two-thirds of the structure suddenly was swept away. It took three weeks more to

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<sup>46</sup>Report of the American Section. . ., 1930, House Doc. 359, pp. 20-22.

close the breach, and not until November 4 had the Colorado been forced back to its old channel leading to the Gulf. Cory's victory over the river was short-lived. Levees were built to strengthen the closure, but on December 7 a flash flood from the Gila broke through the unfinished levees a half mile south of the cut. In less than two days the whole river was flowing once more into the Imperial Valley.

The valley was stunned by this unexpected turn in events. There was cause for alarm since the water flowing into the valley was cutting through the soft earth and progressively creating a series of cataracts upstream. If these deep channels ever reached the bed of the Colorado, the Imperial Canal intake would be at such a low level that it would be impossible to take the water by gravity to the basin, and the Imperial Valley, if not submerged, would revert to desert. An even more serious consequence, once the deep channels had reached the river, would be the extreme difficulty of turning the river back to its old course until after the entire Salton Basin had been filled. If the river could not be turned back, the channel of the main stream would be widened ultimately to and beyond the town of Yuma.<sup>47</sup>

The Southern Pacific Company was unwilling to stand the expense of another attempt to tame the river.

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<sup>47</sup>Ibid.

The United States Government received from E. H. Harriman of the Southern Pacific a telegram asking government aid in the expensive reclamation service for which he hesitated to advance more money to the California Development Company.<sup>48</sup> President Theodore Roosevelt, through Secretary of State Elihu Root, promptly directed consultation with the Mexican government with a view to plans for permanent measures to prevent a recurrence of the danger; and he wired Harriman that the California company should act promptly without waiting for government action, for which he agreed to recommend legislation to provide against repetition of the break and for an equitable distribution of the burden of expense.<sup>49</sup>

On December 11, 1906, Secretary Root cabled the situation to the American embassy at Mexico City and suggested that the American government, by cooperation with Mexico, should assume management of the entire work of control of the river which had reached beyond the capacity of individuals or corporations to handle, and upon which depended the safety of Yuma and the American government dam at Laguna.<sup>50</sup> He instructed the Ambassador

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<sup>48</sup>U.S., Congress, Senate, Colorado River, 62d Cong., 2d Sess., 1912, Senate Doc. 867, p. 2.

<sup>49</sup>James M. Callahan, American Foreign Policy in Mexican Relations (New York: MacMillan Co., 1932), pp. 463-64.

<sup>50</sup>U.S., Department of State, Foreign Relations, 1911, pp. 525-27, letter of E. Root to D. E. Thompson, December 11, 1906.

to urge upon Mexico the necessity of immediate and effective action and discreetly to ascertain whether Mexico would permit American protective operations on Mexican territory, covered by a concession of the Mexican company of Lower California (La Sociedad) which had failed to meet its obligations.

From Ambassador D. E. Thompson's reply of December 14, Root learned that President Diaz agreed to American operations on Mexican territory under a permit from the Mexican government but without expense to Mexico for controlling the river, and that the Mexican government agreed to permit the free entrance of all equipment necessary for conducting the work of control.<sup>51</sup> The Mexican President said La Sociedad de Riegos y Terrenos de la Baja California had failed to meet its concession requirements, and it must therefore demonstrate its ability to control the waters or suffer annulment of the concession.<sup>52</sup>

In the second week of January, 1907, President Roosevelt received from Director Walcott of the United States Geological Survey a letter suggesting that he should request an appropriation of two million dollars and should obtain from Mexico assurances that the break

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<sup>51</sup>Ibid., letters of D. E. Thompson to E. Root, Dec. 13-14, 1906.

<sup>52</sup>Ibid., letter of Department of Fomento to "La Sociedad", Dec. 22, 1906, (notification was officially made).

would be patrolled and guarded at all times. He suggested that Mexico should be asked to prevent any future artificial cutting of the west bank of the Colorado at any point which might threaten to jeopardize American interests.<sup>53</sup>

On January 12, 1907, Roosevelt presented the alarming situation to Congress by stating that if the break remained unclosed until the spring flood of 1907 all property values in the valley, including three hundred miles of canals, would probably be wiped out and that ultimately further damage would result up the river to Yuma and to Laguna. Stating that the Southern Pacific had expended two million dollars or more and that it declined to furnish more (although still working on repairs), he urged as a necessity prompt action to secure permanent protective works and suggested that the general plan under the reclamation service should be a comprehensive scheme of development of all irrigable land upon the Colorado.<sup>54</sup>

But, at this time, the Southern Pacific Company appeared to be the only agency equal to the task of controlling the river. In January and February of 1907 Harriman practically closed the Los Angeles and Tucson

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<sup>53</sup>Colorado River, 1912, Sen. Doc. 867, p. 27.

<sup>54</sup>Foreign Relations, 1911, pp. 528-9, message of T. Roosevelt to the U.S. Congress, January 12, 1907. "The United States should obtain by convention with Mexico the right to carry water through that country upon reasonable conditions."

divisions of the railroad and brought piling, timbers, and other materials by special trains to the scene of the flood from as far away as New Orleans. The breach was finally filled on February 11. This time the closure did not fail.

The river was restored to its old channel. Yet the threat of the Colorado was still present. A part of two seasons' overflow had been sufficient to create an inland sea seventy-six feet deep and about 285,000 acres in area.<sup>55</sup>

The seriousness of the flood menace could be ignored no longer; the Governments of Mexico and the United States were awakened to the international problem of the Colorado River.

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<sup>55</sup>U.S., Congress, Senate, Imperial Valley or Salton Sink Region, 59th Cong., 2d Sess., 1907, Senate Doc. 212, pp. 5-6.

## CHAPTER II

### EARLY NEGOTIATIONS

The Colorado River issue was continually examined, in its various aspects, by the Governments of Mexico and the United States from 1908 to 1913. Then the hesitancy of Woodrow Wilson to grant recognition to the Huerta regime prompted Mexico to abruptly terminate negotiations. As a result, nothing much was gained in the way of equitable distribution of river waters between the two countries.

Above the earlier treaty arrangements providing for navigation of the stream, treating it as a highway of commerce, arose the immediately practical and dominating problem of irrigation and the incidental problems of protection from floods, control of the river, and division of the waters--problems which were not foreseen in the negotiations of the treaties of 1848 and 1853.<sup>1</sup>

The Department of State communicated to Mexico on January 29, 1908, its opinion that the concession to La Sociedad de Riego y Terrenos de la Baja California was excessive and suggested that a commission be formed to

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<sup>1</sup>G. P. Hammond (ed.), The Treaty of Guadalupe Hidalgo, 1848 (Berkeley, Calif.: Friends of Bancroft Library, 1949), p. 21.

investigate and report concerning an agreement on the division of the flow for irrigation--the commission's decision to be informative and not binding on the two Governments.<sup>2</sup> The communication indicated also that the Mexican and American commissioners, so appointed, should consider the following matters for their joint report:

1. The nature and character of the use of Mexican territory which would be necessary or advisable in order to enable the officers of the United States Reclamation Service to protect the reclamation works at the Laguna Dam.

2. In case the United States should acquire the rights of the California Development Co., the terms for an arrangement to be made with Mexico for the use of the existing canal rights owned by that company through its subsidiary Mexican corporation, and for the use of the bed of the Alamo River which connects this canal with the Imperial Valley.

3. If the United States Government should not acquire the rights of the California Development Co., the terms for an arrangement which might be made between the United States and Mexico as to the treatment which should be accorded to the Mexican corporation which has been organized as ancillary to the work of the California Development Co.<sup>3</sup>

On March 31, the Mexican Minister of Foreign Affairs, Ignacio Mariscal, agreed to the appointment of commissioners to obtain data as a basis upon which to

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<sup>2</sup>Charles A. Timm, International Boundary Commission: U.S. and Mexico (Austin: University of Texas Press, 1941), p. 193.

<sup>3</sup>U.S., Department of State, Foreign Relations, 1911, pp. 529-535, letter of E. Root to D. E. Thompson, January 29, 1908. Laguna Dam was under construction by the Reclamation Service about 25 miles above the international boundary.

treat, but he catagorically responded to the January 29 note:

1. The Government can not permit the occupation of national territory unless the Government of the United States confers an equal right on the Government of this country for the occupation of American territory.

2. The California Development Co., the holder of the shares and authorized by the Department of Fomento to utilize the waters of the Colorado River, can not transfer its rights to any foreign Government according to the stipulations of the contract.

3. The said company will receive from the Mexican Government such treatment as it is entitled to, pursuant to the same contract.<sup>4</sup>

The State Department, on April 25, 1908, instructed the American Ambassador in Mexico that there was no objection to the Mexican propositions of March 31 and designated Mr. Louis C. Hill, supervising engineer, Department of the Interior, as the "Commissioner on the part of the United States to study the questions in connection with the distribution of Colorado River waters."<sup>5</sup>

Later, the Secretary of State was advised that Sr. Fernando Beltran y Puga, chief of the Mexican section of the International Boundary Commission, was the appointee for Mexico.<sup>6</sup>

The work of the Colorado River commission of 1908

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<sup>4</sup>Ibid., letter of Igno. Mariscal to Thompson, March 31, 1908.

<sup>5</sup>Ibid., letter of Robert Bacon to Thompson, April 25, 1908.

<sup>6</sup>Ibid., letter of D. E. Thompson to Secretary of State, May 8, 1908.

was later merged with that of a similar commission for the lower Rio Grande, and in 1910, these two were joined with the International Boundary Commission.<sup>7</sup> L. C. Hill resigned as commissioner in 1910, but he described the progress which was made in the negotiations up to the time of their interruption; the tentative agreement between the two commissioners was "approximately":

1. Mexico and the United States to abrogate such parts of the treaty of Guadalupe-Hidalgo as conflicted.

2. The two Nations to divide the low-water flow of the Colorado equally between them. (Mexico's share of this would be less than 1500 second-feet and hence less than would irrigate the lands in Mexico irrigated by the River.)

3. The U.S. to build reservoirs if it so desires to impound all the remaining water for the purpose, among others, of irrigating all the land which can be irrigated by river waters either by gravity or by pumping.

4. Mexico to be permitted, by paying her pro rata part of the cost of the reservoirs and their operation, to have the use of such remaining water as could not be utilized in the United States.<sup>8</sup>

This arrangement gave to Mexico nothing the United States could use, yet the storage facilities on the upper river were shared with Mexico. It would therefore appear that it was mutually agreed that the only water to be con-

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<sup>7</sup>Timm, International Boundary Commission. . ., p. 195, Huntington Wilson to Keblinger, May 9, 1910.

<sup>8</sup>California, Colorado River and the Boulder Canyon Project (Los Angeles: Colorado River Commission of Calif., 1930), pp. 293-94, letter of L. C. Hill to Charles Evans Hughes, March 26, 1923.

sidered for Mexico in settling international demands was clearly based upon the low water flow of the River.

From 1906 to 1909, the Colorado built up its bed, and then left its old channel again at a point about twenty-nine miles below Yuma. It turned west into another of its old overflow channels, called the Bee (or Abejas) River, and then on into Volcano Lake. The river deposited tremendous quantities of silt in the lake and raised the bed so rapidly that it became extremely difficult to keep the levee above it. The Colorado failed to reach the Imperial Valley in 1909, but it had made a major step closer to its goal. The valley's defenses were seriously weakened, and the federal government realized that immediate action should be taken.

For further protection of lands and property of the Imperial Valley against injury from the changes in the Colorado, Congress by joint resolution approved on June 25, 1910, an appropriation of one million dollars, authorizing the President to use any portion of this sum within the limits of Mexico.<sup>9</sup> In July, President Taft appointed Mr. John A. Ockerson, member of the Mississippi River Commission and an expert on work relating to alluvial streams, to make an examination and to devise a plan for restoring the river to its former bed.<sup>10</sup> The Department of State through the

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<sup>9</sup>U.S., Statutes at Large, XXXVI, Part 1, 883-86.

<sup>10</sup>Foreign Relations, 1911, p. 535, Acting Sec. Wilson to Ambassador H. L. Wilson, July 23, 1910.

American ambassador, Henry Lane Wilson, obtained promptly from the Mexican government assurance of cooperation with the Ockerson Commission in facilitating the necessary surveys and investigations along the Colorado in Mexican territory.<sup>11</sup>

The plan adopted by Ockerson and his advisers was to divert the river back to its old channel and to build a levee some twenty-five miles long near the west bank to prevent any future breaks in that direction.<sup>12</sup> (The levee would cross and dam the Abejas River.) As with the other levees, the projected work was located in Mexican territory, so it was necessary to secure the consent of the Mexican government before active operation could begin.

The Secretary of the Interior, R. A. Ballinger, suggested on October 17, in his communication of the engineer's report on the protective works for Imperial Valley, that it would be best to eliminate from the negotiations any matters regarding the right to the waters of the river on the ground that this would cause too great delay.<sup>13</sup> The matter was accordingly ignored thereafter in the diplomatic arrangements.

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<sup>11</sup>Ibid., pp. 536-37, Minister for Foreign Affairs E.C. Creel to Ambassador H.L. Wilson.

<sup>12</sup>E.C. LaRue, Colorado River and Its Utilization (Wash., D.C.: U.S. Government Printing Office, 1916), p. 117.

<sup>13</sup>Foreign Relations, 1911, pp. 536-54, Secretary Ballinger to Secretary Knox, October 17, 1910.

In October, 1910, Assistant Secretary Adee, acting for Secretary of State Knox, instructed Ambassador Wilson to request the consent of the Mexican government for erection of a levee along the west bank of the Colorado.<sup>14</sup> The structure would be located on Mexican lands owned by the Colorado River Land and Water Company. General Harrison Gray Otis and his son-in-law, Harry Chandler of Los Angeles, were the directors of the Company.

On November 7, by instructions of the President, Adee urged the importance of prompt action in order to effectively protect Imperial Valley; he also said that the President had asked the Mexican ambassador to obtain a waiver of customs charges imposed on materials used in the construction of the works.<sup>15</sup> As directed by Adee, Ambassador Wilson, having emphasized to Diaz the necessity for haste, on November 22 reported by telegram a reply from the Mexican Foreign Office, stating that President Diaz had no authority to permit the erection of levees or to grant free entry of materials for the work.<sup>16</sup> Such authorizations were granted only by the Mexican Congress.

On November 26 Secretary Knox in a telegram,

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<sup>14</sup>Ibid., Acting Sec. Adee to H. L. Wilson, October 24, 1910.

<sup>15</sup>Ibid., Acting Sec. of State Adee to H. L. Wilson, November 7, 1910.

<sup>16</sup>Ibid., telegram of H. L. Wilson to the Secretary of State, November 22, 1910.

accepting the suggestion for the appointment of a joint commission to examine the levee project, again advocated haste. The Mexican engineers selected for the commission were to meet the American engineers at the site of the proposed works.<sup>17</sup> Knox explained that the United States government desired to secure for itself no rights on Mexican territory but only to protect settlers of American territory from enormous losses, which would follow from the failure to erect a levee. The United States was willing that the money should be expended by the Mexican company which owned the land where the structure was to be built.

Five days later, the Secretary of State was informed by the Mexican minister, F. L. De La Barra, at Washington, that the Mexican government had telegraphed its agreement to accept a simple exchange of notes as sufficient authority for the "immediate" construction of the protective flood works.<sup>18</sup> The Mexicans proposed certain bases, including provisions that the works should be constructed by the Colorado River Land and Water Company in accord with plans approved by a Mexican

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<sup>17</sup>Ibid., telegram of Secretary Knox to H. L. Wilson, November 26, 1910. In December, J. A. Ockerson and Fernando Beltran y Puga were appointed commissioners by their respective governments to inspect the construction. (Ibid., letter of Knox to H. L. Wilson, December 3, 1910; letter of F. L. de la Barra to Knox, December 16, 1910.)

<sup>18</sup>Ibid., F. L. De La Barra to P. C. Knox, December 1, 1910.

inspector, that in construction the rights of the riparian owners, and of the persons to whom the government of Mexico might have granted concessions for the use of the water, should stand unimpaired. Mexico would assume no responsibility as to the results, and the American government by its pecuniary aid should acquire no right of ownership or easement or any other right over the works constructed on Mexican territory.

On December 24, 1910, Acting Secretary Huntington Wilson in a note to La Barra accepted the bases proposed.<sup>19</sup> Secretary Knox, meanwhile, was asking free importation of materials used by the company in the work of construction, but the Department of Interior was paying duty anyway to avoid further delay.<sup>20</sup>

Knox had expected to arrange later for negotiation of a treaty providing for the maintenance of the levee after its completion. However, he accepted the explanation of La Barra of January 4, 1911, that the defensive works were without any international character (not subject to treaty), and that under the bases of construction by the Mexican company all other agreements must be exclusively

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<sup>19</sup>Ibid., Huntington Wilson to La Barra, December 24, 1910.

<sup>20</sup>Ibid., Knox to the American Ambassador, December 3, 1910; and Knox to the American Ambassador, December 17, 1910. Secretary Knox had even proposed an arrangement for accumulation of deferred payment of duties until the Mexican Congress could remit them by the necessary legislation. Ibid., Knox to H. L. Wilson, December 9, 1910.

arranged between the company and the Mexican department concerned.<sup>21</sup>

Later, on January 9, Ambassador La Barra informed the Secretary of State that he had reached an agreement with a representative of the Secretary of Interior, Brig. General W. L. Marshall, concerning modifications of the printed specifications prepared by J. A. Ockerson, acting as attorney for the Colorado River Land Co., to which the Mexican Government had previously objected.<sup>22</sup> La Barra expressed the belief that the negotiations between the two governments on the matter ended with his conferences with Marshall, since "the adjustment of all questions that may hereafter arise will be exclusively subject to the concessions granted to the Colorado River Land Company."<sup>23</sup> The Secretary of State replied that it was never intended to create by the contracts in question any rights in favor of the Government of the United States to the ownership of the land or to its sovereignty; nor any other rights to any portion of the Mexican

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<sup>21</sup>James M. Callahan, American Foreign Policy in Mexican Relations (New York: MacMillan Co., 1932), pp. 466-469; Foreign Relations, 1911, pp. 554-55, letter of F. L. de la Barra to P. C. Knox, January 4, 1911.

<sup>22</sup>Ibid., pp. 555-65, letter of F. L. de la Barra to the Secretary of State, January 9, 1911. See also Ibid., letter of La Barra to Knox, January 5, 1911, in which the Mexican objection was made.

<sup>23</sup>Ibid., letter of F. M. de la Barra to the Secretary of State, January 9, 1911.

territory or to the works to be built on it.<sup>24</sup>

The American government, after the completion of the international agreement concerning the work of defense against the insurgent river, soon became apprehensive of other threatening dangers of insurgency against which military measures of defense seemed necessary.

On February 12, 1911, notifying La Barra of the reported operations of rebellious Mexican political leaders who were supposed planning to raid the grading camps to entice the workmen to join them and to drive the work animals away, Secretary Knox suggested the need of military cooperation to protect the property which was in jeopardy.<sup>25</sup>

On February 14, La Barra replied that the Mexican government had given orders for the increase of the Mexican force on the Colorado, under the command of Col. Don Celso Vega, and would probably not need to have recourse to American forces whose passage into Mexican territory could be authorized only by approval of the Mexican Senate.<sup>26</sup> On the same day, the Department

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<sup>24</sup>Ibid., letter of P. C. Knox to La Barra, January 26, 1911. "The agreement was fully ratified in the exchange of the note of your embassy of December 20, 1910, and of that of this Department of December 24, 1910."

<sup>25</sup>Ibid., letter of Knox to La Barra, February 12, 1911.

<sup>26</sup>Ibid., La Barra to Knox, February 14, 1911.

addressed an aide-memoire to the Mexican Embassy, saying that it was in receipt of information from the Mexican government that it proposed to send the military commander of the northern district of Lower California, Col. Vega, with 200 men to the place of the works in order to protect them. Vega would be instructed to purchase arms, ammunition, and provisions in Yuma, Arizona. It was stated that, on the understanding Col. Vega's activities would be wholly confined to the protection of the levee rights, the United States would not object to the proposed commercial purchase of arms, etc., in Yuma. If the Mexican troops desired to transport the munitions over American Territory, the United States would be pleased, acting with the Governor of Arizona, to grant facilities for such transportation.<sup>27</sup>

Three days later, following telegraphic news from California that the region of Imperial Valley had been left unprotected because of the defeat of the Mexican constabulary forces by insurgents,<sup>28</sup> Knox telegraphed Ambassador Wilson to reiterate to the Diaz government the suggestion of effective American cooperation with the Mexican government, at least by American police guards without uniform under the direction of the Secretary

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<sup>27</sup> Ibid., aide-memoire of the Dept. of State to the Mexican Embassy, February 14, 1911.

<sup>28</sup> Ibid., letter of Knox to La Barra, February 17, 1911.

of Interior.<sup>29</sup> On the same day, Knox received Wilson's telegraphic reply that in view of the urgent necessity, the Mexican President verbally agreed (without exchange of notes) that the Department of Interior might authorize the use of the necessary un-uniformed guards to serve on the pay roll of the Colorado River Land Company, with the request for utmost discretion in sending them across the boundary and in preventing publicity in the American press.<sup>30</sup>

With the increase of revolutionary activities in Mexico which daily became more menacing to the construction work on the Colorado, Knox found that the plan of protection arranged by agreement with the Diaz government was impracticable. On March 2, he wired the American charge at Mexico City that the Diaz government, appreciating the emergency which made indispensable a body of American troops to guard the works, should officially request the American government temporarily to protect the levee.<sup>31</sup> From the American charge (March 4) and also from the Mexican ambassador (March 3), Knox promptly received the reply that Diaz could not act on the question of inviting in foreign troops without the sanction of the

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<sup>29</sup>Ibid.

<sup>30</sup>Ibid., telegram of Ambassador H. L. Wilson to Knox, February 17, 1911.

<sup>31</sup>Ibid., telegram of Knox to American Charge d'Affaires in Mexico, March 2, 1911.

Senate which was not in session.<sup>32</sup> In agreement with Foreign Minister Creel, the Mexican Ambassador thought any permit for entrance of American troops would strengthen the revolution by being construed as an admission of the weakness of the government. To the Mexican ambassador's suggestion that Mexico would be disposed to request the passage of Mexican troops from San Diego by American railway to the Colorado, H. Wilson replied on March 7 that the American government preferred to adhere to its previous policy of neutrality in requiring the Mexican troops engaged in general hostilities to reach their destination over Mexican territory.<sup>33</sup>

Meantime, the Mexican revolution was approaching a more dangerous stage which required greater watchfulness and military precautions, both by President Taft and by President Diaz. The latter, on March 21, expressed great satisfaction with the attitude and activity of the American government in aiding the construction work on the River.<sup>34</sup>

Finally, the Ockerson Levee was completed in May of 1911, but the floods of the same month breached

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<sup>32</sup>Ibid., American Charge d'Affaires Dearing to Knox, March 4, 1911; Ibid., Mexican ambassador to Knox, March 3, 1911.

<sup>33</sup>Ibid., letter of F. L. de la Barra to Knox, March 6, 1911; Ibid., letter of H. Wilson to La Barra, March 7, 1911.

<sup>34</sup>Ibid., Minister of Foreign Affairs Creel to the American Ambassador, March 21, 1911.

the levee at several points, the largest of which was at the entrance to the Bee River channel. The water widened this break rapidly, and soon the entire river was flowing once more down the Bee channel to Volcano Lake. Parts of the levee still remained intact, but the failure was so complete that nothing further was done to restore it until 1919.<sup>35</sup>

To add to the flood disaster, trouble with Mexico soon appeared. On May 24 and 27, 1911, Knox received from the Mexican minister, Zamacona, a complaint that while the Mexican Federal forces had been engaged in protecting the Colorado River works, filibusterers had crossed the international boundary to invade Lower California.<sup>36</sup> Knox, on June 6, replied that the American government had been vigilant in police measures to insure observance of international duties and denied the intimation that filibustering attempts had been organized on American territory.<sup>37</sup> A day later he suggested that the movement in Lower California seemed to be the work of a Mexican political party seeking to overthrow authority

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<sup>35</sup>Ibid., letter of J. A. Ockerson to the local commander of Mexican troops, May 10, 1911: "My work at the Abejas River, for the present at least, is about concluded." See also Paul L. Kleinsorge, The Boulder Canyon Project (Stanford, Calif.: Stanford University Press, 1941), p. 128.

<sup>36</sup>Foreign Relations, 1911, pp. 432, 490, letters of Mexican Minister Zamacona to P. C. Knox, May 24 and 27, 1911.

<sup>37</sup>Ibid., pp. 494-95, Knox to Zamacona, June 6, 1911.

and to establish a socialistic republic there. Knox also stated that the utterance of their inflammatory propaganda in the United States without any definite act was not an offense against international law, nor against local law.<sup>38</sup>

September 2, 1911, Secretary Knox was informed by Samuel Adams, Acting Secretary of the Interior, that Mexican Commissioner F. B. Puga had suggested that the Mexican permit and privileges granted in 1910, in connection with the construction of the levee and dam on the Colorado, had expired and that application for renewal should be submitted to the Department of Fomento.<sup>39</sup> The new application was approved on November 24.

Connected with the question of permanent control of the river were international questions which could be settled only by an international board. That the special commission on equitable use of the waters of the Colorado had become inactive by 1911 was evidenced by the fact that a conference of the engineers who had participated in the remedial works, held under the direction of the Bureau of

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<sup>38</sup>Ibid., pp. 498-502, Knox to Zamacona, June 7, 1911.

<sup>39</sup>U.S., Department of State, Foreign Relations, 1913, pp. 977-93, letter of Samuel Adams to Sec. Knox, September 2, 1911. Ibid., letter of F. B. Puga to the Commissioner for the U.S., September 2, 1911. Ibid., letter of J. A. Ockerson to the Official Inspector for Mexico, August 25, 1911. See also Ibid., telegram of Assistant Secretary of the Interior, C. A. Thompson, to Secretary of the Interior, November 24, 1911.

Reclamation, recognized the importance of the problem of apportionment of waters, and suggested:

...the early creation of an international Colorado River Commission, embracing in its membership both American and Mexican engineers, invested with large powers and ample authority to examine into and to submit a basis for the adjustment of all questions relating to the conservation, use, and control of the waters of the River, with a view to such governmental action as shall result in a complete, just and final settlement of all such matters at issue between the two nations.<sup>40</sup>

As a result, in February, 1912, Secretary Knox received from Secretary Walter L. Fisher of the Interior Department the recommendation that negotiations should be opened with Mexico for the creation of an entirely new international commission of broad powers. The Commission was to be composed of both engineers and government officials familiar with legal and diplomatic issues involved in order to investigate and report on the proper method of utilizing the waters of the lower Colorado.<sup>41</sup>

Acting Secretary of State Huntington Wilson at first protested the fact that the 1908 Commission was still in existence.<sup>42</sup> The subjects of investigation which were assigned to the old commission included some of those which the proposed commission would have to

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<sup>40</sup>U.S., Congress, House, Conference of Bureau of Reclamation Engineers, 62 Cong., 2d Sess., 1911-12, House Doc. 139, No. 504, p. 161.

<sup>41</sup>Foreign Relations, 1913, pp. 977-93, letter of W. L. Fisher to P. C. Knox, February 10, 1912.

<sup>42</sup>Ibid., letter of Huntington Wilson to the Secretary of Interior, February 19, 1912.

undertake. However, at the insistance of Secretary Fisher, H. Wilson on March 21 instructed the American ambassador, Henry L. Wilson, to press the negotiations for a new commission.<sup>43</sup> On April 27 the ambassador reported the view of the Mexican government approving the plan for the proposed new commission but recommending, "for the purpose of the early action and facilities of said commission,"<sup>44</sup> the continuance of the existing International Water Boundary Commission with an increase of practical personnel to study and propose arrangements for adjustment of special problems of the Colorado.<sup>45</sup>

On June 14, 1912, President Taft in a message to the Congress, recommending a further appropriation of \$1,250,000 for protection of lands from the insurgent waters of the Colorado, referred to the need of a full agreement with Mexico as to joint expenditure and use before a larger plan of improvements could be submitted.<sup>46</sup> On September 10, the Acting Secretary of State, H. Wilson, submitted to Ambassador Wilson the draft of a convention

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<sup>43</sup>Ibid., W. L. Fisher to the Secretary of State, March 18, 1912; Ibid., H. Wilson to Ambassador H. L. Wilson, March 21, 1912.

<sup>44</sup>Ibid., Ambassador H. L. Wilson to Department of State, April 27, 1912.

<sup>45</sup>Ibid.; see also letter of P. Lascurain to the American Ambassador, April 13, 1912.

<sup>46</sup>Ibid., Message from the President of the U.S., Wm. H. Taft, to the Congress, June 14, 1912. This message was based on a letter from Secretary of the

providing for a preliminary commission to study and report upon the basis of distribution of the Colorado waters; and, in November, the Mexican Minister of Foreign Affairs submitted a counter draft.<sup>47</sup>

Secretary of State P. C. Knox and the Mexican Minister of Foreign Affairs, Pedro Lascurain, met in conference at Washington, D.C., on January 3, 1913. Knox reviewed "the substance of" what occurred as follows:

Early in the negotiations it appeared that the Mexican Government was prepared to effect a settlement on the basis of exchanging its claim to the Chamizal tract for a guaranteed supply of water somewhere along the boundary for irrigation purposes, either from the Rio Grande by increasing the amount to be delivered under the treaty of 1906 with Mexico, or from the Colorado River in connection with the settlement of the question of the distribution of the waters of that river and other related questions. Combining the negotiations for the settlement of the Chamizal question with those for the adjustment of the Colorado River matters would lead to delays and complications which would unduly postpone the settlement of the question, and inasmuch as the subjects of the two controversies were wholly

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Interior Walter L. Fisher to the President, June 13, 1912. Fisher's letter had an inclosure: Board of Supervisors, Imperial County, California, to the Secretary of the Interior, June 7, 1911; it was pointed out that the floods of 1905-1907 were estimated to have cost between five and seven million dollars "in money expended to control the river and for the damage wrought."

<sup>47</sup>Ibid., letter of H. Wilson to Ambassador H. L. Wilson, September 10, 1912; Ibid., letter of Mexican Minister of Foreign Affairs to Ambassador Wilson, November 20, 1912.

unrelated, it was finally decided that it would be advisable to deal with them separately.<sup>48</sup>

On February 8, 1913, Assistant Secretary Adee, acting for Secretary Knox, forwarded a counter draft of the amended convention with which the Mexican Minister of Fomento on May 3 announced his practical agreement.<sup>49</sup> However, later Ambassador Wilson wired that General Huerta had refused to consider the Colorado question until after the American government had extended formal recognition to his government. Wilson's message to the State Department, in part, was:

The President yesterday informed me that public opinion was being greatly irritated throughout the country on account of the delay of our Government in recognizing the present Provisional Government.\* \* \* Huerta said that on this account his Government did not feel that it would be justified, in view of a hostile public opinion and of the undignified position in which it would be placed by so doing, in concluding the important questions at present pending between the two Governments--that is to say, the Chamizal and Colorado River cases.<sup>50</sup>

Negotiations between the United States and Mexico

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<sup>48</sup>Ibid., Memorandum of conversation between the Secretary of State and the Minister for Foreign Affairs of Mexico, January 3, 1913; Ibid., P. C. Knox to the American Ambassador, January 14, 1913.

<sup>49</sup>Ibid., letter of A. A. Adee to the American Ambassador, February 8, 1913; Ibid., letter of Minister of Fomento to Minister of Foreign Affairs (translated), May 3, 1913; Ibid., telegram of Ambassador Wilson to the Secretary of State, May 3, 1913.

<sup>50</sup>Ibid., the American Ambassador H. L. Wilson to the Secretary of State, May 8, 1913.

were not resumed until 1925. The long delay in reaching a satisfactory adjustment of the Colorado River question was a natural consequence of the long period of revolutions and economic reforms which followed the retirement of Diaz from the government of Mexico--a new era which began largely as a protest against the increasing cooperation of the Diaz government with the peaceful penetration of Mexico by American enterprise.<sup>51</sup>

The Imperial Valley of California was experiencing a period of transition while the international bargaining was going forward.

Following the receivership of the California Development Company, which owned the stock of the original Mexican company, a new Mexican company was formed, namely, Compania de Terrenos y Aguas de la Baja California. The life of the latter company was extended for fifty years from August 20, 1910.<sup>52</sup>

In 1911 the settlers of the valley voted to form an irrigation district. The Southern Pacific Company had acquired the entire system of the California Development Company at the receiver's sale, so the irrigation district voted a bond issue of \$3,500,000 to buy out the Southern Pacific's interest for three million and to make

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<sup>51</sup>Callahan, American Foreign Policy. . . , p. 470.

<sup>52</sup>U.S., Congress, Senate, Committee on Irrigation and Reclamation, Hearings, 69th Congress, 1st Session, 1925, pp. 96-101.

improvements of half a million. In June of 1916 the sale was consummated when the Southern Pacific accepted the three million dollars from the district. This purchase, of course, included the assets of the new subsidiary Mexican company to which the works of the Imperial Canal system in Mexico had passed.<sup>53</sup>

Therefore, the Imperial Irrigation District succeeded to all of the rights of the California Development Company. The rights, made under the old code filings, have never been seriously questioned.<sup>54</sup>

In 1912 Volcano Lake Levee was raised a few feet and widened; this program was under the auspices of the United States government, using funds remaining from the 1910 appropriation for Ockerson Levee. In the same year, Mexico was advised by the new "Compania" to safeguard her rights on the Colorado. In a letter dated March 18, 1912, Mexico was urged to "strive while the opportunity was given it to secure sufficient water for irrigation"<sup>55</sup> of her lands; no time was to be lost in negotiating a treaty, remembering that the company solicited water on the same estimate of 5.5 acre-feet per acre as the United States

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<sup>53</sup>Ibid., pp. 103-112.

<sup>54</sup>U.S., Congress, Senate, Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 79th Cong., 1st Sess., 1945, p. 1282.

<sup>55</sup>Foreign Relations, 1913, pp. 969-70, letter of Compania de Terrenos to Don Manual Calero, Minister of Relations in Mexico, March 18, 1912.

appropriation of water for its projects. This request was made with the object of immediately placing the water upon the land by pumping, in order to create an actual diversion of water which would be used by the Mexican government as a basis on which to demand that quantity, on the ground of accomplished diversion and use.

Every year the levees had to be heightened as the River deposited silt and raised its bed faster than dirt could be piled. In 1914 the Volcano Lake Levee was breached and 10,000 cubic feet of water per second flowed through the levee into the Imperial Valley for many days before repairs could be made. In 1915 Congress appropriated \$100,000 to protect Imperial Valley, this money to be spent under the direction of the Secretary of Interior when the Imperial Irrigation District had raised a like amount.<sup>56</sup>

The continuing struggle against the Colorado was made doubly tedious by the location of the main canal and levees below the border. Every set of plans for improvement was subject to interminable delays by Mexican officials. Local authorities in Lower California insisted on tying the district's hands, taking advantage of the fact that an American group was dependent on Mexico for water and flood control. Each carload of rock bound for the Colorado levees was stopped at the

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<sup>56</sup>U.S., Statutes at Large, XXXIX, 729-32.

border for customs duty. During one period every member of the district's levee crew was stopped daily at the border on the way to work and asked persistent questions by the customs officers.<sup>57</sup>

Under these conditions, Imperial Valley could not hold its destiny in its own hands. As long as its life-blood depended upon the whim of a foreign authority, it had no security in its water supply or in its defense against floods.

The agitation for an all-American canal began to crystallize into definite action in 1917. A Contract was executed between the Secretary of the Interior and the Imperial Laguna Canal Company to irrigate a tract of land comprising 120,000 to 200,000 acres adjoining the Imperial Valley by means of an all-American canal some thirty miles in length.<sup>58</sup> The water was to be taken from the River at Laguna Dam, and surveys of the route were begun.

Later it was proposed to construct the canal to irrigate the entire Imperial Valley. On February 16, 1918, a co-operative agreement was entered into between the Imperial Irrigation District and the Department of the Interior to make a complete investigation, survey,

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<sup>57</sup>U.S., Congress, House, Report of the American Section of the International Water Commission, 71st Cong., 2d Sess., 1930, House Doc. 359, pp. 86-91.

<sup>58</sup>"Report on the River Colorado," Engineering News Record, LXXVIII (April 2, 1917), No. 13, 235.

and cost estimate of a canal from Laguna Dam to Imperial Valley. Two-thirds of the cost of this investigation was to be borne by the district and one-third by the government.<sup>59</sup>

To maintain development, the Imperial District operated an extensive system of irrigation and protective works in Mexico. Rockwood Heading was built in 1917 at a cost of \$250,000, and a canal was dug from Rockwood Intake to Hanlon Heading. The main canal was improved, and lateral canals were constructed. Railways were built along the levees, and the Pescadero Cut was dredged as another protective measure. By 1919, even breaks in the Ockerson Levee were repaired and revetted.<sup>60</sup>

Improvements all along the river's course were progressing. The water was being captured for beneficial use at last; the stream was being harnessed. But the era of planning and development was only dawning for the Colorado River.

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<sup>59</sup>U.S., Congress, Senate, Problems of Imperial Valley and Vicinity, 67th Cong., 2d Sess., 1922, Senate Doc. 142, pp. 32-35.

<sup>60</sup>Report of the American Section of the International Water Commission, 1930, House Doc. 359, pp. 20-22, 116.

## CHAPTER III

### THE INTERNATIONAL WATER COMMISSION

The 1920's are distinguished as a decade when significant schemes were formulated to advance Colorado River development. The period began with the promise of interstate accord on the division of river waters; it ended with the failure of an international understanding between Mexico and the United States.

The use of water in the lower river area had reached the maximum possible without extensive storage regulation. Demands for additional water had created a critical situation which resulted in the Colorado River Compact, the Boulder Canyon Project Act, and subsequent acts of a similar nature.

On March 17, 1920, at Los Angeles, California, the representatives of the "Southwestern League of the United States" unanimously resolved to support five motions, one of which was that the United States Government should come to an agreement with that of Mexico on equitable contribution to the expenses involved in the future utilization of Colorado River waters for irrigation purposes and motive power.<sup>1</sup> The session was attended by

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<sup>1</sup>U.S., Department of State, Foreign Relations, 1921, pp. 515-17, letter of the Mexican Embassy to the Department of State, October 15, 1921.

an agent of the Northern District of Lower California and by the chief engineer of the Mexican Colorado River Irrigation Commission.

As a result of the Los Angeles meeting, the Secretary of the Embassy of Mexico requested of the Department of State that the rights of Mexico be given due consideration in any future conferences or agreements.<sup>2</sup> In reply the chief of the Mexican Division said the Department of State had no official knowledge of the session specified.<sup>3</sup> Later, on March 3, 1921, the Division Chief, having been informed of the conference, further replied that the State Department would in due course "acquaint the proper Mexican authorities with the steps that might be taken in the future and which might affect the rights held in common by Mexico and the United States over the waters of the Colorado River."<sup>4</sup>

When on August 19, 1921, Congress passed an act "authorizing an agreement between the States of Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming, relative to the disposal of the waters of the Colorado

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<sup>2</sup>Ibid., oral communications related in the letter of October 15, 1921. November 14, 1920 and March 3, 1921 were the two dates given when the Mexican Secretary applied in person to the Chief of the Division of Mexican Affairs.

<sup>3</sup>Ibid., the oral communication of the Chief of the Division to the Mexican Secretary, November 14, 1920.

<sup>4</sup>Ibid., Chief of the Division to the Mexican Secretary, March 3, 1921.

River,"<sup>5</sup> the Embassy of Mexico applied to the Department asking that Mexico be given consideration as a party in the studies and projects that were to be undertaken concerning the distribution and utilization of the River. The message reasoned further:

For as long as Mexico and the United States shall not have framed a final agreement definitely stating the rights and obligations with respect to the conservation of the stream of the river, the utilization of its waters as a way of communication, its use for irrigation purposes and motive power, and the manner of protecting the land of both countries from the danger of flood, neither party can put into practice any project whatsoever, without a breach of the existing international treaties.<sup>6</sup>

The position taken by Mexico was indeed unrealistic and rather extreme.

On October 24, the Department of State was notified by the Mexican Embassy that a conference of representatives of seven States and of the United States was about to convene "somewhere in the West" to discuss interstate storage and distribution of Colorado River waters. Because of her interest in the matter, Mexico desired admittance to the conferences. In making the application:

...the Embassy of Mexico ventures to bring to the special notice of the Department of State that the greater part of the land benefited by

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<sup>5</sup>U.S., Statutes at Large, XLII, 171.

<sup>6</sup>Foreign Relations, 1921, p. 517, letter of the Mexican Embassy to the Department of State, October 15, 1921.

the waters of the river is owned by American companies or citizens, to whom it is the Mexican Government's duty and desire to extend the same protection as it accords to the national companies and citizens of the Republic.<sup>7</sup>

In reply, M. E. Hanna, acting chief of the Division of Mexican Affairs, admitted that a conference was contemplated, but it would treat only domestic matters.<sup>8</sup> Moreover, on November 9, Hanna indicated that the considerations of the delegates, recently appointed, would "not affect Mexico in any way."<sup>9</sup>

Mexico remained suspicious of the proceedings at the proposed Santa Fe Conference. On December 3, 1921, El Universal published an article to the effect that cotton-growers of Arizona and California were seeking by means of dams and impoundings to deprive Mexicans altogether of the waters of the Colorado River to which they were "justly entitled."<sup>10</sup>

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<sup>7</sup>Ibid., pp. 518-22, letter of the Mexican Embassy to the Dept. of State, October 24, 1921.

<sup>8</sup>Ibid., memorandum of Matthew E. Hanna, Acting Chief of the Division of Mexican Affairs, October 24, 1921.

<sup>9</sup>Ibid., letter of the Acting Chief of the Division of Mexican Affairs to the First Secretary of the Mexican Embassy, November 9, 1921.

<sup>10</sup>Ibid., letter of the Charge in Mexico to the Secretary of State, December 5, 1921. It was further related that the appointment of a Mexican Commission had been communicated to the League of the Southwest, in response to its telegram dated December 2 in which the League announced its desire to "accord due honors and hospitality" to the Commission at a conference to be held in Riverside, California. Throughout the remainder

Secretary of Commerce Herbert Hoover, the representative of the United States at the Santa Fe meeting, was informed of Mexico's claim for admittance. He responded to the Secretary of State on April 20, 1922: "It has not occurred to me that the Mexican Government can rightly claim any representation in a Commission engaged in domestic considerations, or to have access to its records."<sup>11</sup> Yet, evidently Mr. Hoover was worried about the Mexican problem on the Colorado, for he received a welcome letter of advice from Charles Evans Hughes on August 17, 1922 while the Conference was deliberating at Santa Fe.

Hughes counseled Hoover that the proposed interstate compact for apportionment of river water should not be approved unless the interests of Mexico were taken into consideration "as a matter of equity." It was the opinion of Hughes that "the treaties of 1848 and 1853 contain a prohibition of action by either Government along the common boundary line which might impede

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of the decade, it was common for Mexican delegates to be present at conferences dealing with Colorado River matters; their attendance was usually unofficial. See L. Ward Bannister's account in Reuel Leslie Olson, The Colorado River Compact (Cambridge, Mass.: by author, 1926), pp. 36-37.

<sup>11</sup>Ibid., pp. 325-29, letter of Herbert Hoover to the Secretary of State, April 20, 1922.

navigation."<sup>12</sup> The force and effect of Article V of the Boundary Convention of 1884 would "seem to be to continue the mentioned prohibition, notwithstanding a change in the channel of the river so as to include any part of such channel within the territory of one of the contracting parties."<sup>13</sup> With respect to work wholly within United States territory, Hughes felt the treaty provisions would not be applicable.

Meanwhile, the Mexican representative in Washington persistently indicated to the State Department the concern of Mexico over reported proceedings of the so-called "Colorado River Commission" and referred to alleged treaty rights respecting the disposition of the river waters.<sup>14</sup>

After weeks of debate and compromise at Santa Fe, New Mexico, the "Colorado River Compact" was signed on November 24, 1922 by the appointed "Commissioners" from each of the seven Basin States and by Herbert Hoover. Before signatures were affixed to the document, there was an extensive discussion about the share of

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<sup>12</sup>U.S., Congress, House, Report of the American Section of the International Water Commission, 71st Cong., 2d Sess., 1930, House Doc. 359, pp. 261-65, letter of Charles E. Hughes to Herbert Hoover, August 17, 1922.

<sup>13</sup>Ibid.

<sup>14</sup>Ibid., pp. 265-67, letters of the Mexican Ambassador to the Secretary of State, July 29 and August 12, 1922.

the waters which might be granted to Mexico by treaty.<sup>15</sup> This question of the participation of Mexico in the use of the stream caused Mr. Hoover to assert that international issues should be excluded from consideration. The minutes of the meetings showed that at least twenty pages of testimony and discussion dealing with the Mexican phase of the problem were deleted from the records of the Commission's proceedings.<sup>16</sup> The Commissioners seemed to agree that they could not handle international questions, but the matter proved difficult to suppress.

The Colorado River Compact divides the River System into "Upper Basin" and "Lower Basin," with Lee Ferry as the point of division.<sup>17</sup> Rather than apportion the precious water among the individual States, the Compact merely allocates by volume to the two Basins. Article III assigns the exclusive beneficial consumptive use of 7,500,000 acre feet per annum to each of the basins. This

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<sup>15</sup>Olson, The Colorado River Compact, pp. 35-36.

<sup>16</sup>Ibid. "Chairman Hoover: 'I want to make a suggestion to you, that is that we should cut out all discussion with reference to Mexico everywhere because we have presented arguments pro and con that will yet be quoted against us. With that problem we don't want to embarrass anybody about it and if nobody dissents I will take occasion to cut out all discussions as far as these meetings are concerned'." Colorado River Commission, Minutes of the Twenty-Second Meeting (Bishop's Lodge, Santa Fe, N.M.: November 22, 1922), pp. 1-2.

<sup>17</sup>U.S., Congress, House, Colorado River Compact, 67th Cong., 4th Sess., 1923, House Doc. 605, pp. 7-12. Article II(f) and (g).

apportionment, it is declared, will be in perpetuity, and the amount given to each Basin "shall include all water necessary for the supply of any rights which may now exist."<sup>18</sup>

Supposedly, the effect of Article III (c) is to settle in advance among the signatory states the question as to how the burden of possible treaty obligations to Mexico shall be borne. The stipulation is that any future supply of water for Mexican use must come, first, from surplus amounts over and above those already apportioned for the use of the two Basins, and that if this surplus should prove to be insufficient the deficiency must be borne equally by the two Basins.<sup>19</sup> Therefore, until some definite determination shall have been reached concerning the water rights of Mexico, conditions in the Upper and Lower Basin seem to remain indefinite and subject to change.

The United States Government in its dealings with Mexico appears not to be in any way embarrassed or limited by the terms of the Compact. In 1923 Herbert Hoover was asked by Arizona's Representative in the Congress, Carl Hayden, to interpret paragraph (c) of Article III. Hoover responded with these words:

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<sup>18</sup>Ibid., Article III(a).

<sup>19</sup>Ibid., Article III(c).

Paragraph (c) of Article III does not contemplate any treaty. It recognizes the possibility that a treaty may at some time be made and that under it Mexico may become entitled to the use of some water, and divides the burden in such an event, but the quantity to which that country may become entitled and the manner, terms, and conditions upon which such use may depend, can not be foreseen. It is a certainty that no such treaty will be negotiated and ratified which is unfair to the United States or any State or detrimental to their interests...<sup>20</sup>

Of the seven States involved at the Santa Fe Conference, Arizona alone withheld immediate ratification because of her misgivings about the more developed areas in the Colorado Basin. Arizona was apprehensive that the rapid expansion of the use of water in California and in Mexico would establish rights to so much of the lower basin allotment that there would not be enough water to permit the future appropriations necessary for her own continuous development. Therefore she asked that the United States enter a treaty with Mexico limiting the amount of water that the Mexicans might receive.<sup>21</sup> Arizona also demanded, before she would ratify the Compact, that an agreement between Arizona, California, and Nevada be affirmed definitely dividing

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<sup>20</sup>U.S., Congressional Record, 67th Cong., 4th Sess., 1923, LXIX, 2, Herbert Hoover, Replies to Questions on the Compact.

<sup>21</sup>D.R. Van Petten, "Arizona's Stand on the Santa Fe Compact and the Boulder Dam Project Act," New Mexico Historical Review, XVII (No. 1), 9-11. See also Arizona Daily Star, February 10, 1923, p. 1.

the lower-basin waters among the three States.<sup>22</sup>

The most significant figure in the politics of Arizona from 1922 to 1932 was George W. P. Hunt. He, more than any other politician, was able to dramatize the struggle of Arizona against California and Mexico during his last four terms as Democratic governor.<sup>23</sup>

While the Santa Fe Compact was giving rise to the first big contest between California and Arizona, Imperial Irrigation District and Harry Chandler's Colorado River Land Company were not idle. In 1922 Pescadero Cut and Bee River Dam were completed in order to turn the River southwest to its old bed. Saiz Levee, overtopped in the flood of 1921, was rebuilt and connected with Volcano Lake Levee by the Colorado River Land Company.<sup>24</sup>

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<sup>22</sup>Paul L. Kleinsorge, The Boulder Canyon Project (Stanford, California: Stanford Univ. Press, 1941), pp. 93-94.

<sup>23</sup>Arizona Republican, November 17, 1922, pp. 1-2. See also George W. P. Hunt, Why I Oppose the Approval of the Colorado River Compact (pamphlet, 1924), p. 5, letter of Hunt to Governor Friend W. Richardson of California, October 19, 1923. "Development in California and Mexico will naturally be earlier than development in Arizona, with the result that by the time Arizona might be ready to utilize her share of the water, the rights would have been acquired by California and Mexico, which would make it impossible for Arizona to develop her lands."

<sup>24</sup>Report of the American Section of the International Water Commission, 1930, House Doc. 359, pp. 121-24, Appendix: "Data on Irrigated Areas in the Colorado Basin," by Frank Adams and J. L. Favela. "While generous help on the flood-control problem has

Yet, it appeared that to save Imperial Valley there was a need for construction of a large storage and flood-control dam upstream in the canyon country. The resources of the valley were not equal to such a tremendous project, and besides the Salton Basin communities were in no position to solve the economic and political problems involved. Without federal aid, the Imperial Valley could do nothing but fight a losing battle against the river and await her fate.<sup>25</sup> The Yuma Valley of Arizona shared a common destiny with her California neighbors.

The needs of the lower-basin Valleys became the concern of leading California politicians in Washington,

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been extended by the United States and the Colorado River Land Co., assisted during 1927 by the Mexican Government, the greatest financial burden of controlling the river, since it was turned back from flowing into the Salton Sea, has fallen on the landowners of Imperial Valley north of the international boundary." See also U.S., Congress, Senate, Committee on Irrigation and Reclamation, Hearings, Colorado River Basin, 68th Cong., 2d Sess., 1924, p. 170.

<sup>25</sup>"The Imperial Valley is not the only district in the lower Colorado region that has suffered from river floods. All projects and settlements along the lower river are subject to floods of serious proportions; but the inundations are not permanent as in the case of the Salton Basin, which lies below sea level. The exceptional danger to the Imperial Valley has attracted attention away from the flood threat to the town of Yuma and the Yuma Valley, to the Coachella Valley, to the Cibola and Palo Verde valleys, to Parker Valley, to the town of Needles and the Mohave Valley, and to other developments along the river which are subject to overflow during periods of high water." Kleinsorge, The Boulder Canyon Project, pp. 113-14.

namely, Senator Hiram Johnson and Representative Phil D. Swing. The campaign for a huge dam at Black (or Boulder) Canyon, with appurtenant works, was waged on a colossal scale from the time of the Santa Fe Conference until the end of 1928, when the "Boulder Canyon Project Act" became a reality.<sup>26</sup>

Arizona in the 1920's was opposed to California's "Swing-Johnson Bill." Spokesmen for the state expressed the fear that a flood-control dam at Boulder Canyon would make feasible much larger agricultural development in Mexico, and "that if drought should come and the share of Mexico be unavailable from the upper reaches of the river, Arizona would have to contribute the water she had stored in her Gila irrigation system."<sup>27</sup> Moreover, Arizona's "Highline Reclamation Association" had adopted a proposal to counter California's schemes. Organized in 1923 by Fred T. Colter, the Highline Association agitated for an independent undertaking by the State to build dams and reservoirs at Glen and Bridge Canyons in the northern part of Arizona.<sup>28</sup> Through the construction of tunnels and canals, the "High-Liners" hoped to

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<sup>26</sup>Ibid., p. 130-152.

<sup>27</sup>Van Petten, New Mexico Historical Review, XVII, No. 1, 4; G. E. P. Smith, "Harnessing the Colorado River," Pan-American Geologist, XLIV, 48.

<sup>28</sup>See Arizona Highline Reclamation Association, Highline Book (Fred T. Colter, 1934).

irrigate as much as six million acres of land by gravity, but investigations showed that the cost of the project was too great to be within the limits of economic practicality.<sup>29</sup>

Arizona, apprehensive of the demands of the remaining river basin area, was not alone in her anxiety towards Mexico. Throughout the interstate river conferences the fear was expressed that there might be a possibility in the future of an excessive amount of water being allocated to Mexico by treaty and that the allocation of this water would hamper and prevent proper development of promising areas in the United States.<sup>30</sup> The fact that Americans owned the larger portion of land in Mexico, which was irrigated from the Colorado, did not decrease

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<sup>29</sup>G. E. P. Smith, Arizona Viewpoint on the Colorado River (Tucson: Univ. of Arizona, 1923), p. 2-5.

<sup>30</sup>Malcolm B. Parsons, "The Colorado River in Arizona Politics" (unpublished Master's thesis, University of Arizona, 1947), p. 162-64. Also U.S., Congress, House, Boulder Canyon Reclamation Project, 69th Cong., 2d Sess., 1926, H.R. 1657, p. 16. - "In 1927, allowing for evaporation and losses in transit, the total use of water by California and Mexico was 4,200,000 acre-feet." Arizona Colorado River Committee, Report of Committee (Phoenix, Jan. 1, 1927), pp. 10-14. The Conferees were unanimous in the opinion that Mexico should not obtain even moral right to additional water made available by storage within the U.S. Any water allotted Mexico "must be deducted from the amount contained in the main stream and not from the water of the tributaries." Ibid.

the opposition in the United States to Mexican expansion.<sup>31</sup>

At the "Conference of Governors" held in Denver, Colorado, in 1927, a resolution was adopted, declaring adherence of the seven basin States to the policy that waters stored on American soil should be for the benefit of American lands and interests, and that Mexico should acquire no right, legal or moral, to the use of stored waters conserved by American energy and expenditure. The President and the United States Department of State were requested to act promptly in the matter of effecting a treaty with Mexico which would "define and limit" that

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<sup>31</sup>Olson, The Colorado River Compact, p. 179. Harry Chandler's Colorado River Land Company owned 75% of the irrigable Mexican lands according to La Revista Agricola (Mexico City: April, 1922), "Mexican Lands Irrigable by the Colorado River", p. 301. In 1929 it was reported: "Most of the land under irrigation is controlled by American interests or syndicates, not allied with, and largely antagonistic to, the agricultural interests in the Imperial Valley on the U.S. side of the boundary. Seemingly in an effort to build up a maximum demand for water, it is reported that vast areas of this Mexican land are placed under irrigation one year and the following year allowed to go dry and the water diverted upon another area." - California, Colorado River and the Boulder Canyon Project (Los Angeles: Colorado River Commission of Calif., 1930), p. 292. Frank Adams in his report from an inspection trip said: "Together these American interests control 876,500 acres, and of this something more or less than 200,000 acres is irrigated. The Mexican Government owns 35,500 acres and the Andrade estate owns 50,000." - Report of the American Section of the International Water Commission, 1930, House Doc. 359, p. 125. "Harry Chandler, publisher of the Los Angeles Times, organized a syndicate which purchased 862,000 acres of land in Lower California in 1899. He is president of the California-Mexico Land & Cattle Co." - Who's Who, 1932-33.

country's rights in and to the waters of the Colorado River. Furthermore, the "Memorialists" prayed that, in the formation of any commission for the purpose of negotiating a treaty, the States of the Colorado River Basin be adequately represented.<sup>32</sup>

Earlier the same year, Arizona's Carl Hayden echoed sentiments in harmony with the Governors' resolution at Denver. During the Congressional Hearings on the proposed program for the Colorado Basin, Representative Hayden spoke in behalf of Arizona agricultural interests which looked with alarm at expanding cotton production in Mexico.<sup>33</sup> In order to combat such expansion Hayden recommended that a treaty limitation be imposed on the appropriation of water by Mexico and that the big dam be placed higher up the river to facilitate reclamation of more lands in Arizona. Finally, the "Asiatic menace" argument--popular at the time--was injected to fortify the Congressman's statements; he said that the kind of people who would occupy and cultivate the Mexican lands were:

...Chinese coolies, the Japanese laborers, and the Mexican peons, who are now in that country. It is cheap labor of that character with which

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<sup>32</sup>Conference of Governors, Partial Proceedings of Conference of Governors (Phoenix: Arizona Commission on the Colorado River, 1927), "Memorial", pp. 15-17.

<sup>33</sup>Parsons, "The Colorado River in Arizona Politics," p. 166.

they grow crops in Mexico. The principal crop produced is cotton. It is a wonderful cotton country. The United States will furnish water to a million acres of Mexican land upon which crops grown by cheap labor will compete with that grown by American farmers. The delta of the Colorado River is the only place, under the terms of this bill, where the water stored at Boulder Canyon can go, and that is just what will happen if this bill becomes a law.<sup>34</sup>

Strangely enough, the Chandler interests fought the Boulder Dam development program because they viewed it as restrictive of their farming projects in Mexico. At the same time, Arizona farming interests--which disliked the Chandler "syndicate"--opposed the Santa Fe Compact and the Boulder Dam proposals because neither of them made any specific restriction on the amount of water in the Colorado which could be used in Mexico.<sup>35</sup> Arizona's chances to defeat her southern neighbor in the race to establish water rights based on prior use were considered extremely remote; agricultural development

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<sup>34</sup>U.S., Congress, House, Boulder Dam, Hearings on H.R. 9826, 69th Cong., 2d Sess., 1927, Part I, pp. 66-67. "The principal use of water from the Colorado River in Lower California was for cotton, 72% of the Mexican area supplied from the Imperial Canal system in 1927 having been in that crop. Alfalfa came next, with 23%, followed by 4% in grains and 1% in miscellaneous crops. The total area reported irrigated from Imperial Canal system in Mexico in 1927 was 156,168 acres. On the American side a greater return can be secured from diversified vegetable and fruit crops, and the products from the new American lands will undoubtedly be of that character." E. F. Scattergood, "Engineering and Economic Features of Boulder Dam," Annals of the American Academy of Political and Social Science, CXXXV (No. 224), 122.

<sup>35</sup>Parsons, "The Colorado River. . .," pp. 164-68.

in Arizona would thus be limited to the small amount of water available above the established appropriations.

To counteract the Arizona objections, California proponents of the Boulder Canyon Project pointed out that their opponents had not mentioned the All-American Canal feature of the Act which was designed to solve the Mexican problem and not to complicate the situation.<sup>36</sup>

The All-American Canal would not only give Imperial Valley a more dependable water supply, but it would end the necessity of the Concession whereby the Mexican farmers had the right to take half the water diverted through the old canal. American lands would have first call on the water flowing through the proposed Canal; as far as the American farmers were concerned, the Imperial Canal could be abandoned.<sup>37</sup> Therefore, the Imperial Valley people eagerly supported the project which would bring water to them by an all-American route.

In the year 1928 the "Swing-Johnson Bill" was presented for Congressional scrutiny. Those for and against the measure were unreserved in their denunciations of Harry Chandler and his orientally cultivated lands in Mexico. On December 10, when the bill was being debated

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<sup>36</sup>"The All American Canal," New Reclamation Era, March, 1926, XVII (No. 3), p. 40.

<sup>37</sup>Kleinsorge, The Boulder Canyon Project, pp. 119-23.

on the Senate floor, Senator Key Pittman of Nevada described Mexico's situation in one concise sentence:

"I think that under the comity that exists between nations the only water that Mexico could claim would be water that she has appropriated from the natural flow of the stream, and that she could claim none of the benefits of the water increased by our impounding works."<sup>38</sup> The Senator's statement was accepted by his colleagues without a dissenting voice.

On December 21, 1928, in spite of Arizona's contentions, the Swing-Johnson Bill was approved and became the Boulder Canyon Project Act. The purposes of the Project were: (1) the control of floods; (2) the improvement of navigation; (3) the regulation of flow; (4) the storage of water for the reclamation of public lands and other beneficial uses exclusively within the United States; and (5) the generation of electrical energy.<sup>39</sup>

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<sup>38</sup>Reported in U.S., Congress, Senate, Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 79th Cong., 1st Sess., 1945, p. 37.

<sup>39</sup>U.S., Statutes at Large, XLV, Part 1, 1057-66, Section 1. From August 4 to October 16, 1924, the first great loss due to drought was sustained in the Imperial Valley. For ninety-six days all of the water in the river was diverted into the Imperial Canal, and after half of the water in the canal had been taken to fulfill Mexican requirements there was not enough left for proper irrigation of the American lands. "The crop loss was estimated at not less than five million dollars, and for several days during the drought there was barely enough water for stock and domestic purposes." - U.S., Congress, House, Report on Imperial Valley, 69th Cong., 2d Sess., 1926, H.R. 1657, Part 1, p. 16. The Boulder Canyon Project

Benefits which might accrue to Mexican lands were incidental to, rather than a part of, the objectives achieved in the Act.

The three major accomplishments of the legislation were: (1) the Colorado River Compact was ratified, and provision was made that in the event only six States should ratify it, the Compact should become effective as a six-State agreement, provided California was one of the adhering parties and provided further that California should agree to limit her use of water for the benefit of the other States; (2) the construction of a dam at Black or Boulder Canyon was authorized; (3) the construction of an All-American Canal connecting the Imperial and Coachella Valleys with the Colorado River was allowed.<sup>40</sup>

The amended language of Section 1 of the Act, which declares that water stored by the proposed dam is for beneficial use exclusively within the United States, is a provision of importance, since inferentially it is

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helped solve the drought problem through the provision of water storage sufficient not only for present needs but for considerable expansion in the area irrigated, and it eliminated "the threat of lawsuits and injunctions by the lower basin to force the upper basin to augment the flow of water during periods of small runoff." Ibid.

<sup>40</sup>U.S., Congress, Senate, Committee on Irrigation and Reclamation, Hearings, Protection and Development of the Lower Colorado River Basin, 70th Cong., 1st Sess., 1928, pp. 303-06. For the construction of the Dam and Canal, \$165,000,000 was appropriated. See Section 13 a of the Project Act: Statutes at Large, XLV, 1057-66.

a notice to Mexico that her rights cease with the exhaustion of the normal flow of the river.<sup>41</sup> However, it seems likely that the benefits of the provision are nullified by the concluding paragraph which states that "nothing in this Act shall be construed as a denial or recognition of any rights, if any, in Mexico to the use of the waters of the Colorado River system."<sup>42</sup>

Recalcitrant Arizona still refused ratification of the Compact and accordingly partnership in the river development plan. Nevertheless, with the approval of California, Colorado, Nevada, New Mexico, Utah and Wyoming, the Colorado River Compact became operative as provided for in the Project Act.<sup>43</sup>

California's Self-Limitation Act of March 4, 1929, placed that state on record as in agreement with the division of the waters in the Colorado Basin. Arizona was to receive the right to use annually one-half of the surplus waters of the Colorado and also to obtain exclusive usage of the Gila River and its tributaries, except such return flow as might find its way back into the Colorado. Furthermore, the Gila was not

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<sup>41</sup>Ibid., Section 1. See also Ray Lyman Wilbur and Northcutt Ely, The Hoover Dam Power and Water Contracts (Washington, D.C.: U.S. Government Printing Office, 1933), pp. 564-69.

<sup>42</sup>Statutes at Large, XLV, 1057-66, Section 20.

<sup>43</sup>Ibid., Section 4(a).

to contribute toward water for Mexico under any treaty entered into by the United States.<sup>44</sup>

While the Basin States attempted to work out a formula to remedy the river problem among themselves, the Governments of Mexico and the United States became interested in a resumption of negotiations to determine riparian rights.

Discussions on the international level were initiated in a rather unexpected manner; commencing with the Rio Grande, they concluded with the three major rivers which are on the Mexican border. In 1924 the "Commission on the Equitable Use of the Waters of the Lower Rio Grande" was created by act of Congress; the appointment of three commissioners was authorized to cooperate with Mexican representatives in a study of the Rio Grande below Fort Quitman.<sup>45</sup> Pursuant to the Act's authorization, President Calvin Coolidge in January of 1925 designated the following commissioners: Dr. Elwood Mead, Director of the Bureau of Reclamation, chairman; General Lansing H. Beach, a retired army officer; and W. E. Anderson, a civil engineer experienced in reclamation work.<sup>46</sup>

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<sup>44</sup>California, Statutes, 1929, Chap. 15, 37-39. California agreed to limit her annual consumptive use of water to 4,400,000 acre-feet plus one-half of any surplus waters unapportioned by the Colorado River Compact.

<sup>45</sup>U.S., Statutes at Large, XLIII, 118; approved on May 13, 1924.

<sup>46</sup>Report of the American Section of the International Water Commission, 1930, House Doc. 359, p. 1.

On January 14, 1925, H. F. Arthur Schoenfeld, American Charge d'Affaires in Mexico, received a communication from Aaron Saenz, Mexican Secretary of Foreign Affairs; the "renewal of negotiations" concerning the distribution of Colorado River waters "on the basis established in 1912" was solicited.<sup>47</sup> Saenz also stated that, for the past three years, his Government had been occupied in gathering "all the necessary data" pertaining to the international rivers, but Mexican appointments to the Rio Grande Commission would not be forthcoming until certain rules of procedure were first agreed upon to "govern their labor."<sup>48</sup>

What the Mexicans really wanted, however, was inclusion of the Colorado River question in the assigned work of the Commission for the Rio Grande--a fact which was demonstrated by their Embassy's notes to Secretary of State Hughes.<sup>49</sup> Indeed, the reason for their delay in appointing representatives was not procedural, but strictly substantive.

In response to Charles Evans Hughes' statement

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<sup>47</sup>U.S., Congress, Senate, Report on the Colorado River, 70th Cong., 1st Sess., 1928, Senate Doc. 163, pp. 1-7, letter of A. Saenz to H. F. Arthur Schoenfeld, January 14, 1925.

<sup>48</sup>Ibid.

<sup>49</sup>Ibid., letters of the Mexican Embassy to the Secretary of State, January 6 and 10, 1925.

that the Colorado River and the Rio Grande "would appear to be two distinct subjects," the Mexican Government concurred but said that they could only be discussed "by the same commission."<sup>50</sup> The motives expressed by the Mexicans for including the Colorado problem in the studies were:

Negotiations having been effected which will tend to fix the bases which should control the labors of the investigating commission, it seemed more logical to begin by discussing the matter of the international rivers at the point which seemed most advanced. One must take into account the existence of prior negotiations on the Colorado and the lack thereof with respect to the Rio Grande, as well as the importance which public opinion in the United States has given to the use of the waters of the Colorado.<sup>51</sup>

The Mexicans seemed well aware of the protests coming to Washington from the Basin States about water appropriations south of the Border.

By 1926 the United States State Department understood that the Mexican Government would only consider the two rivers together by the same international commission. On August 13, 1926, Ambassador James R. Sheffield admitted that the United States would designate representatives "on that basis" to confer with representatives of Mexico for the purpose of studying the subjects and

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<sup>50</sup>Ibid., letter of Hughes to the Mexican Embassy, January 17, 1925; letter of A. Saenz to Charge d' Affaires Schoenfeld, January 26, 1925.

<sup>51</sup>Ibid., Saenz to Schoenfeld, January 26, 1925.

submitting recommendations for use as a basis of an agreement.<sup>52</sup>

Conformably to the exchange of communications in 1925 and 1926, the United States Congress on March 3, 1927, passed a joint resolution authorizing the President to appoint commissioners to cooperate with Mexico in a study regarding the equitable use of the waters of the three international rivers (Rio Grande, Colorado and Tia Juana) "for the purpose of securing information on which to base a treaty."<sup>53</sup>

Thereafter the Secretary of State directed that under its enlarged powers the title of the commission should be the "International Water Commission, U.S. and Mexico."<sup>54</sup> The American personnel on the Commission for the Rio Grande were confirmed as the United States Section of the new Commission.<sup>55</sup>

The anticipated completion of Boulder Dam, combined with the corollary features of great power

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<sup>52</sup>Ibid., letter of Ambassador Sheffield to Secretary of Foreign Affairs Saenz, August 13, 1926.

<sup>53</sup>U.S., Statutes at Large, XLIV, 1043. It should be noted that although the Commission was established more than a year before the passage of the Boulder Canyon Project Act, by the time the Commission was ready to draw its conclusions, the Act was more than two years old.

<sup>54</sup>Report of the American Section of the International Water Commission, 1930, House Doc. 359, p. 2.

<sup>55</sup>Ibid., the date of this authorization was June 15, 1927.

development, water supply for cities, an All-American canal for irrigation in the Imperial Valley, and the increasing interest in irrigation in general, made it highly desirable for Mexico to conclude an agreement covering diversion from the Colorado River.<sup>56</sup> Likewise, the demands issuing from the Basin States, Arizona's refusal to ratify the Compact, and the regulated flow to be had as a result of the Dam Project in the Lower Basin, caused the United States to desire an arrangement limiting Mexico's diversion from the River.

In August, 1927, the American Embassy at Mexico City informed the State Department that Mexico had appointed the following commissioners: Gustavo P. Serrano, the Mexican member of the International Boundary Commission; Javier Sanchez Mejorada, a member of the National Irrigation Commission of Mexico; and Federico Ramos, general adviser of the Department of Foreign Relations.<sup>57</sup>

The International Water Commission met in three sessions; the first beginning on February 27, 1928, the last ending on November 9, 1929. The first joint session convened at El Paso, Texas. The various meetings were

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<sup>56</sup>Charles A. Timm, International Boundary Commission: U.S. and Mexico (Austin: University of Texas Press, 1941), p. 199.

<sup>57</sup>Report of the American Section. . ., 1930, House Doc. 359, p. 2.

held alternately in Ciudad Juarez, Mexico and in El Paso. The chairmen of the two sections acted alternately as chairmen for the day.

Discussions of a very general nature were had at the initial meetings--the contemplated construction on the Colorado by the United States being the most frequent topic. It was decided that data had to be compiled about the following: the stream flow rate on the three rivers; the area actually under irrigation; the quantities of diversion for all purposes; the areas irrigable but not yet irrigated; the storage and utilization possibilities for electrical, domestic, and other purposes; and the flood protection works in the lower reaches of the Colorado and Rio Grande.<sup>58</sup> In order to make this compilation, the Commission entered upon a field investigation of the water boundary, starting at Yuma, Arizona. The period of inspection lasted for over a year.

Data having been secured as far as was practicable, a second session took place at Mexico City opening on August 20, 1929. The Mexican Section had been reorganized in January so that it consisted of the following personnel: Fortunato Dozal, consulting engineer to the Mexican Government, chairman; Ignacio Lopez Bancalari, a member of the Federal Irrigation Commission; and Gustavo P. Serrano.<sup>59</sup>

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<sup>58</sup>Ibid., p. 3, 30-32.

<sup>59</sup>Ibid., p. 4.

Each section of the Commission developed a set of theories bolstering the claims of their respective Governments; the arguments presented on both sides pertaining to the Colorado were basically traditional. Immediately, the Mexican Section stated that treaty provisions "bound both parties to maintain the navigability" of the River and that treaty modifications must establish a new legal status which would guarantee better uses and services to Mexico.<sup>60</sup> However, it was admitted that "other uses" of the waters would be more advantageous than that for navigability, yet the construction of works that might jeopardize river journey would be in violation of the treaties in force.

The position of the United States Section on this question was that the theory of navigability of the streams should be abandoned, owing to the importance of irrigation use.<sup>61</sup>

At the meeting of August 29, 1929, the Mexican Section presented its claim to 4,500,000 acre-feet of water from the River; this was based on the "fact" that there were in Mexico, adjacent to the Colorado, one and a half million acres of irrigable land for which a

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<sup>60</sup>Ibid., pp. 4-5, 38-41.

<sup>61</sup>Ibid.

diversion duty of three acre-feet per year was "necessary."<sup>62</sup> In determining this area only land which could be served by ditches and whose quality was sufficiently good to permit full utilization had been included; no land was involved in this figure which required a greater pumping lift than eighty feet, and unexplored land immediately north of the Gulf of California had not been included.

Dr. Elwood Mead, on behalf of the United States, then pointed out that the area of land in the American River Basin was one hundred and twenty times that of the Basin in Mexico and that if the water was to be divided on a basis of land areas, the supply which could be furnished Mexico would necessarily be very limited.<sup>63</sup>

Under date of August 30, the United States Section presented its official reply to Mexico's claim. The written memorandum stated the only "known instance" of international determination of waters for irrigation and other consumptive purposes between the two countries was the convention for the equitable distribution of Upper Rio Grande waters, signed by the plenipotentiaries of Mexico and the United States on May 21, 1906.<sup>64</sup> In

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<sup>62</sup>Ibid., p. 5, 42-44. In hydrography, a "duty" is the quantity of water necessary to supply adequately a definite surface of land.

<sup>63</sup>Ibid., p. 43.

<sup>64</sup>Ibid., pp. 5, 44-47.

compliance with this convention the United States undertook to provide a regulated flow from a reservoir built north of the International Boundary in order to supply water sufficient to irrigate certain lands in Mexico which had been "previously watered from the unregulated flow of the Rio Grande."<sup>65</sup> Attention was invited to the fact that this convention was only an act of comity.

Finally, the United States Section illustrated the similarity of the lands on the lower Colorado and those on the Rio Grande for whose benefit the Convention of 1906 was made. It was therefore proposed, as an equitable division of the waters of the Colorado, that the United States deliver to Mexico "each year at the international boundary an amount of water equal to that delivered for irrigation and domestic purposes in Mexico during the year 1928, which was the maximum delivered in any one year and which was understood to be 750,000 acre-feet."<sup>66</sup> An additional amount might be added to compensate for losses in the main canal. The delivery of 750,000 acre-feet would be conditioned on the construction of Boulder Dam. When started, the rate of flow would be "in accordance with a schedule to be agreed upon" with the understanding that in case of extraordinary drought or serious accident to the storage

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<sup>65</sup>Ibid., p. 45.

<sup>66</sup>Ibid.

works in the United States, the amount of water delivered would be "diminished in the same proportion as in the United States."<sup>67</sup>

On the subject of the flood control problem, the United States Section said that it would be largely resolved for both nations by the erection of Boulder Dam. However, the generation and sale of hydro-electric power was "not a factor in the international division of water."<sup>68</sup> In defense of the Dam the American Section felt that works were necessary to regulate the flow in order to avoid losses from shortage of water; any extension of the irrigated area on the lower Colorado, without regulation, was both hazardous and undesirable. Moreover, the use of surplus water, beyond the guaranteed amount per year in Mexico, could not be regarded as establishing a right as against the United States.

Thus the American commissioners rejected the fiction of navigability, and "espoused the doctrines of sovereignty in American territory, comity governing agreements, and the preservation of existing uses in both countries."<sup>69</sup>

On September 2 the Mexican Section offered their

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<sup>67</sup>Ibid.

<sup>68</sup>Ibid.

<sup>69</sup>W. Hawkins, "Water Rights in U.S.-Mexico Streams," Temple Law Quarterly, V, 193, 203.

eight-point answer to the United States memorandum of August 30. First, the Colorado "being an international stream, the use of its waters constitutes a common wealth for both countries, and in consequence, in order to deal with its beneficial uses as well as with flood control, this river must be considered as a single geographic unit."<sup>70</sup> The second contention was that the treaty provisions required both parties to maintain navigability. In the third place, however, the Mexican Section admitted that, aside from legalities, irrigation was of greater importance than navigation. Fourth, it was insisted that, since irrigable Mexican lands "totaled 1,500,000 acres as opposed to 6,000,000 acres in the United States," Mexico's share of water should be not less than 3,480,000 acre-feet.<sup>71</sup> This fantastic figure was about five times the amount which the American Section would concede, yet it was a reduced demand. Fifth, the Mexican commissioners urged that the principle of the Treaty of 1906 was not applicable to the Colorado for the reason that this treaty provided compensation for damages and contained a specific denial by the United States, in Article V, that it set up a precedent binding upon the parties. In reference to the application of this tenet,

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<sup>70</sup> Report of the American Section. . . , 1930,  
House Doc. 359, pp. 6-7, 47-50.

<sup>71</sup> Ibid.

attention was called by the Mexicans to their doctrine of "common wealth." Sixth, it was argued that the Boulder Dam project violated treaty provisions, that it would not effect flood control and would not solve the problem of silt deposit, as was proved in the case of Elephant Butte Dam on the Rio Grande. As for Boulder Dam, this point "could come only under the navigation provisions of the treaties."<sup>72</sup> In the seventh place the Mexican section pointed out that since the United States was going ahead with the development of power resources regardless of Mexico, then the latter should be given the benefit of the use of such power at a price no greater than that charged in the United States. Eighth, under the concession of the Compania de Terrenos y Aguas de la Baja California, Mexico maintained a right to 3,600,000 acre-feet. The amount of 750,000 acre-feet which the American Section considered as just for Mexico was "out of proportion and unacceptable."<sup>73</sup>

Thus it may be said that the Mexican representatives reiterated the principle of navigability and "adopted the doctrines of common wealth, geographical unit, and sovereign rights."<sup>74</sup>

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<sup>72</sup>Ibid., p. 49

<sup>73</sup>Ibid., p. 7.

<sup>74</sup>Hawkins, Temple Law Quarterly, V, 196-97.

The United States Section on September 7 submitted a rejoinder to Mexico's eight points on the "proper division" of the river waters; with regard to the alleged inapplicability of the Treaty of 1906 the facts, especially after the construction of Boulder Dam, were "decidedly similar".<sup>75</sup> If the United States insisted upon the principle of Article V, accepted by Mexico, the latter could have "no legal right to any water" of the Colorado. However, the American Section failed to refute the point made by Mexico that the 1906 Treaty was made in response to Mexican claims for damages, a situation which did not prevail on the Colorado.

On the subject of navigation, the American Section stressed the fact that both Governments had ignored the fiction of navigability and that Mexico had even granted a concession in 1904 to divert the entire low-water flow of the River. Therefore, "Mexico was, by her own acts, estopped from objecting to any action of the United States on the Colorado, within its own territory, which would interfere with navigation."<sup>76</sup>

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<sup>75</sup>Report of the American Section. . . , 1930, House Doc. 359, pp. 7-10, 54-58. See also U.S., Statutes at Large, XXXIV, 2953-55.

<sup>76</sup>Report of the American Section. . . , 1930, House Doc. 359, p. 56.

In view of the Mexican contentions of navigability, it should be mentioned again that the Mexican corporation operating below Yuma had a concession to divert nearly three times the amount of water that the river would carry at an extreme low stage.

The Americans did not make any allowance in the allocation of water beyond the previous offer of 750,000 acre-feet, for they noted Mexican grants by contract to corporations were: "authorizing diversion from the river of 10,000 cubic feet a second for use in Mexico and the U.S.", without establishing "their right to water originating in the United States".<sup>77</sup>

No specific comment was made on the topic of flood control, except to indicate that Mexico had not borne its fair share of the cost. Imperial Irrigation District and the United States Treasury had handled "the entire financial burden." Mexican responsibility for a proportionate part of flood protection costs would seem to be "a logical consequence to the espousal of Mexico's doctrine of common wealth."<sup>78</sup> The American Section did concede that the Mexican position in regard to electrical power was reasonable.

The Water Commission assembled at Washington, D.C., on October 22, 1929, for the last series of meetings. The membership remained the same as at the session in Mexico City. Subcommittees were appointed to formulate a statement as to the position of the two countries in reference to the division of the waters of the Colorado

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<sup>77</sup>Ibid., p. 55. See also Timm, International Boundary Commission. . . , pp. 204-05.

<sup>78</sup>Ibid., p. 205.

River and the Rio Grande. The American Section selected General Lansing H. Beach as its representative on the Colorado; the Mexican Section appointed Ignacio Lopez Bancalari. After several days of continual conferences the report on the Colorado was presented on November 1 by the subcommittee of two.

The substance of the lengthy findings by the subcommittee was merely a restatement of the positions of the parties.<sup>79</sup> The abrogation of the theory of navigability and the inclusion of provisions on flood control and power use in any future treaty were suggested. Mexico admitted that Boulder Dam would benefit her lands in many ways, but denied that the 1904 Concession could stop her "from objecting to the construction of any work which might alter the navigability established by the treaties", listing reasons.<sup>80</sup> The United States, on the other hand, conceded nothing.

At the fifth meeting in Washington on November 7, it was realized that the Mexican and American Sections were so far at variance in their views that the "only course" was to submit a statement of the situation to the respective Governments.<sup>81</sup> The Mexicans then submitted a

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<sup>79</sup>Report of the American Section. . ., 1930, House Doc. 359, pp. 10-14, 62-69.

<sup>80</sup>Ibid., pp. 67-68.

<sup>81</sup>Ibid., p. 70-71.

memorandum which was read by Dr. Mead, entitled "Suggestion presented by the Mexican Section for the creation of a permanent international water commission, U.S. and Mexico."<sup>82</sup> Following a discussion of this proposal, the Americans asked for time to study it and to submit a written response.

The next day, November 8, the answer to the Mexican memorandum was given by Elwood Mead. He stated that because of the limited nature of his commission, by act of Congress, it was impossible to accept the latest offer concerning a "permanent international water commission." It was pointed out that the United States Section had suggested a basis for the distribution of waters between the two countries and that the Mexican Section preferred "quite a different one." There was "no prospect of reconciling these divergent views by further discussion."<sup>83</sup>

However, on November 9, the American Section recommended the employment of an American and a Mexican engineer to make a study of conditions along the river from Laguna Dam to the mouth of the Colorado, "with a view to formulating a plan of adequate levee control to be carried out as an international matter."<sup>84</sup> The United States Section regarded such an arrangement of more

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<sup>82</sup>Ibid.

<sup>83</sup>Ibid., pp. 71-73.

<sup>84</sup>Ibid., p. 22.

urgent importance than an agreement on the division of the river waters. The Mexican Section expressed itself in full accord with this plan and designated J. L. Favela as its representative. R. M. Priest, who was superintendent of the Yuma Project, was chosen as the United States engineer.<sup>85</sup>

Chairman Mead for the American Section presented the Commission's findings, as required by law, to the Department of State on March 22, 1930; they were submitted in turn to the President and to Congress.<sup>86</sup> The Commission continued in operation in order to complete its studies on flood control, dam sites, gauging stations, and the measurement of evaporation, consumptive uses, and duties on water used in irrigation.<sup>87</sup>

In July, 1930, the American Section of the International Water Commission was reorganized; L. M. Lawson was designated as sole United States commissioner. However, in 1932, Lawson recommended that the duties of the American Section of the Water Commission be transferred to the American Section of the International

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<sup>85</sup>Ibid., p. 22, 73.

<sup>86</sup>Ibid., p. vii, letter of Elwood Mead to Secretary of State Stimson, March 22, 1930; Ibid., p. v, letter of Herbert Hoover to the Congress of the United States, April 21, 1930. See also Statutes at Large, XLIII, 118; Ibid., XLIV, 1043.

<sup>87</sup>U.S., Congress, Senate, Miscellaneous Documents, 71st Cong., 3d Sess., 1931-32, Senate Doc. 250, letter of Secretary Stimson to President Hoover, January 8, 1931.

Boundary Commission.<sup>88</sup> In accordance with this recommendation, the Water Commission was dissolved by virtue of a provision of the "Economy Act" of 1932; its powers and functions were conveyed to the International Boundary Commission, United States Section.<sup>89</sup>

The deadlock in international negotiations at the beginning of the 1930's was a long time in being resolved. Nevertheless, this stalemate did not hinder construction planned in the United States for the Colorado River.

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<sup>88</sup>U.S., Congress, House, Engineer's Report, 72d Cong., 1st Sess., 1932, H.R. 1025, II, pp. 1-6.

<sup>89</sup>U.S., Statutes at Large, XLVII, 475, 481; Act of July 1, 1932.

## CHAPTER IV

### THE ERA OF CONSTRUCTION AND COMPROMISE

In the early 1930's, the time for taming the mighty Colorado had arrived. By 1935 the gigantic dam at Boulder Canyon was readied for "beneficial uses exclusively within the United States," but the All-American Canal, "designed to solve the Mexican problem," unfortunately remained unfinished until 1942.<sup>1</sup> New structures on the River fostered new ideas; traditional claims were abandoned in favor of seemingly rational settlements. Except for statistical compilations, the findings of the International Water Commission were discarded by the end of the 1930's. Then California, once the champion of progress along the River, lost her position of leadership. Finally, to climax years of dedicated opposition to exorbitant Mexican demands for water, the Department of State skillfully guided the majority of the Basin States into approving what amounted to a reciprocal agreement on the international level, a treaty which ignored every supplication arising for two solid decades from the water users of the Colorado.

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<sup>1</sup>U.S., Statutes at Large, XLV, Part 1, 1047, Section 1.

After the collapse of international bargaining between the two sections of the Water Commission, Mexico awaited the increased river flow and the protection from intermittent seasons of flood and drought afforded by completion of Boulder Dam. Mexican uses of river water had "reached the limit of safe and profitable development"<sup>2</sup> without storage regulation. Diversions below the Border were dependent upon structures located in the United States and upon canals and protective levees furnished mainly by American capital. With no storage sites available to Mexico in the flat delta area and with her agriculture menaced by devastating floods (except where American-owned protective works were available), the uncontrolled condition of the River gave no promise of a permanent agriculture.

Within the United States, on the other hand, Section 5 of the Boulder Canyon Project Act provided that no one should "be entitled to have the use for any purpose of the water stored. . . except by contract."<sup>3</sup> The United States Secretary of the Interior was authorized, "under such general regulations as he may prescribe" to contract for the delivery of water in the

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<sup>2</sup>Martin G. Glaeser, "The Mexican Water Treaty: Part One," Journal of Land and Public Utility Economics, XXII, 5-6; U.S., Congress, House, Engineers Report, 73d Cong., 2d Sess., 1934, House Doc. 395, p. 337.

<sup>3</sup>Statutes at Large, XLV, 1047-66, Section 5.

Dam's reservoir. Such contracts "respecting water for irrigation and domestic uses" were accepted "for permanent service."<sup>4</sup> Demonstrating faith in the efficacy of this Section and desiring legal reassurance against any future appropriations by Mexico, the States of the Lower Basin contracted from time to time for the use of the waters impounded at Boulder Dam.

The State of California, whose politicians had sponsored the Project Act, was naturally the first applicant for water contracts. The Metropolitan Water District of Southern California and the Imperial Irrigation District each presented applications; the former proposed to build an aqueduct from the River to the Coastal Plain.<sup>5</sup> Accordingly, a water delivery contract was executed with the Metropolitan Water District on April 24, 1931, immediately preceding the execution of its power contract. Other agreements soon followed, giving the California interests a maximum total delivery of 5,362,000 acre-feet per annum.

Nevada was granted 300,000 acre-feet in her contract, but Arizona--holding out to the last--was not apportioned her maximum amount of 2,800,000 acre-feet a

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<sup>4</sup>Ibid.

<sup>5</sup>Ray Lyman Wilbur and Northcutt Ely, The Hoover Dam Power and Water Contracts (Washington, D.C.: U.S. Government Printing Office, 1933), pp. 30-31.

year until 1944. Moreover, the lower basin contracts were made subject to the availability of water "in the amounts and for the purposes specified" under the Compact and the Project Act--a loophole for those who would seek to defeat contractual relationships.<sup>6</sup>

With the nearly completed dam at Boulder Canyon, the States of the Basin increasingly became more jealous of their rights. In 1934 the National Resources Board submitted a report concerning land use and water resources in the United States. The States of the Basin were said to maintain that there was "no necessity of considering the claims of Mexico" to a portion of the River after the completion of the All-American Canal.<sup>7</sup> Since the entire flow originated in the United States, it was claimed that the States "stoutly opposed releasing more than 750,000 acre-feet to Mexico."<sup>8</sup> The old position of allowing lands south of the Border only the quantity of water equal to the maximum delivered in any one year became stronger than ever; the benefits of equated flow

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<sup>6</sup>Ibid., pp. 31-32. With 7,500,000 acre-feet apportioned in the Compact to the Lower Basin, a deficit of about 700,000 acre-feet remains if California and Arizona fulfill their respective contracts to the limit. The pro-Treaty people point this out in Chapter V.

<sup>7</sup>U.S. National Resources Board Report (Washington, D.C.: U.S. Government Printing Office, 1934), pp. 282-83.

<sup>8</sup>Ibid.

from the new Dam had to be safeguarded.

With an original total capacity of about thirty-one million acre-feet, Boulder Dam was for most purposes complete in 1935. The ample supplies of water released from storage for power production flowed, almost unobstructed, into Mexico, where fertile lands were immediately placed under irrigation. An agricultural empire on the Colorado Delta was speedily becoming a reality, profiting every Mexican landholder and justifying every apprehension above the border. Imperial Dam, begun in 1936 for the diversion of water into the All-American Canal, could hardly be expected to turn aside the river current for six precious years; the delay meant Phil Swing's recommendation for heading off the south-bound flow at the new Canal could not be accomplished.<sup>9</sup> California and Arizona looked askance while "their water" was easily put to beneficial use in Mexico; diversion was much more difficult and costly above the International Line than below it.

Although George Hunt was no longer Governor of Arizona, that State, through its elected officials, remained the arch-defender of the Colorado in opposition to Mexico's claims throughout the 1930's. Illustrative of this point was the letter dated December 8, 1936,

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<sup>9</sup>U.S., Congress, House, Report on Imperial Valley, 69th Cong., 2d Sess., 1926, H. R. 1657, Part 2, pp. 45-51.

written by Henry F. Ashurst, U. S. Senator, to R. Walton Moore, Acting Secretary of State. In part, it read:

Whatever privileges Mexico may assert by amity and grace to waters of the Colorado River must be limited to the Colorado river in a state of nature. Mexico has no reservoir or dam sites within her boundary on the River where she could store any quantity of water and she cannot require the United States to supply such sites. Neither can she claim the benefit of storage works built within the United States through the expenditure of funds of the United States and for the avowed benefit of communities and citizens of the United States.<sup>10</sup>

The Lower Basin had little to fear very long from Harry Chandler's "syndicate"; the sudden prosperity experienced in Lower California was swiftly denied the "Colorado River Land Company." A rather pathetic letter from Chandler in 1945 addressed to the Attorney General, of California, Robert Walker Kenny, reviewed the Mexican landholding situation in part for the years of 1938 to 1944. Evidently, the Government of Mexico "expropriated to agrarian uses approximately 287,000 acres of company lands" in 1938, "including substantially all of the developed areas."<sup>11</sup> The result of expropriation was, Chandler said:

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<sup>10</sup>Jassim M. Khalaf, Water Resources of the Lower Colorado River Basin (Chicago: Univ. of Chicago, 1951), p. 179, letter of J. F. Ashurst to R. W. Moore, December 8, 1936.

<sup>11</sup>U.S., Congress, Senate, Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 79th Cong., 1st Sess., 1945, p. 921.

. . . almost a fatal blow to the prospects of the Colorado River Land Company. Indeed, for about two years practically no business whatever was transacted except to prepare and in every manner prosecute claims against the Mexican Government both in Mexico and through the American-Mexican Mixed Claims Commission for recoveries on account of this expropriation. Awards were allowed by the Claims Commission in 1943 and covered all claims on behalf of the Colorado River Land Company and its American stockholders against the Mexican Government.<sup>12</sup>

In order to bring about a final "winding up" of the unsuccessful Mexican venture, "every effort" was made to sell the remaining properties. In 1944, W. O. Jenkins, a controversial figure residing in Mexico, took control of the property of the Colorado River Land Company, giving in exchange certain real estate "owned by him in the United States."<sup>13</sup>

Despite the loss of a great deal of American capital in Mexico, W. O. Jenkins and his neighbors persisted in the race to place more and more land under irrigation each year. The idea was "to develop as far as possible before the All-American Canal was completed to give the Imperial Valley an advantage."<sup>14</sup>

By the late thirties American water users

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<sup>12</sup>Ibid., letter of Harry Chandler to R. W. Kenny, February 2, 1945.

<sup>13</sup>Ibid.; see also "The Jenkins Case and Mexican-American Relations," Hispanic American Historical Review, XXXI, November, 1951, pp. 586-607.

<sup>14</sup>Remi A. Nadeau, The Water Seekers (Garden City, New York: Doubleday Co., 1950), pp. 245-46.

became suddenly alarmed. If Mexico secured a right to the increased flow by means of a treaty with the United States their own "established" water rights would be endangered. In June and July of 1938, American water interests--from California to the Rocky Mountains--met at Phoenix, Arizona, to consider three urgent matters: amendment of the Project Act, the satisfactory adjustment of power rates charged at Boulder Dam, and the "Mexican menace."<sup>15</sup> Some of the delegates were appointed by their state governors and some by the water users of their particular community. Resolutions were passed supporting the principles "which later ripened into the Boulder Canyon Project Adjustment Act."<sup>16</sup> A "Committee of Fourteen" was organized, with two members from each of the Basin States, to advise the United States Government on Colorado River affairs and especially on the Mexican question. When sitting with representatives of the Boulder Dam power contractors, it became the "Committee of Sixteen."<sup>17</sup>

At Phoenix a special resolution was unanimously adopted as presented by Clifford H. Stone of Colorado,

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<sup>15</sup> Ibid., p. 247; Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 530-32, testimony of Arvin Shaw.

<sup>16</sup> Ibid., p. 1415, testimony of Clifford H. Stone.

<sup>17</sup> Nadeau, The Water Seekers, p. 248.

Chairman of the Resolutions Committee. Similar in many ways to the "Memorial" advocated by the Conference of Governors at Denver in 1927, the document of June 23, 1938, requested officials of the United States to "give notice" to the Republic of Mexico that in harmony with the Boulder Canyon Project Act:

It is the policy and purpose of the Government of the United States of America to reserve for use within the boundaries of the United States of America all waters of the Colorado River which may be stored or impounded therein, to the end that the government of the United States of Mexico, the citizens of that Republic, and the owners of Mexican lands may have direct and timely notice and warning that the use by them of any such waters as may temporarily flow into Mexico shall establish no right, legal or moral, to the continued use of such waters.<sup>18</sup>

In flagrant disregard of the 1938 Resolution and of the entreaties from the Colorado Basin area, Under Secretary of State Sumner Welles initiated negotiations in 1939-40 with Mexico. An international agreement "confirming the present uses of Lower Colorado River waters on Mexican lands" was sought;<sup>19</sup> four to five years of Mexican appropriation of waters derived from Boulder storage, above that which had been used before the Dam, made little difference to Welles. The Under Secretary

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<sup>18</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, p. 530.

<sup>19</sup>U.S., Department of State, Foreign Relations of the United States, 1940, V, pp. 1029-30, letter of Under Secretary of State Welles to Ambassador Castillo Najera, December 27, 1939.

further proposed the inclusion of the Lower Rio Grande problem in any deliberations had--not as a question related to the Colorado, but as one integrated with it.<sup>20</sup> That is, "similar uses" of Rio Grande water by Americans in Texas could be secured in exchange for rights guaranteed to Mexico on the Colorado--a plan fearfully predicted as early as 1927 in Arizona.<sup>21</sup>

In 1934 the National Resources Board had officially intimated a settlement was feasible along the lines suggested by Welles. Pointing out the fact that 70% of the water in the Lower Rio Grande came from tributaries in Mexico, the Board's Report demonstrated the necessity of an arrangement that would recognize "existing uses in the United States."<sup>22</sup> Since reservoirs were under construction in Mexico to store most of the water for irrigation of lands there, this program "would result in a shortage of water for lands already irrigated" in the United States. The situation on the Rio Grande

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<sup>20</sup>Ibid., in spite of all that is said on the subject, the only similarity between the two rivers is their their complete dissimilarity.

<sup>21</sup>Arizona Colorado River Committee, Report (Phoenix, January 1, 1927), pp. 14-15. "Our present information is that there is a possibility that Colorado water might be traded to Mexico for Rio Grande water." See also G. E. P. Smith. "An Equitable Basis for Solution of the Colorado River Controversy." Tucson: University of Arizona, December 15, 1928. (Pamphlet.)

<sup>22</sup>U.S. National Resources Board Report, 1934, p. 283.

was labeled as "the reverse" of the one on the Colorado: "if the United States has control of the water supply of the Colorado, Mexico has similar control of that of the lower Rio Grande."<sup>23</sup> The Report recommended that the problems of allocating the waters of the two rivers be considered together "in order to reach solutions acceptable to both nations."

The 1934 Report heralded the turn of events in subsequent years along the two great international rivers. Rich citrus areas in the State of Texas would gain great advantages from consideration of the Colorado issue with that of the Rio Grande, for "Mexico had plenty to offer on the Rio Grande and everything to ask on the Colorado."<sup>24</sup> An interchange of water guarantees would indeed be a simple solution for all parties concerned. As Sumner Welles explained to the Mexican Ambassador in 1939: "A certain amount of water going to Mexico from the United States in the one area and an equal amount of water delivered from Mexico for use in the United States in the other area" would "correct the situation."<sup>25</sup> To implement this program for the rivers, the International

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<sup>23</sup>Ibid., pp. 283, 382-84.

<sup>24</sup>Arthur L. Kruckman, "Mexican Treaty Unwise," Western Construction News, XX, No. 2, 63.

<sup>25</sup>Foreign Relations, 1940, V, pp. 1029-30, letter of Under Secretary Welles to Castillo Najera, December 27, 1939.

Boundary Commission--its powers already extended by a 1935 Act of Congress--could "report on the question of the area of land being irrigated and the amount of water used by each country from the other country's source, in order that present beneficial uses of water" on both rivers "might be recognized and confirmed by agreement" between Mexico and the United States.<sup>26</sup>

Among the many things Welles had overlooked was the fact that the International Boundary Commission, United States and Mexico, had been engaged in such a "study regarding the equitable use of the waters of the lower Rio Grande and of the Colorado and Tiajuana Rivers" for at least four years.<sup>27</sup>

The express purpose of obtaining the information was for use "as the basis" of a treaty. Moreover, data continued to be collected until the actual time of treaty negotiations in the Autumn of 1943.

The Government of Mexico was delighted with the American Under Secretary's proposals pertaining to the "solution" of the double river problem. Yet in the note of January 19, 1940, Castillo Najera, the Mexican Ambassador, attached conditions to full acceptance of

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<sup>26</sup>Ibid.; U.S., Statutes at Large, XLIX, 660, August 19, 1935.

<sup>27</sup>Ibid.; Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, p. 1801.

Welles' suggestions. Foremost among these were the following:

To authorize the Commissioners of International Waters of the two countries and the Boundary Commissioners, in their respective spheres, to prepare and to present appropriate reports on the following points:

- a. Areas of ground which are now under irrigation and the quantity of water used by each country proceeding from the other country in the lower regions of the Colorado and Bravo (Grande) Rivers;
- b. Prospects and projects of possible future uses;
- c. Works of international character permitting greater utilization of international waters;
- d. Bases which could serve for the concerting of a Treaty between Mexico and the United States which would govern use and distribution of the international fluvial waters, the control of floods, the production of electric energy, as well as any other use of the said waters. The Treaty should create an International Water Commission between Mexico and the United States of a permanent character which would have in its exclusive charge the carrying out of the basic points of the said Treaty.<sup>28</sup>

In reply Sumner Welles heartily approved the preparation of a special joint report. Boundary Commissioner L. M. Lawson was instructed to cooperate with Mexico in the matter.<sup>29</sup> Castillo Najera was reminded, however, that the American Section of the International Water Commission was abolished by congressional action on June 30, 1932, and that its functions had been transferred to

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<sup>28</sup>Foreign Relations, 1940, pp. 1031-32, letter of Mexican Ambassador Castillo Najera to Under Secretary of State Welles, January 19, 1940.

<sup>29</sup>Ibid., p. 1034, letter of Welles to Castillo Najera, February 15, 1940.

the Boundary Commission, United States Section. Furthermore, with respect to a permanent "International Water Commission," Welles stated that this item would be unacceptable to the Congress of the United States.<sup>30</sup>

On May 18, 1940, the Mexican Ambassador indicated regret that the United States Government "did not accept the proposals" which were made in the note of January 19. He cordially pointed out that Welles had misinterpreted the proposal relative to the organization of the International Water Commission, inasmuch as it was not suggested that "such organization be set up previous to the conclusion of the Treaty, but as a consequence thereof." The Mexicans felt a treaty could not properly operate "failing the existence of a body charged with executing it."<sup>31</sup>

Further negotiations were "merged in efforts to arrive at a general settlement" when Sumner Welles addressed a letter to Castillo Najera on July 19 which terminated discussion along the lines expressed.<sup>32</sup> Not forgotten, however, was the understanding that additional bargaining would be based on the exchange of water from

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<sup>30</sup>Ibid.

<sup>31</sup>Ibid., p. 1035, letter of Castillo Najera to the Secretary of State, May 18, 1940.

<sup>32</sup>Ibid., pp. 1037-39, letter of Sumner Welles to Castillo Najera, July 19, 1940.

the Rio Grande for Colorado River water. The idea of a "swap" persisted.

That Mexico regarded the All-American Canal as an impending threat to her rapidly expanding agriculture was obvious in the memorandum of her embassy to the Department of State on November 16, 1940. The Department was informed that the Ministry for Foreign Affairs had presented to the United States Embassy in Mexico City a "note protesting against the performance of acts which may impair the right which international law gives Mexico to the use and enjoyment of the waters of the international rivers."<sup>33</sup> Reopening of discussions was encouraged, since Mexico especially urged a treaty "granting to each of the countries reciprocal advantages."<sup>34</sup> The move ". . . was scarcely unexpected; having built up her water claims as high as possible on the Delta, Mexico was now willing to negotiate."<sup>35</sup>

The year 1941 saw Mexico diverting much more water from the Colorado River than she ever had been able to efficiently use from the unregulated stream. As the All American Canal neared completion, Mexico recognized her precarious position. The Imperial Dam would

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<sup>33</sup>Ibid., pp. 1061, 1063, Memorandum of the Mexican Embassy to the Department of State, November 16, 1940.

<sup>34</sup>Ibid.

<sup>35</sup>Nadeau, The Water Seekers, p. 250.

turn water from the River at a point farther upstream than the heading of the old Canal. Imperial Valley could then destroy cultivation on the Delta merely by cutting off the water supply for a sufficient length of time.

The Mexicans did not want to rely on the good intentions of their American neighbors; they were anxious "to concert a treaty" in which their rights would be taken fully into account. As the Mexican Embassy explained to the Department of State on February 17, 1941, the treaty would be given "concrete form along the following general lines":

Amendment of the articles relative to navigation in the Treaties of 1848 and 1853, and renunciation by the two contracting parties of any claim for nonobservance of the provisions contained in the said articles. . . .

Delivery to Mexico of an annual volume of the waters of the Colorado River determined by the proportion between the amounts now used, the urban and farm requirements existing in the valley of the river in the territory of the two countries, and the reasonable and just possibilities of extension of the said requirements in the future.

Settlement of the problem of obstructions of the lower Colorado River and construction of international defense works in that region.

Establishment of a Mixed Commission on International Waters, with consultative, administrative, executive and jurisdictional powers, and the establishment of general regulations for the labors of the commission referred to. . . .

As a consequence of the acceptance of the foregoing stipulations, confirmation of the

present uses--Mexican and American--both on the Colorado River and also on the Rio Grande.<sup>36</sup>

Secretary of State Cordell Hull, realizing that such a treaty would contradict the desires of the Colorado River Basin States, informed the Mexicans through Ambassador Daniels that "confidential conversations" were necessary with "certain United States interests."<sup>37</sup> International negotiations were then placed in a subordinate position to the series of conferences held between the State Department and the Committee of Fourteen, representing the Basin States.

The Chairman of the Committee of Fourteen was notified of the State Department's intention to consider an agreement with Mexico.<sup>38</sup> Consequently, at Salt Lake City, Utah, the Committee met in April and May of 1941

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<sup>36</sup>U.S., Department of State, Foreign Relations of the United States, 1941, VII, pp. 378-79, letter of the Mexican Embassy to the Department of State, February 17, 1941. The Mexican theory, as opposed to the American idea of comity, was based on an inflated interpretation of the appropriation doctrine. Mexico felt she should have everything possible for future expansion while Americans believed the law of prior appropriation and use did not extend across international boundaries in any form. See U.S., Executive Branch, Twenty-One Opinions of the Attorney-General, 274, 1895.

<sup>37</sup>Foreign Relations, 1941, p. 384, letter of C. Hull to Ambassador in Mexico Daniels, April 27, 1941.

<sup>38</sup>Colorado River Water Users Association, Proceedings of the First Regular Conference (Las Vegas, Nev., 1945), pp. 20-26, statement by Arvin B. Shaw, Jr. of California.

in order to determine what action should be taken. It was decided that a "Subcommittee of Seven," one representative from each of the Basin States, should go to Washington and discuss the issues with the State Department, "particularly asking for the privilege of consultation."<sup>39</sup>

At Washington, D.C., the Subcommittee conferred frequently with agents of the State Department. It also drafted a resolution reflecting the traditional position of the American Basin in that no objections were offered to the initiation of conversations with Mexico on the subject of water allocation, but making it clear that the seven States would object to any treaty which allowed Mexico more than 750,000 acre-feet. The Department of State promised an answer to the Subcommittee's resolution.<sup>40</sup>

On July 2, 1941, the Department gave the Mexican Ambassador, Francisco Castillo Najera, a memorandum setting forth a tentative outline of a plan for adjustment of various matters relating to the proposed treaty. In suggesting the assurance in perpetuity of 900,000 acre-feet of "stored water" from the Colorado to Mexico, delivered according to a monthly schedule convenient to

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<sup>39</sup>Ibid.

<sup>40</sup>Ibid.

the requirements of Mexico and "consistent with releases and uses on the American side," the Department of State felt that it had "more than met Mexican requirements based upon past claims," since the "quantity of controlled water would be so much more valuable than a much greater quantity of uncontrolled water."<sup>41</sup>

Subsequently, the Mexican Ambassador presented a reply dated July 22 which contained a treaty draft requesting less than Mexico's traditional claim. The proposal demanded approximately two million acre-feet annually of "stored water"--a considerable drop from 3,600,000 acre-feet of unregulated flow.<sup>42</sup>

Several months passed before the State Department responded to the new Mexican contentions. Meanwhile, the International Boundary Commissioners, L. M. Lawson for the United States and Rafael Fernandez MacGregor for Mexico, were studying the flood control problem below Imperial Dam.<sup>43</sup>

February 11, 1942, the Department brought forth a compromise. Mexico was offered the assured annual

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<sup>41</sup>U.S., Department of State, Foreign Relations of the United States, 1942, VI, pp. 547-48, Memorandum of the Department of State to the Mexican Embassy, February 11, 1942.

<sup>42</sup>Ibid., the July 2 and July 22 communications are both repeated in the Memorandum of February 11, 1942.

<sup>43</sup>Ibid.

delivery of 1,150,000 acre-feet "according to a fixed monthly schedule" from the regulated flow of the Colorado; any surplus waters that "might reach Mexico over and above the guaranteed amount would not establish any additional rights."<sup>44</sup>

While the Mexicans were preparing a suitable answer to the American proposition, Imperial Dam and the All-American Canal were completed. Farmers in the United States were officially released from dependence upon water transported through Mexico. The 1904 Concession was meaningless as far as Imperial Irrigation District was concerned because Mexico had to rely upon the District for water now.

The new canal entered the agricultural areas at a high level and made possible irrigation by gravity of lands in both the Imperial and Coachella Valleys which previously could not be reached by waters of the old canal. Expensive pump lifts could be avoided, and a steadier flow of water attained from the permanent diversion dam than was possible under the old system. The Canal provided facilities for the rapid expansion of cultivation in California and for an increased use of water, perhaps at Mexico's expense.<sup>45</sup>

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<sup>44</sup>Ibid.

<sup>45</sup>Paul L. Kleinsorge, The Boulder Canyon Project (Stanford, California: Stanford University Press, 1941), pp. 141-45.

Fully appreciative of the new "threat" above the border, the Mexican Ambassador boldly rejected the "volume of 1,150,000 acre-feet offered" in the Department's memorandum of February 11.<sup>46</sup> Two million acre-feet were demanded as "indispensable for Mexican needs". Releasing this amount "would not cause difficulties in the execution of present and further irrigation programs in American territory." To substantiate the latter point, Engineer Adolfo Orive Alba, a member of the Mexican Section of the International Water Commission, was quoted as saying: "Mexico could receive up to 2,300,000 acre-feet annually without any scarcity being felt in the United States even in periods of drought."<sup>47</sup>

The American proposition "to furnish water controlled according to a fixed table" was highly objectionable to Mexico. "Practice" had shown that such deliveries gave "rise to serious injuries, both with respect to the crops and with respect to a large amount of wasted water occasioned by the method of the fixed table."<sup>48</sup> As "more practicable," Mexico suggested the delivery of water "according to an annual table" which the "International

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<sup>46</sup>Foreign Relations, 1942, VI, pp. 549-51, Memorandum of Ambassador Castillo Najera to the Department of State, March 19, 1942.

<sup>47</sup>Ibid.

<sup>48</sup>Ibid.

Commission would determine every December" to govern the following year.<sup>49</sup>

In April of 1942, State Department officials, disturbed by the vigorous Mexican rejection of their "compromise," met with the Subcommittee of Seven at El Paso, Texas. The Department told the subcommittee that it was not advisable to put a proposition of 750,000 acre-feet before Mexico, as the Resolution of 1941 at Washington had urged. Such a "meager" amount would be refused, it was claimed, because Mexico would accept nothing under two million acre-feet.<sup>50</sup>

In June the entire Committee of Fourteen held sessions at El Paso to debate the water allocation subject. A resolution was unanimously adopted embodying a formula for apportionment of river water; a fixed allowance was not favored, but a sliding scale proposition whereby Mexico would receive varying amounts according to the water available from year to year. In any year in which the discharge from Boulder Dam equalled 10,000,000 acre-feet, Mexico should have 800,000 acre-feet, but the Mexican grant should increase or decrease on a percentage basis depending on whether the discharge

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<sup>49</sup>Ibid.

<sup>50</sup>Colorado River Water Users Association, Proceedings. . ., pp. 24-25.

from the Dam was over or under 10,000,000 acre-feet.<sup>51</sup> The formula was transmitted to the Department of State, supported by a memorandum in which a physical description of conditions on the Delta was made.

Immediately, the Department thwarted the sliding scale proposition. Broader considerations, like the American image as a good neighbor in the world, were crowding in to influence the approach to the Mexican question.<sup>52</sup> The Basin States simply were unaware and uninformed of global factors which diplomats deemed so very important.

Yet the State Department was not completely insensible to each recommendation dispatched by the Committee of Fourteen, for on November 4, 1942, an informal note was handed Ambassador Castillo Najera by agents of the Department, Duggan and Timm.<sup>53</sup> First, the memorandum surprisingly reiterated the old contention that Mexico could only expect confirmation of her uses of the Colorado prior to the erection of Boulder Dam. The "rights" of the seven Basin States were at last to be

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<sup>51</sup>Ibid., the concluding paragraph of the sliding-scale formula of 1942 thanked the Department "for the separate handling" of the negotiations upon the Colorado River and the Rio Grande.

<sup>52</sup>Nadeau, The Water Seekers, pp. 251-53.

<sup>53</sup>Foreign Relations, 1942, VI, pp. 559-60, Memorandum by Charles A. Timm of a Conversation between Castillo Najera and Duggan, November 4, 1942.

taken into consideration. Second, it was pointed out that even though two million acre-feet might be delivered to Mexico in unusually wet years without deprivation to American lands, in the average year the amount "would be very much less than this figure." During dry cycles "much less than one million acre-feet would be available."<sup>54</sup> Third, the need for a downward revision of old water supply estimates was stressed. Mexico's estimates were said to be based on early figures which were shown by later surveys to be inaccurate. Fourth, "no account" was taken by Mexico of reservoir evaporation losses, "which are estimated as being in excess of one million acre-feet annually, materially reducing the amount of water available for distribution." Fifth, "expanded uses in Mexico since 1935" were made possible by the "construction of Boulder Dam and its appurtenant works, thus controlling and regulating the theretofore erratic flow of the stream." In determining beneficial uses "to which Mexico has established a right," the period subsequent to 1935 must be excluded. Sixth, the Department insisted that its proposed quantity for Mexico was "more than sufficient, particularly considering the fact that the delivery was

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<sup>54</sup>Ibid., pp. 561-63, Memorandum regarding the Proposed International Water Treaty of the Department of State to the Mexican Embassy, November 4, 1942.

to be a controlled one, subject to agreed schedules."<sup>55</sup>

After Mexico's Ambassador had finished reading the United States memorandum, Lawrence Duggan announced that the difference between the amounts suggested by each side was nearly one million acre-feet. He also claimed that it was "simply unthinkable that the United States Senate would approve a treaty providing an allocation anywhere near the Mexican figure."<sup>56</sup> Charles Timm called attention to the "clearly established fact" that the Colorado system did not provide enough water for the irrigable lands of both countries.

In response the Mexican Ambassador said that the presently regulated flow did not "add enough value to make 1,150,000 (the American offer) equivalent to Mexico's just share of the water supply."<sup>57</sup> Finally, at the conclusion of the interview, everyone agreed that as a result of technical studies of the water supply, it would be possible to make more rapid progress in the negotiations.

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<sup>55</sup>Ibid., evidently the generous Sumner Welles had nothing to do with the preparation this particular memorandum; it was quite conservative for the State Department.

<sup>56</sup>Ibid., Memorandum by Charles A. Timm of a Conversation between Castillo Najera and Duggan, November 4, 1942. Ironically, the U.S. Senate approved a document almost three years later which guaranteed Mexico an amount closer to two million than to one million acre-feet.

<sup>57</sup>Ibid.

On December 14, 1942, the United States Ambassador to Mexico, George S. Messersmith, reported a meeting with Rafael Fernandez MacGregor, Boundary Commissioner; Ernesto Enriquez, Chief of the Legal and Advisory Department, Mexican Foreign Office; and Lorenzo L. Hernandez, Foreign Office water and boundary expert. The Mexicans laid "great stress on the importance to the two countries of prompt resolution of the water problem with particular reference to the example it would set to the world."<sup>58</sup> It was suggested that Mexico would not insist upon a guaranteed minimum amount of water annually "if this would facilitate the Department's negotiations with the Basin States." This offer, however, was "conditioned upon the adoption of a strict percentage basis for water allotment, without any maximum limitation."<sup>59</sup> Tentatively suggested for Mexico was 12.5% of the discharge from Lake Mead. Finally, Messersmith observed, "studies and negotiations now proceeding in the United States have not reached a point where any action here is practicable"-- a phenomenon resolved by the Santa Fe Conference a few

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<sup>58</sup>Ibid., pp. 564-65, letter of Ambassador Messersmith to the Secretary of State, December 14, 1942. This was a Mexican hint that America must fulfill her role as the "Good Neighbor."

<sup>59</sup>Ibid., the "strict percentage basis" desired by Mexico was incorporated in the Department's formula presented to the States at Santa Fe.

months later.<sup>60</sup>

Early in 1943 there occurred on the official level an almost unexplainable change in the attitude of the Basin States toward a water treaty with Mexico. Arizona's Governor Osborn encouraged full cooperation with the State Department in any international settlement concluded on the Colorado. Osborn's position was a far cry from that announced by former Governor R. C. Stanford in 1938. Stanford had briskly answered Secretary of State Hull regarding any anticipated Mexican pact. He said in part: "No water treaty with Mexico is necessary, and none has ever been desired except by those wishing to give Mexico more than that to which she is entitled, to the extreme detriment of the United States and especially Arizona."<sup>61</sup>

Whatever the reasons might have been, it was undeniable that there was a general repudiation of traditional river arguments in the United States. The idea of limiting Mexico to an exact amount of water, based on her present appropriations, became acceptable throughout the Basin, except in California and possibly Nevada. Of the seven States concerned, California seemed most eminently threatened by a Mexican treaty; although she had contracted to receive 5,362,000 acre-feet a year from

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<sup>60</sup>Ibid.

<sup>61</sup>Colorado River Water Users Association, Proceedings. . . , p. 40.

Boulder Dam storage, nearly one million acre-feet of the amount was classed as "surplus"--outside the 7,500,000 acre-feet granted to the Lower Basin by the Colorado River Compact. Since the Compact directed that any Mexican draft would first "be satisfied out of the unapportioned surplus,"<sup>62</sup> California knew that the high claims of Mexico would consume so much that a portion of her own water contracts would be invaded.<sup>63</sup>

From April 14 to 16, 1943, the Committees of Fourteen and Sixteen met at Santa Fe, New Mexico. State Department representatives, having rejected the prior two proposals of the States, placed before the Committees a one page formula which was acclaimed "as the least" Mexico would accept.

The first section of the formula annually allotted an amount of water to Mexico "equal to 10% of diversions for that year from the Colorado River for agricultural and domestic use in the States of Arizona, California, and Nevada."<sup>64</sup> The second section was the most essential, however. It provided that "any other water" arriving at

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<sup>62</sup>U.S., Congress, House, Colorado River Compact, 67th Cong., 4th Sess., 1923, House Doc. 605, pp. 7-12, Article III (c).

<sup>63</sup>Colorado River Water Users Association, Proceedings. . ., pp. 25-26.

<sup>64</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, p. 161.

the international boundary was to be never less than 750,000 acre-feet in any year, and the aggregate delivery to Mexico in all categories was not to be more than 2,000,000 acre-feet in any year. Other sections of lesser importance followed.

Readily ascertained was the fact that the old maximum offer had become the guaranteed minimum in the Department's formula. Moreover, Mexico could use up to two million acre-feet, her most recent demand. Here, indeed, was something for everyone; the Department had concocted a scheme so broad in its outlines that it meant no restriction at all.<sup>65</sup>

At Santa Fe, over the strenuous objections of Californians Arvin Shaw and Phil Swing, a vote was taken in which the representatives of five of the Basin States approved the State Department's proposition. California and the power contractors repudiated the formula, and Nevada abstained from voting. The split represented the first time that the seven States had not voted as a unit on the question of a Mexican treaty. California definitely felt that the officials from the Basin had retreated from

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<sup>65</sup>Ibid., the proof of this statement is what the negotiators of the Treaty did at El Paso a few months later.

what they had once positively affirmed.<sup>66</sup>

In addition to the resolution approving the formula, there was adopted the so-called "Wallace Resolution" which expressed confidence in the State Department and requested that every effort be made in the coming negotiations to reduce as far as possible the total assignment to Mexico.<sup>67</sup> A statement of policy further recommended that the "government take over all Imperial Valley diversion works for the delivery of water to Mexico."<sup>68</sup> Among the facilities specifically mentioned were: Davis Dam which had not yet been constructed but which Congress had authorized; Imperial Dam where the waters for the All American Canal were diverted; the All American Canal itself from the Dam to Pilot Knob wasteway; and the wasteway from the Yuma Project.<sup>69</sup> To the California delegation at Santa Fe this was final proof that the other States were "playing

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<sup>66</sup>Committees of Fourteen and Sixteen, Proceedings at Santa Fe 1943 (Los Angeles, December 19, 1949), pp. 42-45. At Santa Fe, Phil Swing demanded whether the federal officials intended to give away part of the water in California's contracts. The government men would not commit themselves.

<sup>67</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 1429.

<sup>68</sup>Nadeau, The Water Seekers, p. 255.

<sup>69</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 103-05, testimony of Frank B. Clayton.

the State Department's game." Phil Swing, who had devoted his life to acquiring the facilities for Imperial Valley, erupted with anger: "This is the final humiliation and adds to the indignity already done to California and its communities."<sup>70</sup> Charging that the Committee was invading constitutional rights of ownership, he chastized the other States for the "steam-roller methods with which you have rolled toward your predetermined goal."<sup>71</sup>

California received a curious response from the other delegates at the close of the session. The chairman of the meeting, Judge Clifford H. Stone of Denver, voiced the majority opinion when he intimated that California had a just cause but nothing could be done for her.<sup>72</sup>

The defeat of the last champion of river tradition was gleefully acknowledged by the State Department. Before the Santa Fe meeting California had been secure in the support of the Upper Basin and Arizona for a Mexican burden which would not harm the contracts with the United States Government. The representatives of California observed that "government negotiators had

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<sup>70</sup>Committees of Fourteen and Sixteen, Proceedings at Santa Fe: 1943, p. 68.

<sup>71</sup>Ibid., p. 72

<sup>72</sup>Ibid., pp. 85-86.

somehow drawn away the other States"--a statement not far from the truth.<sup>73</sup>

The end of the series of Colorado River Basin conferences in the Spring of 1943 signified a victory for the Department of State. Uninhibited by the "Santa Fe Formula," the United States could now parley with Mexico as it pleased in producing a truly reciprocal agreement.

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<sup>73</sup>Ibid., p. 98; see also Nadeau, The Water Seekers, p. 257. G. E. P. Smith suggests throughout his writings that Governor Osborn in early 1943 was visited by representatives of the Upper Basin and by government agents, who managed to change the Governor's mind about the entire Colorado River problem. Soon thereafter, Osborn, in a message to the Arizona Legislature, presented an entirely new program, which included the belated ratification of the Compact and the support of a water treaty to limit Mexico. See especially G. E. P. Smith, Arizona Loses a Water Supply (Tucson: University of Arizona, 1956), pp. 2-5.

## CHAPTER V

### THE WATER TREATY

"A Treaty like every other legislative act is always a compromise between different interests; it is always a mutual exchange."<sup>1</sup>

This observation by Professor F. J. Berber of the University of Munich was particularly applicable to the treaty signed in 1944 relating to the utilization of the waters of the Colorado. The quid pro quo specified as necessary to the treaty-making process was simply the exchange of Colorado River water for that of the Rio Grande.

Professor Berber continued, "He who has little to offer will receive little in return." In flat contradiction of this maxim, the State of Texas had little to offer Mexico on the Lower Rio Grande, but everything requested by her was granted in a single treaty. The Colorado River Basin States, having plenty to offer Mexico, received absolutely nothing in return under the same document. Evidently, in this matter, Berber had not

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<sup>1</sup>F. J. Berber, Rivers in International Law (New York; Oceana Publications, Inc., 1959), pp. 270-71.

<sup>2</sup>Ibid.

taken into account the unpredictable behavior of the United States diplomatic corps.

An examination of the testimony at the Senate hearings on the Water Treaty leaves a strong impression that the dominant concern in negotiations was global diplomacy anticipating the organization of the United Nations. The exigencies of this larger program favored Texas interests at the expense of the Basin States. Injustice could be found primarily in the fact that two international rivers were treated as one; whatever advantage the United States had as the contributor of Colorado water was neutralized by a simultaneous discussion of the Rio Grande.

The terms of the treaty were formulated in conferences held intermittently in El Paso, Texas, and Ciudad Juarez, Mexico, from September 6 to the latter part of December, 1943. Diplomats, lawyers and engineers were needed by both sides to handle the many complicated questions involved. Representatives of the Mexican Ministry of Foreign Relations, the Department of State and both sections of the International Boundary Commission, assisted by technical advisors, participated in the sessions. From time to time other agencies were consulted (principally the Bureau of Reclamation) respecting the works under the

jurisdiction of the Bureau on the Colorado River.<sup>3</sup>

L. M. Lawson and Rafael Fernandez MacGregor, the two Boundary Commissioners, usurped leadership in the negotiations, aided by their legal and engineering assistants. However, the official heads were the diplomatic representatives from each country. Lawrence Duggan, Joseph McGurk and Charles Timm were the authorized State Department agents at El Paso.<sup>4</sup> The International Boundary Commission, since 1935, had assembled a great mass of data relating to water supply, present and prospective developments in both countries, and flood control on the three international streams -- Rio Grande, Colorado and Tia Juana.<sup>5</sup>

Day after day, the discussions were mainly on "the amount and the conditions of water delivery."<sup>6</sup> The items of importance for the Colorado River were the quantity and the quality of the water.

When negotiations commenced, "Mexico was demanding 2,000,000 acre-feet delivered through the All-American Canal."<sup>7</sup> The United States offered only 1,250,000 acre-feet

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<sup>3</sup>U. S., Congress, Senate, Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 79th Cong., 1st Sess., 1945, pp. 103-05.

<sup>4</sup>Ibid., p. 1093.

<sup>5</sup>Ibid., pp. 104, 1801.

<sup>6</sup>Ibid., p. 1089, testimony of R. J. Tipton.

<sup>7</sup>Ibid., p. 1325.

with deliveries in the River at the "lower boundary." Moreover, the Americans insisted on credit for any return flow. There was a difference of opinion at this point.<sup>8</sup>

The proceedings came "almost to a stalemate."<sup>9</sup> A recess was taken September 30, and the Mexican representatives went to Mexico City but later returned to resume the conference.

As a modification of the Formula adopted by the Committee of Fourteen at Santa Fe, the United States delegation next proposed that "Mexico receive water equal to 8% of the diversions made by the States of Arizona, California, and Nevada" annually.<sup>10</sup> Furthermore, Mexico was guaranteed a yearly minimum of 750,000 acre-feet of water in addition to the sliding scale proposition. All Mexican diversions would be "charged against the suggested allocation of 8% plus 750,000 acre-feet."<sup>11</sup>

After some discussion the American representatives recognized the obvious flaw in their own offer. They "did not want to base any deliveries to Mexico on United States diversions, for Mexico's eyes would constantly reach above

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<sup>8</sup>Ibid., p. 1336.

<sup>9</sup>Ibid.

<sup>10</sup>Ibid., p. 1073.

<sup>11</sup>Ibid., p. 1337.

the border when the terms of the treaty were being administered."<sup>12</sup> Since such an arrangement could lead to periodical arguments about what constituted 8% of Lower Basin diversions, it was decided as unwise "to set up our use of water as a criterion of the amount Mexico had a right to use."<sup>13</sup> Finally, the conclusion was reached that a "definite guaranty of a certain fixed amount was better for the United States than a sliding scale."<sup>14</sup>

The Santa Fe Formula was then abandoned in favor of the actual treaty figure of 1,500,000 acre-feet -- the "lowest possible figure" to which Mexico would agree and the highest that the United States would accept.<sup>15</sup> There could be no doubt that this guaranteed minimum quantity for Mexico represented a compromise.

At the beginning of the El Paso conferences the Mexicans had insisted that their share of Colorado River water should be top quality flow -- of the upstream variety. Realizing that such a request was impossible to grant, the Americans had carefully avoided further talk along these lines. The issue arose again, however, when the allotment

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<sup>12</sup>Ibid., pp. 1337-38, testimony of Tipton.

<sup>13</sup>Ibid., p. 1075.

<sup>14</sup>Ibid., p. 1072.

<sup>15</sup>Six States Committee, In Support of Ratification of the Treaty with Mexico (Tucson: University of Arizona, 1945), O. 78.

figure was written into the treaty. Mexico desired a guarantee of quality, as well as of quantity, but the American diplomats, according to Charles Timm, "succeeded in evading" the issue.<sup>16</sup> In addition, the words, "from any and all sources," were objectionable to Mexico in relation to the waters of the Colorado, but the "U. S. representatives insisted upon them" in the treaty to insure credit for the United States "for all kinds of water."<sup>17</sup> It was practically impossible to persuade the Mexican agents to accept return flow and drainage water as part of their allotment "which would require in the future some dilution with fresher water of a less alkaline quality."<sup>18</sup> Indeed, the Mexicans remained unconvinced at the time that they should take such water -- a misunderstanding which spelled trouble at the International Border.

The treaty provision for extraordinary drought in the Basin was equally misunderstood at El Paso. Borrowed directly from the 1906 Treaty on the Upper Rio Grande,<sup>19</sup>

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<sup>16</sup>Committees of Fourteen and Sixteen, Proceedings at Salt Lake City: 1944 (Los Angeles, 1950), pp. 15, 21. See also Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 556-57.

<sup>17</sup>Ibid., pp. 107-08, testimony of Frank B. Clayton. "When you speak of any and all sources, as far as the obligation to Mexico is concerned, it is immaterial where the water comes from."

<sup>18</sup>Ibid., pp. 39-40.

<sup>19</sup>U. S., Statutes at Large, XXXIV, 2953-60,

this provision seemed to need no definition and little discussion. Unfortunately, just what was meant by the term "extraordinary drought" was never exactly determined. Yet it was decided that the criterion of reduction of use in the United States was not to apply to the Lower Basin only, but to the entire American Basin.

Not subject to varying interpretations was Article 15 of the Treaty providing for annual, rather than fixed, schedules of delivery. Sponsored by the Mexican negotiators, it permitted schedule variations to reflect the changing pattern of water use in Mexico. This seemed desirable since the "entire Mexican irrigation system was dependent for its life on the timely delivery of waters from the Colorado River."<sup>20</sup> Winter crops could be raised more abundantly south of the Border through increased water use in the proper season; a better agricultural economy could be built up easily.

Article 20 was inserted at the request of the American negotiators. It was for the express purpose of allowing American labor to be used in Mexico by the United States Section of the International Boundary Commission, or other agencies, in connection with work assigned

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<sup>20</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 182-83, letter of R.F. MacGregor to L.M. Lawson, March 18, 1944. See also Ibid., p. 1283.

under the Treaty.<sup>21</sup>

Undoubtedly, the Treaty produced at El Paso was a thorough document from most points of view. But admittedly Imperial Valley of California was not protected in it "against excessive runoffs from the Mexican canals to the Salton Sea."<sup>22</sup> This subject was something the negotiators failed to consider.

In order to comprehend what actually was accomplished in 1943 at El Paso, it is necessary to summarize the more important treaty sections pertaining to the Colorado River.

The introductory remarks certified the purpose of the document as being "to fix and delimit the rights of the two countries with respect to the waters of the Colorado . . . in order to obtain the most complete and satisfactory utilization thereof. . ."<sup>23</sup>

After a definition of certain terms used in the

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<sup>21</sup>Ibid., p. 1780. "This stipulation was necessary because of the provisions of Mexican law requiring the employment of Mexican labor in Mexico."

<sup>22</sup>Ibid., p. 1213, testimony of R. J. Tipton.

<sup>23</sup>U. S., Congress, Senate, Executive Document A, "United States-Mexico Water Treaty," 78th Cong., 2d Sess., 1944. This analysis is based on the one by L. M. Lawson in Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 161-77; observation of the document itself; and R. J. Tipton's "Engineering Memorandum on the Treaty" contained in Book 2 of Six States Committee, In Support . . ., pp. 91-125.

Treaty, Article 2 prescribes the general powers and functions of the "International Boundary and Water Commission," formerly the Boundary Commission, United States and Mexico. Administration of the Treaty is entrusted to the Commission which consists of a Mexican Section and an American Section. Each government extends diplomatic privileges and immunities to the Section officers of the opposite government. The jurisdiction of the Commission is defined as extending to the limitrophe parts of the Colorado River, to the land boundary, and to works located thereon. Each section retains jurisdiction over that part of the works located within its own country.<sup>24</sup>

The purpose of Article 2 is to provide a central agency through which all treaty matters can be cleared, serving to coordinate the activities of other agencies engaged in the discharge of functions relating to boundary affairs.

Article 3 prescribes a certain order of preferences to serve as a guide to the Commission in matters which concern the joint use of international waters.

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<sup>24</sup>Ibid. These provisions serve more to clarify and recognize a status already existing than they do to create new authority in the Commission. By the Convention of 1889, which created the Commission, matters affecting either the land or water boundary were placed within its jurisdiction. The scope of this authority was extended by the Convention of March 20, 1905, providing for the elimination of bancos from the effects of the boundary treaty of November 12, 1884.

Domestic and municipal uses are first on the preference list. The article is of limited scope, especially in relation to the Colorado.

In Article 10 the United States guarantees Mexico an annual quantity of 1,500,000 acre-feet of river water from any and all sources, to be delivered in accordance with schedules furnished in advance of each irrigation year by the Mexican Section of the Commission. Beyond this minimum quantity, the United States delivers to Mexico, whenever the American Section decides there is a surplus of water, an additional quantity up to a total, including the 1,500,000 acre-feet, of not more than 1,700,000 acre-feet per year. Mexico can use any other waters which arrive at her points of diversion but can acquire no right to any quantity in excess of her guaranteed amount. In case of extraordinary drought, or serious accident to the irrigation system in the United States, deliveries to Mexico will be reduced in the same proportion as American consumptive uses are reduced.

Article 11 provides that the waters allotted to Mexico by Article 10 will be made up of the waters of the Colorado "whatever their origin" and will be delivered to Mexico in the boundary portion of the River, except that until 1980 Mexico may receive 500,000 acre-feet annually, and after that year 375,000 acre-feet annually, through the All-American Canal, as part of the guaranteed quantity.

If the Mexican diversion dam is located entirely in Mexico, the United States undertakes to deliver at Mexico's request up to 25,000 acre-feet annually of the allocation at the Sonora land boundary near San Louis.

"This latter quantity of water will be made up largely, if not entirely, of waste and return flows from the Yuma project."<sup>25</sup>

Article 12(a) requires that Mexico construct, at its expense, a main diversion structure in the River below the international boundary. If the dam is located in the limitrophe section of the river, its location, design and construction are subject to the approval of the Commission which will operate and maintain the structure at Mexico's expense. Regardless of where the structure is located, provision is made for the construction by the two sections, each within its own territory but at Mexico's expense, of levees and interior drainage facilities necessary to protect lands within the United States against damage from floods and seepage resulting from the operation of the diversion structure.

Paragraph (b) of Article 12 provides for the construction by the United States of Davis Dam and Reservoir, a part of the capacity of which is necessary to make possible the regulation at the boundary of waters to be

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<sup>25</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico. 1945, p. 165.

delivered to Mexico. The province of the United States Section of the Commission is to furnish officials of the Bureau of Reclamation the annual schedules of delivery presented by the Mexican Sections so the Bureau can operate the structure to make available to Mexico the waters in the quantities and at the times called for by the schedules.

Paragraph (c) provides for the acquisition or construction by the United States, within its own territory, of any works necessary to convey waters to the Mexican diversion points referred to in the Treaty. All works which are used exclusively for this purpose are constructed and acquired, and thereafter operated and maintained, at Mexico's expense.

Paragraph (d) provides for the construction and operation of gaging stations on the river and on all other carrying facilities used for the delivery of water to Mexico, in order to keep a complete record of the flow of the river and of the waters delivered.

Article 13 provides for study and preparation of plans for flood control on the River below Imperial Dam, and for the building of any flood control works which may be recommended as a result of the studies approved by the two Governments.

Article 14 requires Mexico to pay a proportionate part of the costs of construction, operation, and mainten-

ance of Imperial Dam and the Imperial Dam-Pilot Knob section of the All-American Canal in consideration for the use of these facilities. This provision serves to decrease proportionately the costs of construction, operation, and maintenance borne by American users.

Article 15 necessitates the delivery to Mexico of her guarantee at the points specified in Article 11 and in accordance with annual schedules which the Mexican Section formulates and presents to the Commission before the beginning of each calendar year. Separate schedules are devised for deliveries in the River and for deliveries through the All-American Canal. These schedules are subject to limitations, especially in regard to minimum and maximum rates of flow at different times of the year. Mexico is permitted to vary her schedules from time to time within the year as circumstances require, but always subject to the limitations as to total amounts and rates of delivery as prescribed by the treaty.

The provisions of Article 17 are designed to make it clear that no obligation rests upon one country to control the floods or releases of excess water for the benefit of the other. They require each Government to furnish the other with advance information concerning excess flow.

Article 20 provides that each Government, through its section of the Commission, shall perform the construction of works assigned to it. In the construction of these works, the respective sections of the Commission

may make use of any competent public or private agencies in accordance with the law of the respective countries. All materials used in construction are exempt from import or export duties. Personnel employed in the construction of the works are also exempted from immigration restrictions and labor regulations. Each Government assumes responsibility for the settlement of claims arising within its own territory in connection with the construction, operation or maintenance of the works.

Article 22 prescribes that the provisions of the convention of February 1, 1933, for the rectification of the Rio Grande in the El Paso-Juarez Valley, shall govern, so far as delimitation of the boundary, distribution of jurisdiction and sovereignty, and relations with private owners are concerned, in any places where works for the artificial canalization or rectification of the Rio Grande and the Colorado River are built. The relevant provisions of the convention of 1933 are found in Articles V, VI, VII and VIII.

Each Government in Article 23 agrees to acquire any private property necessary for the construction of the works stipulated. Ordinarily this property is acquired at the expense of the country within which it is situated. This is not true where Mexico, under the provision of other articles, agrees to pay a proportionate part of the cost of property and works located in the

United States, utilized in the delivery of Mexico's allocated water supply. Mexico pays all the cost of certain other works devoted exclusively to this purpose.

This Article further specifies that construction of the works built in pursuance of the treaty shall not confer upon either of the two countries any rights, either of property or of jurisdiction, over any part of the territory of the other. Each Government shall retain, through its own section of the Commission, ownership and control within its territory of real property and works acquired or constructed under the treaty.

Article 24 outlines certain powers and duties of the Commission which are not specifically mentioned elsewhere.

Paragraph (a) provides that the Commission shall initiate investigations and develop plans for the works provided for in this and other agreements dealing with boundaries and international waters. Recommendations are to be made for the financing of the works and the division of costs.

Paragraph (b) requires the Commission, or its respective sections, to construct, operate, and maintain the works agreed upon, or to supervise such construction, operation, and maintenance, each section within the territory of its own country.

Paragraph (c) generally charges the Commission with the duty of exercising and discharging the specific powers entrusted to it by this and other agreements in force between the two countries, and requires the authorities of each country to aid the exercise and discharge of these powers and duties.

Paragraph (d) provides that the Commission shall settle all differences that may arise internationally with respect to the interpretation or application of the treaty. Where the Commissioners fail to reach an agreement, they shall so inform their respective Governments in order that the controversy may be adjusted through regular diplomatic channels.

Paragraph (e) requires the Commissioners to furnish any information to their respective Governments which may be requested.

Article 25 provides that Articles III and VII of the Convention of March 1, 1889 shall govern the proceedings of the Commission in executing the treaty provisions and that, supplementary thereto, the Commission shall establish a body of rules and regulations governing its proceedings subject to the approval of both Governments.

Article 27 states that treaty provisions relating to Mexican deliveries are not to be applied until Davis Dam and the major Mexican diversion structure are operating or for a maximum period of five years, the time within which

the two countries agree to construct these works. Meanwhile, Mexico is given permission to construct and operate, at its expense, a temporary diversion structure in United States territory for the purpose of diverting water into the Alamo Canal. The plans for such structure and its construction and operation shall be subject to the approval of the American Section. During this period the United States agrees to make available in the river at the diversion structure river flow not currently required in the country and to cooperate with Mexico to the end that the latter may satisfy its irrigation requirements, within limits, for lands irrigated during 1943.

Article 28 provides that ratifications of the treaty shall be exchanged in Washington, and that the treaty shall enter into force on the day of such exchange and shall continue in force until terminated by another treaty concluded for that purpose.

With minor changes, which were made in Washington by the treaty-drafting experts of the Department of State and the Mexican Embassy, the treaty was signed in Washington on February 3, 1944.<sup>26</sup>

It was contended, especially by the Bureau of Reclamation, that the Treaty could be interpreted to create

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<sup>26</sup>Ibid., p. 1806. See also Executive Document A, "United States-Mexico Water Treaty," 1944.

authority in the United States Section of the International Boundary and Water Commission to conflict with the authority of other federal agencies. When called to the attention of the State Department, it was claimed that this was a wholly unintended effect.<sup>27</sup> Accordingly, on November 14, 1944, a Protocol was signed for the purpose of clarifying whatever doubt may have existed under Articles 2 and 23 of the Treaty with reference to the jurisdiction of either Section over works located wholly within the interior of a country and used but partly for the performance of treaty functions.

The Protocol provides that works situated wholly within a nation and used only partly for treaty fulfillment shall be under the jurisdiction and control of the agencies which may be authorized by domestic law to construct, operate, and maintain such works. These functions shall be exercised in conformity with the provisions of the Treaty, and in cooperation with the respective Sections of the Commission, to the end that international obligations may be coordinated and fulfilled. Works constructed or used along the Boundary, and those constructed or used exclusively for the discharge of the Treaty, shall be under the jurisdiction of the Commission, or of the

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<sup>27</sup>Martin G. Glaeser, "The Mexican Water Treaty: Part Two," Journal of Land and Public Utility Economics, XXII, 354.

respective section, in accordance with treaty stipulations.<sup>28</sup>

The Committees of Fourteen and Sixteen were officially informed of the Treaty's existence at the January, 1944, meeting in Salt Lake City, Utah. Department of State representatives, led by Charles Timm, reported the salient features of the agreement which had not yet been signed.<sup>29</sup> Immediately, the California and Nevada delegates rebelled; they claimed the Treaty contained provisions in "clear violation" of their water contracts. On the other hand, the Upper Basin delegates heartily approved of the pact, for they were determined to limit Mexico's use at almost any cost to the Lower Basin; they believed "this particular treaty would do so without invading their own water rights."<sup>30</sup> Arizona, whose reasons were obscure, united with the Upper Basin States despite the fact that her anticipated contract for water most certainly would be impaired by the Treaty. Since obviously nothing more could be gained by further consideration, the Committees of Fourteen and Sixteen disbanded.

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<sup>28</sup>Six States Committee, In Support. . ., p. 23. See U. S., Congress, Senate, Executive Document H, 78th Cong., 2d Sess., 1944.

<sup>29</sup>Committees of Fourteen and Sixteen, Proceedings at Salt Lake City: 1944, pp. 15-16.

<sup>30</sup>Ibid., pp. 21-22. See also Remi A. Nadeau, The Water Seekers (Garden City, New York: Doubleday Co., 1950), p. 256.

Following the adjournment, California waged an opposition campaign equal to the one she initiated years before on behalf of the Boulder Canyon Project. Not allied with anyone in particular, California would fight her latest battle almost unassisted.

Arizona, on the other hand, was now willing to cooperate in the river development plan, having realized a little late that through refusal to unite with her sister States she was being deprived of some contractual advantages enjoyed by her neighbors. Negotiations were opened with the Department of Interior, and on February 9, 1944, Secretary Harold Ickes signed a contract with officers of Arizona's Colorado River Commission, governing the amount of water to be delivered to that State yearly from Lake Mead.<sup>31</sup> All of the other Colorado Basin States approved the contract with the exception of California. In view of Arizona's years of refusal to accept the water allotment of the Boulder Canyon Project Act, California had appropriated, allegedly as surplus, a considerable amount of water in excess of that specifically allotted to her

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<sup>31</sup>Arizona Daily Star, February 10, 1944, p. 1.

under the Project Act.<sup>32</sup> This situation was to cause great difficulty in the years ahead.

Governor Osborn issued a call for convening the Arizona Legislature in special session on February 15, 1944. In ten days' time the Legislature, under the impetus of the Governor's leadership and in response to increasing public demand, approved the recently negotiated contract with the Interior Department and made an appropriation for a survey of Arizona water resources. On February 24, the Legislature also ratified the much disputed Colorado River Compact, an action which had been at the vortex of intrastate controversial politics since 1923.<sup>33</sup>

Arizona joined the four Upper Basin States at a meeting in Santa Fe in July of 1944. The States agreed that California's propaganda attack on the Mexican Treaty should be repelled. Representatives from Texas, cognizant

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<sup>32</sup>California, limited to 4,400,000 acre-feet and one-half of the unapportioned surplus yearly, under the Boulder Dam Act, was alleged to be receiving 5,362,000 acre-feet in 1944, and objected to the Arizona contract on the grounds that the quantity of water specified--2,800,000 plus one-half the surplus and total use of the Gila--could not be delivered to Arizona without invading the perfected water rights of California and the other Basin States. Arizona Daily Star, February 2, 1944, p. 1. When the Upper Basin supported Arizona's contract claim, Californians declared they knew at last why Arizona had backed the Treaty.

<sup>33</sup>Arizona, State Legislature, Journal of the Senate, 16th Leg., First Special Session, 1944, pp. 35-39, 51.

of the benefits to the Rio Grande, assembled with the others to form the "Six States Committee" which supported ratification of the Water Treaty.

The Committee of Six States made the dubious claim of representing the "responsible water officials and the great majority of the affected water users in the States of Arizona, Colorado, New Mexico, Texas, Utah, and Wyoming."<sup>34</sup> Statements in favor of the Treaty were issued from time to time over a period of some seventeen months. The arguments manufactured were tenuous and disregarded historical facts and documentary evidence. The Colorado River Compact and the Boulder Dam Project Act were misinterpreted and abused. California was said to have rights "junior" to those guaranteed Mexico by the Treaty, because that State was "notified in the Compact itself" of such superior Mexican "rights."<sup>35</sup> The Compact, of course, never did deny or grant Mexico anything, speaking only in "if" phrases about "international comity," not rights.<sup>36</sup>

The only meritorious observation by the Committee was one which actually did not defend the Treaty. It was maintained that no river projects, like Boulder Dam, should

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<sup>34</sup>Six States Committee, In Support. . ., p. 1

<sup>35</sup>Ibid., pp. 81-83, 90.

<sup>36</sup>U. S., Congress, House, Colorado River Compact, 67th Cong., 4th Sess., 1923, House Doc. 605, pp. 7-12. Article III(c).

have been staged in the United States before Mexican water rights were absolutely defined.<sup>37</sup> The truth in this contention was indeed irrefutable, but what "should have been" done was hardly the answer to international problems.

That the Six States Committee was effective in its campaign was exemplified in the Eastern United States where public sentiment was stimulated largely in favor of the Mexican Pact. By early 1945 the Treaty was esteemed "as a necessary earnest of American good-neighborliness."<sup>38</sup> California was regarded as a selfish child who would not subordinate her wishes to the welfare of the family.

"It is not quite clear," said the Baltimore Sun, "how California would deny Mexico's claim other than by brandishing the might of the United States over Mexico's head."<sup>39</sup> The only item "not quite clear" was how an entire section of the United States, instructed by its newspaper media, could be so misinformed about and unsympathetic to the needs of the southwestern portion of their country.

Opinion in the East seemed to agree with the news commentator who declared that the treaty "would merit

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<sup>37</sup>Six States Committee, In Support. . ., p. 57.

<sup>38</sup>Nadeau, The Water Seekers, p. 287.

<sup>39</sup>The Baltimore Sun, January 5, 1945, p. 2.

favorable action by the Senate even if it means a real sacrifice on our part."<sup>40</sup> California failed to see the justice in sacrificing water from the one section of the nation which needed it most; such generosity seemed unmerited.

The majority of those truly affected by the Mexican Treaty agreed with California. At the invitation of E. P. Carville, Governor of Nevada, the Colorado River Water Users Association met in Conference at Las Vegas, Nevada, on January 12 and 13, 1945. The fifty-one delegates represented between seventy and eighty percent of "the actual present-day water users" of the Basin States, except New Mexico.<sup>41</sup> A resolution was unanimously adopted against the Treaty because it "betrayed the best interests" of the River Basin and of the United States.<sup>42</sup>

On January 19, the American Society of Civil Engineers, Intermountain Section, recorded their opposition in a similar resolution which recommended certain amendments.<sup>43</sup> Many Utah water interests followed suit,

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<sup>40</sup>Nadeau, The Water Seekers, p. 291. Several commentators were quoted to this effect.

<sup>41</sup>Colorado River Water Users Association, Proceedings of the First Regular Conference (Las Vegas, Nevada, 1945), pp. 2-3.

<sup>42</sup>Ibid., pp.58-60.

<sup>43</sup>U. S., Congressional Record, 79th Cong., 1st Sess., 1945, XCI, Part 10, Appendix, 1273-77.

like the Metropolitan Water District of Salt Lake City.<sup>44</sup>

Furthermore, such prominent organizations as the American Federation of Labor, the American Bar Association, and the National Grange were very much opposed to the Treaty for their own respective reasons. The American Bar Association Journal condemned the pact with Mexico in no uncertain terms, quoting the remarks of Dean Roscoe Pound, Harvard University Law School, before the house of delegates of the American Bar. Dean Pound in reviewing some of the administrative features said:

This treaty is unique and without precedent in the way in which it subjects the rights of Americans with respect to some of the most important forms of what we can fairly call property, in some of our States, to the absolute, unlimited, unchecked power of a single commissioner. . . I have not encountered anything which goes so far in the direction of subjecting the rights of individuals to an absolute, unlimited, unchecked authority.<sup>45</sup>

Finally, enemies of the Water Treaty produced the latest Bureau of Reclamation estimates which were based upon studies of stream flow over a forty-four year period. The average outflow from Boulder Dam was given as 8,500,000 acre-feet in the report but that available for use was only 7,900,000 because of evaporation and other

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<sup>44</sup>Arnold Kruckman, "Editorial," Western Construction News, XX (February, 1945), 94.

<sup>45</sup>"Creating Administrative Agencies by Treaty," American Bar Association Journal, XXX (November, 1944), 629; Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, p. 672.

losses. The Lower Basin contracts and the Mexican allotment would consume a total of 9,962,000 acre-feet, leaving a deficit of 2,062,000 on the Colorado.<sup>46</sup>

Obviously, the treaty assailants pointed out, "any minimum guarantees of water to Mexico must invade the commitments made by the United States to its own projects."<sup>47</sup>

In an attempt to overcome so much opposition in the West, the State Department endeavored to show that the conclusion of the Treaty was an international law obligation of the United States. F. J. Berber, Professor at the University of Munich, later inspected the Department's case and said simply: ". . . the legal sources produced for this purpose are extremely thin, and in view of this tactical situation the treaty has no great evidential power as the expression of a continuous state practice."<sup>48</sup>

In the midst of the furor -- politicians against water users, frenzy against facts, and East against West -- hearings began before the Senate Foreign Relations Committee on January 22, 1945. Tom Connally of Texas held the strategic position of committee chairman and

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<sup>46</sup>Quoted in Martin G. Glaeser, "The Mexican Water Treaty: Part One," Journal of Land and Public Utility Economics, XXII, 8.

<sup>47</sup>Ibid., p. 9

<sup>48</sup>Berber, Rivers in International Law, p. 118.

California's venerable Hiram Johnson was usually the only other member present. However, the room was filled with interested parties on both sides.<sup>49</sup>

The proceedings were often a duel between the Chairman and a parade of California witnesses. Nothing failed to hide the impatience with which Senator Connally regarded the arguments and protestations of treaty opponents. Moreover, eighteen hundred pages of testimony seemed to reveal the moving consideration, darkly hinted, that "in compensation for the great advantages accruing to the State of Texas from the division of waters of the Rio Grande, a definitely liberal and preferred allotment of waters was accorded to Mexico out of the Colorado at the expense of the States comprised within the watershed."<sup>50</sup> This was true despite Boundary Commissioner Lawson's disclaimer that the question of trading waters between the two countries was ever brought up in the negotiations. Although Lawson said, as first witness, that "settlement was entirely on the basis of each stream system,"<sup>51</sup> what was understood since 1940 need not have been discussed in the final parley. Moreover, that which the Commissioner

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<sup>49</sup>Nadeau, The Water Seekers, p. 294.

<sup>50</sup>Glaeser, "The Mexican Water Treaty: Part One," Journal of Land and Public Utility Economics, XXII, 2.

<sup>51</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, p. 34.

denied took place anyway in the nature of the document produced at El Paso.

Before the Commissioner testified, Joseph C. Grew, Under Secretary, read Edward R. Stettinius' official statement as Junior Secretary of State. The earlier claim of the United States Government to possess absolute sovereignty over water within its own territory was, in effect, renounced. "Mutual obligation" was stressed by Stettinius as governing the solution of the international river problem. Then, in closing, the Junior Secretary contradicted himself when he said: "This treaty has been brought about simply by the application of those principles of comity and equity which should govern the determination of the equitable interests of two neighboring countries in the water of international streams."<sup>52</sup> In applying "the principles of comity", the United States certainly could not be recognizing a legal obligation, for the one doctrine would necessarily exclude the other.<sup>53</sup>

By continued restatement throughout the hearings, United States representatives announced that Mexico was entirely willing to accept any sort of water, no matter how poor, as a portion of her annual allotment. Personal

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<sup>52</sup>Ibid., pp. 20-21, written statement by Edward R. Stettinius.

<sup>53</sup>Berber, Rivers in International Law, pp. 122-29.

conversations and written memoranda were relied upon as evidence, it was said, to support this "clear understanding."<sup>54</sup>

An entirely different understanding of the Treaty was expressed to the Mexican people by Adolfo Orive Alba, Executive Chairman of the National Irrigation Commission of Mexico and a participant in the negotiations at El Paso. The Executive Chairman assured his compatriots that Mexico had an "undeniable right to receive waters of good quality" from the Colorado River.<sup>55</sup> "For reasons of a legal and technical nature," there was no danger that the water would be of poor or unusable quality. In addition, said Orive Alba, Mexico had no objection to receiving these waters the same as the other American users of the lower portion of the Colorado River, as long as they were of good quality for irrigation."<sup>56</sup>

Unfortunately the Mexicans did not read L.M. Lawson's testimony before the United States Senate Committee, for the latter boastfully claimed:

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<sup>54</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 1801-02; Ibid., pp. 84-85, testimony of L. M. Lawson.

<sup>55</sup>U. S. Congress, Senate, Water Treaty of the Colorado River and the Rio Grande Favors Mexico, 79th Cong., 1st Sess., 1945, Senate Doc. 98, pp. 15-17; El Universal, August 1, 1945, p. 1-2.

<sup>56</sup>Ibid.

The treaty itself fixes for all time the obligation of the United States and the amount of water which Mexico will receive. That amount of water is even less than was offered to Mexico in 1929, because this treaty proposes to credit the United States with all the return flow in the river, all the waste water that may arrive at the boundary line, which has been estimated, in various ways by various persons, to amount to, we will say, an average of at least 900,000 acre-feet.<sup>57</sup>

Where Commissioner Lawson obtained his information was not clear, for the Treaty itself specified nothing about "credit" to the United States for anything that flowed into Mexico up to "900,000 acre-feet." Even more amazing was the Commissioner's allegation that the firm offer in 1929 of 750,000 acre-feet was a larger "amount of water" than the 1,500,000 guaranteed in 1945. The figures were simply not with Lawson.

Peculiar reasoning was not confined to L.M. Lawson, for R. J. Tipton, consulting engineer for the Six States Committee, explained that Mexico "would have to take water so saline as to be totally useless for irrigation."<sup>58</sup> Just what that country would do with unusable flow was not explained. Furthermore, said Tipton, "if Mexico required an additional amount of fresh water to dilute this to make it usable, she could not call upon the United States to

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<sup>57</sup>Committee on Foreign Relations, Hearings. . ., 1945, p. 83.

<sup>58</sup>Ibid., p. 343.

deliver that fresh water."<sup>59</sup>

Lack of concern for neighbors was only topped in the hearings by lack of concern for posterity. Fred E. Wilson, attorney for the New Mexico Interstate Streams Commission, said the matter of salinity would be many years in arising, so he "just figured" that "the people who come after us will have to solve it as best they can."<sup>60</sup>

A shrewd and foresighted observation on the subject came finally from Senator Alexander Wiley of Wisconsin, who said:

If we are bound under this contract to give Mexico 1,500,000 acre-feet of the same quality water we are now giving her, and if in the future the flow of that stream becomes more saline than it is now, we will have to put in more water than the 1,500,000 acre-feet, to reduce what goes to Mexico to the present quality of water.<sup>61</sup>

The "extraordinary drought" section of Article 10 was a constant source of disagreement. Commissioner Lawson claimed: "In order for the 'escape clause' to be invoked, it is sufficient if there be such a drought in any portion of the basin, requiring a reduction of consumptive uses anywhere. The reduction in deliveries to Mexico will be proportionate to the over-all reduction of uses

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<sup>59</sup>Ibid., p. 324.

<sup>60</sup>Ibid., p. 1588.

<sup>61</sup>Ibid., p. 1592.

in the United States."<sup>62</sup> The reverse of this interpretation, on the other hand, was asserted by Mexico's Oriva Alba; a total crisis throughout the American Basin was necessary, said he, before Mexico's rightful quantity could be at all reduced.<sup>63</sup>

Treaty opponents in the Senate hearings were more concerned about the large amount of water guaranteed to Mexico than about any other subject. Fisher S. Harris of Utah reflected the feelings of this group when he stated: "Previous to 1943, you will search the record in vain for an official American expression of countenance to a guarantee to Mexico of 1,500,000 acre-feet, plus the use of American works to enable her to use it."<sup>64</sup>

Since arguments like the foregoing were the truth, treaty proponents had to plot their strategy accordingly. Mexico was said to have increased her irrigated area, "served from diverted flows of the Alamo Canal as well as by pumping and gravity systems,"<sup>65</sup> in order to use the dubious amount of 1,800,000 acre-feet of Colorado River flow. The volume guaranteed in the Treaty, therefore,

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<sup>62</sup>Ibid., p. 164.

<sup>63</sup>Water Treaty. . ., 1945, Senate Doc. 98, p. 18.

<sup>64</sup>Committee on Foreign Relations, Hearings. . ., 1945, pp. 557-58.

<sup>65</sup>Ibid., p. 151, testimony of L. M. Lawson.

was designated as 300,000 acre-feet less than current Mexican appropriations. Although the data was based on perceptibly faulty records, the value of this repeated contention was immeasurable in the hearings.<sup>66</sup>

California was not about to let such reasoning go unchallenged. M. J. Dowd, consulting engineer for Imperial Irrigation District, denied Mexico was using 1,800,000 acre-feet a year, saying the amount was closer to one million acre-feet in 1943 and 1944. "This idea that Mexico could have used nearly 2,000,000 acre-feet in any year cannot be substantiated with the All-American Canal in operation and taking the natural flow from 1913 to 1943,"<sup>67</sup> said Dowd.

Actually, recent use in Mexico made little difference, for her water employment was vitally dependent upon Boulder Dam. As a vivid illustration of complete reliance, Engineer Dowd related the following:

The release from the Dam increased slightly toward the middle of 1942, and it put several thousand acres of new land under water. Immediately there was a request from Mexico for the United States to reduce the flow from Boulder Dam. Later on in the summer, the release from Boulder Dam was cut somewhat to do some work up there, and the water level dropped below the suction of the pumps, so there was a very vigorous request on the part of Mexico to increase the release from the Dam to raise the

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<sup>66</sup>Ibid., p. 685, testimony of M. J. Dowd; G.E.P. Smith of Arizona maintains throughout his writings that such an amount could not possibly have been used in Mexico.

<sup>67</sup>Ibid., p. 698.

river high enough to where the pumps would reach it. That was done by the Bureau of Reclamation at the request of our State Department.<sup>68</sup>

Even L. M. Lawson had to admit in answer to Senator Sheridan Downey's probing questions that "the 1,800,000 acre-feet would not have been possible had it not been for the facilities which have been created in the United States."<sup>69</sup> Physical, not economic, conditions had sharply limited Mexico's beneficial use of the River prior to the Dam at Boulder Canyon.

In order to distort California's true motives and to divert attention toward their own faulty explanations, Six State Committee witnesses asserted that the only American interests which would gain by the failure of ratification of the Treaty would be the Imperial Irrigation District, because "it would be permitted to continue and increase its deliveries of water for use upon Mexican lands and thereby increase its possible annual revenue derived from such deliveries."<sup>70</sup>

Phil D. Swing of California effectively checked this claim when he pointed out that his State was selling the water but was not being paid the actual costs of operation of the system. Rates were fixed by the Mexican

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<sup>68</sup>Ibid., p. 706.

<sup>69</sup>Ibid., p. 32.

<sup>70</sup>Ibid., p. 306.

Secretary of Fomento, and the District received no profit since it did not control the rates.<sup>71</sup> Furthermore, Evan T. Hughes as President of the Board of Directors of Imperial Irrigation District, testified the District "did not wish Mexico to receive any water in excess of the 750,000 acre-feet" which was offered officially to her in 1929. Hewes counterclaimed that the State Department "either wilfully or negligently" aided Mexico in building up her demands and that the Treaty did nothing to protect the investment of Imperial Valley farmers in Mexico.<sup>72</sup>

California seriously indicted the entire pact when she brought forth evidence that 80% of all irrigators in the American Basin, the real parties in interest, were definitely opposed to the Treaty. "Delivery to Mexico of excessive amounts of first right water stored and regulated through the years," with works constructed in the United States, would be "unfair to American farmers and farm labor," placed in competition with "abundant cheap labor" in Mexico.<sup>73</sup> California alleged the "ruthless" W. O. Jenkins had by 1944 "acquired two-thirds of the ter-

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<sup>71</sup>Ibid., p. 402.

<sup>72</sup>Ibid., pp. 1642-45, 47-63.

<sup>73</sup>Ibid., pp. 1797-98, written statement by E. F. Scattergood.

ritory to be benefited by the Treaty."<sup>74</sup>

The American Bar Association was concerned enough about the administrative features of the Treaty to send Sylvester C. Smith of New Jersey to say:

The treaty does not suggest any policy or standard limiting the manner in which the American Commissioner can determine who, of all those who have water rights, should supply a deficiency which may arise under the terms of the treaty, nor how such deficiency contribution might be prorated among several property owners. There is no protection against arbitrary or capricious actions, by providing adequate judicial review by the Federal courts.<sup>75</sup>

With so much harassment from all sides, treaty proponents had to resort to argument that scarcely deserved mention. Reference was made to the "threat" of arbitration of Colorado River rights under the Inter-American Arbitration Treaty of 1929. The court, said the proponents, would most certainly rule against the United States.<sup>76</sup>

Once again, Phil Swing impeded this line of argumentation when he said: ". . . there is no precedent in international law to submit to arbitration a claim by Mexico that she is entitled to have water stored in

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<sup>74</sup>Ibid., p. 919, testimony of Robert W. Kenny; a complete account of Jenkins' activities is given here by Attorney General of California Kenny.

<sup>75</sup>Ibid., p. 1785.

<sup>76</sup>Ibid., pp. 1585, 1805-16.

Boulder Dam delivered to her by diversion at another structure, Imperial Dam, through the All-American Canal, built and paid for by the United States or by its citizens."<sup>77</sup> A. E. Chandler, special counsel for the City of Los Angeles, added: "A right must be based upon the use of the natural flow, and waters released from storage are not part of the natural flow."<sup>78</sup>

Without a doubt, the United States had the better case if international litigation became a necessity. Even Mexico had acknowledged this fact when her government spokesman, Ernesto Enriquez, observed:

A judgment in arbitration . . . would not give to Mexico the advantages that she obtains with the water treaty now signed. The arbitrator only has faculties to declare what quantity of water would belong to Mexico and to the United States, respectively. He never would be able to determine what works ought to be built in the limitrophe sections of the river, with the object of obtaining a better use of the flow.<sup>79</sup>

Probably the most concise summary in the hearings of just what the Water Treaty meant to the United States was given in a written statement by Senator James G. Scrugham of Nevada, who helped work out the details of the Boulder Canyon Project Act and the Colorado River Compact. The Senator declared:

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<sup>77</sup>Ibid., p. 448.

<sup>78</sup>Ibid., p. 767.

<sup>79</sup>Berber, Rivers in International Law, p. 264; Professor Berber is quoting from the ratification proceedings in Mexico -- unavailable to the general public.

The proposed treaty with Mexico is of very questionable value. It cuts across all of the work of the Colorado River Compact, setting the States at each other's throats again by imposing upon the river system a new first mortgage, a priority, a guaranty, in favor of new lands in Mexico. The lands are guaranteed stored water out of Boulder Dam, in flat contradiction of the congressional mandate contained in Section One for uses exclusively within the United States. That assurance is contained in every water and power contract, including those to which my State is a party, and including even the Arizona water contract, signed the same week that this treaty was signed, in 1944. Until 1944 no one had the slightest notion that the State Department was going to reverse an act of Congress and take away stored waters which the United States had already contracted to deliver to Arizona, Nevada and California, in order to give them to Mexico. It is preposterous to guarantee to lands in Mexico, largely held by American speculators, rights superior to those secured by a half century of patient and costly development in our own country.<sup>80</sup>

When the Senate Committee hearings closed on February 21, 1945, the one "preposterous" position was that assumed officially by the State of Arizona whose determined politicians in Washington blindly supported the Treaty in spite of the admonition of Nevada and California.

California, still hopeful of victory, submitted alternative proposals to the Treaty which were recorded in the last pages of testimony.<sup>81</sup> Similar to the 1929 offer by the American Section of the International Water Commission, the California suggestions added the following

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<sup>80</sup>Committee on Foreign Relations, Hearings. . ., 1945, p. 1054, statement read by Alfred Merritt Smith.

<sup>81</sup>Ibid., pp. 1791-95.

points: No guarantee of quality expressly stated; proportional allocation in times of drought; the integrity of the Compact and contracts insured; full compensation to the owners of flood-control works in Mexico; protection of the Salton Sea area from flood-waters; and separate commissions for each of the international rivers. These recommendations were immediately labeled as "impractical" by Treaty proponents.<sup>82</sup>

The Treaty was favorably voted out of Committee, eighteen to four, on February 23. The record of member attendance at the Committee hearings, together with the fact that the Treaty was voted out in two days after the conclusion of sessions with the voluminous testimony remaining unprinted and hence certainly not digested by the absentees, can be called "unseemly procedure."<sup>83</sup>

The majority report of the Foreign Relations Committee stated:

It should be borne in mind that the rights and obligations of the two countries in the international stream are mutual and reciprocal, not merely unilateral. The treaty does not give away any natural resource. It simply recognizes these mutual rights and obligations. In so doing, it not only sets at rest the fears and uncertainties which are the source of misunderstanding and bitterness in the great river basins in both countries but also allows

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<sup>82</sup>U. S., Congressional Record, 79th Cong., 1st Sess., 1945, XCI, Part 10, 2816.

<sup>83</sup>Glaeser, "The Mexican Water Treaty: Part One," Journal of Land and Public Utility Economics, XXII, 1-2.

development to proceed in an orderly manner and on a firm basis.<sup>84</sup>

According to this presumptuous report, the Millennium was dawning for the Colorado River Basin -- a thing too good to be true.

Senate debate on the Treaty started on March 16, 1945, and continued recurrently for a month. The same presentations on both sides were made as in the committee hearings. Long forgotten by many of the Senators were the once popular words of Nevada's Senator, Key Pittman, during the final debate of the Boulder Canyon Project Act in 1928. In referring to the position of Mexico in the event that she should claim some right to the conserved waters of the Dam, Pittman said Mexico "never had any right under the comity of nations to the stored waters in our country." The Mexicans were "solely limited to the natural flow and the use" to which they put it.<sup>85</sup>

One of the main events in the Senate was the presentation of a letter from Herbert Hoover, who had served at Santa Fe as Chairman in 1922. The contention by the Six States Committee that the Compact subjected all water users to accept any diminution of their contract rights was impressively rebuked. Firmly against the Treaty,

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<sup>84</sup>Congressional Record, 1945, XCI, Part 10, 3177-82. See also Berber, Rivers in International Law, pp. 123-25.

<sup>85</sup>Committee on Foreign Relations, Hearings. . ., 1945, p. 668.

Hoover said in part:

I am sure none of the Commissioners who negotiated the Compact had any idea that our Government would offer to guarantee Mexico any such amount as the 1,500,000 acre-feet stated in the proposed treaty. At that time, it was a serious question as to how Mexico could prevent disaster to the lands she was then cultivating, much less increase that use.

Now by means of American works, we have controlled the flood water and silt, which is of tremendous value for Mexico. Had it been suggested in 1922 that the United States was to be paralyzed in the future by having to furnish free to Mexico a volume of water made available by works constructed in the United States, to supply lands made possible of development only because of those works, I know it would have met with the opposition of the Compact framers. Moreover, had the Compact negotiators considered such a treaty possible as the present one, I am not sure that agreement on a Compact could have been reached.<sup>86</sup>

It must therefore be concluded that the Treaty was not within the contemplation of the framers of the Compact and cannot be adduced as a valid reason for refusing to give weight to objections raised by American water users.

California's Senators, Hiram Johnson and Sheridan Downey, fought long and hard before their colleagues, but no one was paying much attention to them anymore. Twenty-nine reservations--enough to change the complexion of the entire document -- were introduced by California. These were quickly attacked by Tom Connally and his Upper Basin friends, who told the Senate that the Californians were

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<sup>86</sup>Congressional Record, 1945, XCI, Part 10, 3299-3303, letter of Herbert Hoover to Senator Albert Hawkes of New Jersey, February 26, 1945.

simply trying to smother the Treaty with amendments.<sup>87</sup>

On April 17 the lawmakers began voting on California's reservations, discarding them one by one. Eleven other reservations were substituted, having to do with matters of administrative law and procedure.<sup>88</sup> Indeed, the eleven were so broad in scope that they were reminiscent of the "Santa Fe Formula" of two years before. The next day, April 18, 1945, the final vote was taken. Seventy-six "yeas" to ten "nays" ratified the Treaty in the United States Senate.<sup>89</sup> The Californians, bitterly defeated, went home convinced of only one thing -- even the truth was no match for Texas determination.

While there had been some discussion of the Treaty in the Mexican press, the document's text, the protocol, and the American reservations were not officially released by that government until April 20, 1945.<sup>90</sup> What amounted to the Mexican equivalent of Senate Committee hearings began on July 31 and terminated on September 13, with a report to the Mexican Senate on September 27 recommending ratification. Some of the witnesses in the hearings did not consider the American eleven reservations to be very

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<sup>87</sup>Nadeau, The Water Seekers, pp. 295-96.

<sup>88</sup>U. S., Statutes at Large, LIX, Part 2, 1263-67.

<sup>89</sup>Congressional Record, 1945, XCI, Part 10, 3547.

<sup>90</sup>Glaeser, "The Mexican Water Treaty: Part Two," Journal of Land and Public Utility Economics, XXII, 352.

clear, but it was deemed to be better policy to clarify them by an exchange of notes than by formal counter reservations.<sup>91</sup>

Adolfo Orive Alba as Chairman of the National Irrigation Commission had done his work well. Mexicans, for the most part, were in favor of the Treaty, having read the official report prepared by Orive Alba's Commission.<sup>92</sup> However, Esquivel Obregon, President of the Academy of Jurisprudence and Legislation, and Ernesto Enriquez, international lawyer, strongly advised that assurance be obtained from the United States pertaining to the good quality of Colorado River water used on Mexican lands.<sup>93</sup>

In reply to this recommendation, Orive Alba said: "That was covered in the treaty when it spoke of waters for irrigation. No one would be able to sign a treaty to give or receive waters of bad quality because both parties would suffer damage therefrom."<sup>94</sup>

El Universal of Mexico City completely agreed with the National Irrigation Commission in supporting the Treaty. The newspaper on August 1, 1945, observed:

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<sup>91</sup>Ibid.

<sup>92</sup>Reprinted in Water Treaty of the Colorado River and the Rio Grande Favors Mexico, 1945, Senate Doc. 98, pp. 2-19.

<sup>93</sup>Excelsior, August 9, 1945, pp. 2-3; El Nacional, August 11, 1945, p. 1.

<sup>94</sup>Excelsior, August 10, 1945, p. 2.

As Mexico did not have any place to regulate the waters of the River in order to distribute them day by day, according to the needs of irrigation, it was necessary to arrange by means of the treaty for the United States to deliver that water regulated to our wishes within certain limitations which do not impose on us any sacrifice for any plan of cultivation that is followed in Mexicali Valley. For this service of regulation of that water, our country does not have to pay a single cent.<sup>95</sup>

This, indeed, was great incentive for propitious Senate action.

The day the Mexican Senate received the Committee report, it approved the Water Treaty without reservation. As for the eleven American reservations, the Mexicans specifically refrained from considering them, because it was "not competent to pass judgment upon them."<sup>96</sup> Finally, the instrument of ratification was signed by the Mexican President on October 16, 1945.

Exchange of ratifications took place in Washington, D. C., on November 8, 1945, putting the Treaty into effect.<sup>97</sup> Almost immediately, litigation and discord resulted on the Colorado River, traceable to the mere fact of the Treaty's existence. The kind of peace intended, in order to proceed with development "in an orderly manner and on a firm basis,"<sup>98</sup> was not realized.

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<sup>95</sup>El Universal, August 1, 1945, p. 1.

<sup>96</sup>Glaeser, "The Mexican Water Treaty: Part Two," Journal of Land and Public Utility Economics, XXII, 353.

<sup>97</sup>Statutes at Large, LIX, Part 2, 1266-67; proclaimed by President Harry S. Truman on November 27, 1945.

<sup>98</sup>Congressional Record, 1945, XCI, Part 10, 3179.

## CHAPTER VI

### IN THE MATTER OF SALINITY

"Anyone who will study the history of the relations of the United States with other countries, especially with those of the American Continent, will realize that the United States always sets aside legal arguments and settles on a basis of unreasonable liberality."<sup>1</sup>

Although this statement represents an attempt on the part of a civil engineer to make historical generalizations, it may be somewhat true of the 1945 international settlement for distribution of Colorado River waters.

In the treaty negotiations a great error in judgment was made when the water-shed of the Colorado was combined with that of the Rio Grande in one transaction. Almost equally serious was the guarantee of a definite quantity of first-right water to Mexico in a treaty of indefinite duration. Conditions of water supply and use were totally different in the two water-sheds, and the old records for prognosticating the water supply were so defective as to make inadvisable

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<sup>1</sup>American Society of Civil Engineers, Transactions, Paper No. 1558 (Pasadena, California, 1924), p. 17.

the use of these figures in any long-range international commitments.

Underlying any continued development of the water resources of the Colorado River is one basic economic condition. Simply stated, this predominant and controlling fact is that the demand for water far exceeds the supply. Furthermore, any politically feasible reclamation proposal is limited by three fundamental factors: (1) the necessity for a downward revision of estimates as to how much river water is actually available; (2) the quantity of water assured Mexico above all other Lower Basin rights; and (3) the increasingly saline character of the flow crossing the International Border. One of the most persistent questions today on the Colorado is whether Americans will have to send more water down to Mexico in order to guarantee usability for lands south of the Border.

In 1916 there was no certain record of flow at Lee's Ferry. At the request of the United States Department of Interior, C. C. LaRue of the Geological Survey prepared a synthetic report which covered the previous thirty years. Based on information confined chiefly to measurement of the upper Colorado tributaries, the "approximated record" was mainly guesswork.

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<sup>2</sup>Martin G. Glaeser, "The Mexican Water Treaty: Part Two, " Journal of Land and Public Utility Economics, XXII, pp. 354-55.

LaRue himself said the figures might well be twenty percent higher than actuality and the demand on the River might eventually surpass the supply.<sup>3</sup>

When the Colorado River Compact was devised in 1922 the Commissioners at Santa Fe assumed that the total water production in the Basin was about nineteen million acre-feet. Therefore, on this assumption, sixteen million acre-feet were allocated by the interstate agreement. Subsequent stream flow records indicated that the early estimate was too high.<sup>4</sup> As gauging facilities were improved, the computations of virgin flow tended to decline so much as to place in doubt any estimate as high as eighteen million acre-feet.<sup>5</sup>

In his 1945 letter to Senator Albert Hawkes of New Jersey, Herbert Hoover confirmed the paucity of hydrological data available at the time the Compact was drawn up. Hoover stated:

. . . it appears that what was regarded then as safe limits leaves no margin of supply for either an allotment to Mexico or for redistribution between the basins and the states concerned. . . The recent developments point

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<sup>3</sup>U. S., Department of the Interior, Geological Survey, Water Supply Paper No. 395 (1916), pp. 167-69.

<sup>4</sup>U. S., Department of State, Foreign Relations of the United States, 1942, VI, pp. 561-63, Memorandum of the Department of State to the Mexican Embassy, November 4, 1942.

<sup>5</sup>Ibid.

to the inescapable conclusion that the water supply of the 'last water hold' of the Southwest is running out, while the value of this natural resource is being steadily enhanced.<sup>6</sup>

According to the calculations of George Edson Philip Smith, University of Arizona Professor of Irrigation Engineering, the total water production in Basin (including the Gila River) during the low runoff period, 1930 to 1940, averaged only around 14,500,000 acre-feet per year.<sup>7</sup> This was 1,500,000 acre-feet short of the annual allotment under the Compact. It was apparent, Smith said, that "any water allocated to Mexico over and above return waters present in the river at the International boundary must operate to restrict proportionately the ultimate development within the United States."<sup>8</sup>

The Charles Carson report to the Arizona Legislature in 1944, concerning Mexican water usage, was described as false by Professor Smith who claimed the flow crossing the International Boundary in 1943 was 1,167,000 acre-feet -- not 1,800,000 acre-feet as Carson

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<sup>6</sup>Congressional Record, 1945, XCI, Part 10, 3301, letter of Herbert Hoover to Albert Hawkes, February 26, 1945.

<sup>7</sup>G. E. P. Smith, Arizona Loses a Water Supply (Tucson: University of Arizona, 1956), p. 7. See also the estimates of the Department of State in 1942; Foreign Relations, 1942, VI, p. 562, Memorandum, November 4, 1942.

<sup>8</sup>Smith, Arizona Loses a Water Supply, p. 8.

maintained. Furthermore, not all of that amount was diverted into the laterals flowing south from the Alamo Canal, and quite a bit was "wasted back" into the United States near Calexico.<sup>9</sup>

In 1945 G. E. P. Smith ascertained that under full development in the Upper Basin, and assuming that California and Nevada would obtain most of the water contracted to them, and that Arizona would be able to obtain only water for projects at the time authorized, the Mexican Water Treaty would create a deficit of 525,000 acre-feet, leaving nothing available for future development.<sup>10</sup> This was an extremely pessimistic forecast but is presently verified.

Even proponents of the Treaty more or less reluctantly agreed that the total water supply of the Colorado could not possibly meet the requirements of the known feasible projects in the United States and satisfy the guaranteed primary right of Mexico as well. E. B. Debler, consulting engineer for the State of Arizona, confessed in 1951: "There is not

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Ibid., p. 12. The Press described the Carson report as revealing a vast water supply in the Colorado River for Arizona; its erroneous features were "apparent" at once.

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G. E. P. Smith, "Arizona Reclamation Limits," Western Construction News, XX, No. 8 (August, 1945), p. 104.

enough water to meet the compact allotments to the two basins and the Mexican allotment."<sup>11</sup> Alfred

Merritt Smith, state engineer for Nevada, added:

". . . water is short in the lower basin at least 750,000 acre-feet."<sup>12</sup>

Therefore, it must be concluded that the available annual water supply of eight million acre-feet from Boulder storage is exhausted by: projects already in existence, deductions to cover evaporation from reservoirs, stream bed losses and the obligation to Mexico. To further burden the River, the Bureau of Reclamation allows itself an excess of 261,000 acre-feet per year to insure the Mexican delivery of 1,500,000 on schedule.<sup>13</sup> It is impossible to release exactly the amount specified, so a larger amount of water is relinquished in order to satisfy minimum requirements.

The constant downward revision of water supply estimates casts serious doubt upon the adequacy

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<sup>11</sup>

U. S., Congress, House, Committee on Interior and Insular Affairs, Hearings, Central Arizona Project, 82d Congress, 1st Session, 1951, p. 434.

<sup>12</sup>

Ibid., p. 542.

<sup>13</sup>

G. E. P. Smith, Arizona Loses a Water Supply; Supplement (Tucson: University of Arizona, 1958), p. 22.

of such essential documents as the Colorado River Compact, upon which all Lower Basin contracts are founded.<sup>14</sup> A major revision of the Compact itself may be required before any real harmony is attained on the Colorado.

In spite of adverse hydrological data, the Central Arizona Project was formulated in 1946 when Reclamation Bureau engineers met in Washington, D. C. with officials and members of Congress from Arizona. Immediately, California announced such a project would infringe on her contracts for "surplus" water. At this particular time, both Arizona and California were persuaded that there was a "big unused residue" for lower basin allocation.<sup>15</sup>

By June of 1946 a fierce California-Arizona court battle flared again -- a controversy directly linked to the great volume lately assigned to Mexico. The remaining water in the Colorado, after firmly established rights were satisfied, was the "prize" to be awarded the winning contestant. During the struggle, California blamed Arizona for supporting the Treaty which gave Mexico so much water, and Arizona maintained

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Ray Lyman Wilbur and Northcutt Ely, the Hoover Dam Power and Water Contracts, (Washington, D. C.: U. S. Government Printing Office, 1933), pp. 30-32.

<sup>15</sup>

Smith, Arizona Loses a Water Supply, p. 25.

that California was at fault in the first place for building Boulder Dam to facilitate Mexican use.<sup>16</sup>

G. E. P. Smith said the litigation between the two Basin States meant very little, for the "residue" sought was next to nothing.<sup>17</sup> The Court might decide in Arizona's favor if it chose, but its powers did not extend to putting water in the River where none existed.

Another difficulty the United States Supreme Court could not resolve was the matter of the grade of flow passing into Mexico under the Water Treaty. The record of testimony by responsible State Department officials before the Senate Committee on Foreign Relations had disclosed a unanimous conviction that the United States assumed no obligation regarding water quality.<sup>18</sup> Assistant Secretary of State Dean Acheson unequivocally informed Senator Sheridan Downey of California that the plain terms of the Treaty required Mexico to accept the delivered water

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<sup>16</sup> Committee on Interior and Insular Affairs, Hearings, Central Arizona Project, 1951, pp. 859-62, material submitted by John R. Murdock.

<sup>17</sup> Smith, Arizona Loses a Water Supply, pp. 25-26.

<sup>18</sup> Interest of legal scholars in the water quality of international rivers is apparently a recent development. Neither H. A. Smith, in his The Economic Uses of International Rivers (1931), nor F. J. Berber, in his Rivers in International Law (1959), discusses in any detail the problem of water quality. With increased consumptive uses of international rivers, water quality will assume greater importance.

regardless of its quality. Acheson rejected a suggestion of a reservation to the Treaty providing that Mexico would take released water in spite of its character. He explained that it was unwise to add to the plain words of the document additional phrases which were "wholly unnecessary." The international agreement, he said, was "clear beyond any peradventure of a doubt."<sup>19</sup>

In 1962 the official interpretation of the American diplomatic corps was reiterated in an announcement by the State Department. Insisting that the United States was fulfilling its obligations under the Treaty, the Department pointed out that it was known in 1944 that part of the water to be delivered to Mexico would consist of saline drainage.<sup>20</sup>

It seemed everyone understood but the Mexicans, for officials south of the Border interpreted this matter precisely opposite to their "good neighbors" in the North. Adolfo Orive Alba in 1945 had eulogized the Water Treaty, saying: ". . . even a superficial study of the document shows that it is

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<sup>19</sup>U. S., Congress, Senate, Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 79th Congress, 1st Session, 1945, pp. 1777; 1764-65.

<sup>20</sup>U. S., Department of State Bulletin, XLVI, No. 1178, 144.

to the interests of both countries to take advantage of these waters in order to obtain their complete and satisfactory utilization. . . ."21

This overly enthusiastic definition of the international agreement by Orive Alba was not without some foresight, however. In another place, he declared:

The salinity of the return waters which may enter the Colorado River depends on the use that Arizona makes of the waters that belong to it. Whatever the project that it selects, it would not be totally developed for many years -- probably at the end of the Twentieth Century. The most pessimistic technical calculations show that even considering that Arizona would employ its water in its central region and that the return water with a high percentage of salinity would reach the Colorado River without being lost in the bed of the Gila River, these returns mixed with the rest of the assignment to our country of waters with very small percentage of salinity would give a mixture that our country would probably accept.<sup>22</sup>

Only the lapse of time would prove that "the most pessimistic technical" calculation was not pessimistic enough in relation to the Mexican allotment.

In 1947 the Department of Foreign Relations was obliged to answer charges issuing from inside Mexico that the United States reserved the right to send waters which

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<sup>21</sup>U.S., Congress, Senate, Water Treaty of the Colorado River and the Rio Grande Favors Mexico, 79th Congress, 1st Session, 1945, Senate Doc. 98, p. 16.

<sup>22</sup>Ibid., pp. 17-18.

would make Mexican lands "useless forever."<sup>23</sup> In defense of the fact that the Treaty did not need a guaranty of quality, the Department insisted that "according to its letter and its spirit," the pact "was signed to promote the distribution of international waters for beneficial uses, among which are found principally those of agriculture, which excludes definitely the possibility that waters of bad quality may be delivered."<sup>24</sup>

In 1961-62, water with a high saline content drained into the Gila River from the recently opened Wellton-Mohawk Irrigation and Drainage District in southwestern Arizona. Flowing through the Colorado River into Mexico, the salty water constituted part of that country's annual apportionment. Irate Mexicali Valley farmers and businessmen asserted that the briny water did sixteen million dollars damage to crops and ruined 106,000 acres of land in northern Baja California.<sup>25</sup>

There can be no doubt that the delivery of the saline flow excited Mexican agricultural interests. In a

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<sup>23</sup>Extract from Mexico, Department of Foreign Relations, Office of International Boundaries and Waters, International Water Treaty Between Mexico and the United States, 1947, pp. 81-82. Reprinted in Committee on Interior and Insular Affairs, Hearings, Central Arizona Project, 1951, pp. 468-72.

<sup>24</sup>Ibid., See also New York Times, March 11, 1962, p. 70.

<sup>25</sup>Arizona Daily Star, January 30, 1964, p. 16.

December, 1961, message to the "People of the United States of America," the "People of the State of Baja California" declared that the discharge of the poor quality water signified "an aggression that belies the most well-meaning of policies." In addition, the American Government was accused of deliberately attempting "to cause, through chemical means, the annihilation of the closest and, possibly as of a short time ago, the friendliest neighbor you have."<sup>26</sup>

In accordance with the Water Treaty, the Governments instructed the International Boundary and Water Commission, United States and Mexico, to investigate the situation and recommend remedial measures.<sup>27</sup> Moreover, on March 16, 1962, the Presidents of the United States and of Mexico announced that the Commission would appoint a team of Mexican-American water and soil scientists to study the salinity problem. The scientists were instructed to submit their findings to the Commission.<sup>28</sup>

In the spring of 1962 considerable prominence was given by the press to complaints from Mexican agricultural

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<sup>26</sup>This message appeared as a full-page advertisement in a Washington, D. C. newspaper. See The Evening Star, December 26, 1961, Section B, p. 20.

<sup>27</sup>Don C. Piper, "A Justiciable Controversy Concerning Water Rights," American Journal of International Law, LVI, 1020-22.

<sup>28</sup>U.S., Department of State Bulletin, XLVI, No. 1190, 650.

groups along the lower river. The objections were that the United States was violating its treaty obligations in releasing a flow high in salt content.<sup>29</sup> Mexican farming operations were facing undue hardships in production.

President John F. Kennedy's visit to Mexico in the summer resulted in an interim agreement supposedly to alleviate the problem, but damage to lands and crops was to a large extent irreparable, at least for the year 1962. The two countries, in a joint declaration, promised to work for "permanent solutions" -- yet to be consummated.<sup>30</sup>

The United States Bureau of Reclamation in February, 1963, issued a report entitled "Special Studies -- Delivery of Water to Mexico."<sup>31</sup> The statement presented a three-phase proposition to help solve the salinity problem. The essence of the recommendations was as follows: The first phase involved the drilling of additional drainage wells in the Yuma area and selective pumping from these wells to reduce the salinity in releases to Mexico during the winter months. The second included an additional outlet drainage channel through the Wellton-Mohawk

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<sup>29</sup>Arizona Interstate Stream Commission, Sixteenth Annual Report (Phoenix: Arizona Interstate Stream Commission, 1963), p. 37.

<sup>30</sup>New York Times, July 1, 1962, pp. 1-2. See also James Daniel, Mexico and the Americans (New York, N.Y.: Frederick A. Praeger, 1963), p. 435.

<sup>31</sup>Reprinted in Arizona Interstate Stream Commission, Sixteenth Annual Report, pp. 37-39.

area, some flood control measures, and more wells. Phase Three comprised river regulation and ground water pumping combined with further studies of the question. The report indicated that changes in the cropping pattern in the Yuma region would aid reduction of salinity under all three phases. After appropriations were obtained by the Bureau, work according to Phase One was started.<sup>32</sup>

Farmers and irrigators throughout southwestern Arizona are presently being instructed by agents of the Bureau of Reclamation on methods to relieve their run-off waters of high salt content. The outcome of such advice is anxiously awaited on both sides of the International Line.

In 1964 the "nagging" salinity dispute became a major topic of discussion when Presidents Lyndon B. Johnson of the United States and Adolfo Lopez Mateos of Mexico met in conference on February 21-22.<sup>33</sup> However, the issue seemed to be unresolved after the presidential encounter in California. Mexico remained unsatisfied with her neighbor's interpretation of the Water Treaty -- a matter which might be decided only by a court of competent jurisdiction.

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<sup>32</sup>Ibid.

<sup>33</sup>Arizona Daily Star, January 30, 1964, p. 16.

The 1945 Treaty which, according to Howard F. Cline, was supposed to remove "a chronic source of friction between the nations"<sup>34</sup> became all too soon a source of trouble for every party concerned -- except, of course, the State of Texas. The State of Arizona, one of the leading treaty proponents, was the only region more adversely affected by the document than Mexico. Limited by the aforementioned factors of water absence and the Mexican burden (whatever it might be after the salinity problem is settled), Arizona should expect practically no water for her future projects.

In full realization of the danger to his State, Professor G. E. P. Smith tried his best to dissuade Arizona officials from their course of treaty advocacy. In a series of letters to Senator Carl Hayden, Smith demonstrated the fallacies of the Charles A. Carson report which was heavily relied upon by most Arizona spokesmen. Ignoring Dr. Smith's entreaties, Hayden brought the controversial Mr. Carson to Washington to testify before the Senate Committee on Foreign Relations in 1945.<sup>35</sup> Thus, the advice of a man who had devoted a great portion of his life to

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<sup>34</sup>Howard F. Cline, United States and Mexico (Cambridge, Mass.: Harvard University Press, 1953), p. 15.

<sup>35</sup>Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, pp. 248-66, testimony of Charles A. Carson. See also Smith, Arizona Loses a Water Supply, pp. 1-2, 13-17.

the study of the Colorado was hastily brushed aside as being "too academic."<sup>36</sup> In its place, the suspicious utterances of a lawyer versed in hydrological "data" were substituted.

The State of Nevada, by means of her Colorado River Commission, further warned Arizona in a resolution that she would be "a loser if there is a water shortage, particularly after full appropriation is made of the upstream allotment through multiple uses and out-of-basin diversions."<sup>37</sup> But Arizona could not be bothered with admonitions from the Lower Basin, for she was heeding only what Upper Basin agents said.

In 1952 the Bureau of Reclamation reported that "they could find only 500,000 acre-feet of water for the Central Arizona Project instead of the 1,200,000 estimated

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<sup>36</sup>Ibid., p. 21. Professor Smith had predicted in 1928 exactly what transpired in 1943. He said: "The real contest for the last four million acre-feet is between Arizona and Mexico. . . It is conceivable -- yes, probable -- that Texas will favor selling Colorado River water to Mexico in return for waters of the Salado and Conchos Rivers." G. E. P. Smith, An Equitable Basis for Solution of the Colorado River Controversy (Tucson: University of Arizona, 1928), pp. 2, 10-11. There was no reason to disbelieve his warnings in 1945.

<sup>37</sup>Resolution reprinted in Committee on Foreign Relations, Hearings, Water Treaty with Mexico, 1945, p. 58.

in the original plans."<sup>38</sup> G. E. P. Smith in 1956 declared that Arizona's chances for obtaining any water for the Project were "gone forever." He lamented: "Poor Arizona, in the role of the 'last man on the ditch', has been deceived again."<sup>39</sup>

The Water Treaty with Mexico extracted from the River a quantity of almost one million acre-feet more than had been traditionally considered the maximum proper allowance. This fact has inevitably intensified the struggle between Arizona and California. As the Attorney General of California, Edmund G. Brown, wrote Professor Smith in 1957: "Had your advice been heeded by Arizona's spokesmen in 1944. . . many of our present difficulties might have been avoided."<sup>40</sup>

Since the day of the ratification exchange in Washington, virtually no one has made a good comment about the Treaty -- with the exception of its authors. In 1946 Martin Glaeser, Professor of Economics and Commerce at the University of Wisconsin, investigated the performance of

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<sup>38</sup>G. E. P. Smith, Arizona Loses a Water Supply: Supplement, pp. 7-8, letter of Smith to Victor I. Corbell and to Walter R. Bimson, December 2, 1957. "I have grapevine information that the Bureau now agrees with me that there isn't any water available for the Project, although it will not say so publicly." Ibid.

<sup>39</sup>G. E. P. Smith, Arizona Loses a Water Supply, p. 24.

<sup>40</sup>G. E. P. Smith, Arizona Loses a Water Supply: Supplement, p. 14, letter of Edmund G. Brown to Smith, December 27, 1957.

the document's framers at El Paso and said simply:

" . . . the American negotiators in the State Department failed egregiously by refusing to take up the gauntlet and do some trading on their own account in protection of American interests."<sup>41</sup>

At the present, California assumes with good reason that the treaty burden, added to Arizona's developmental program, will infringe upon her water contracts with the Department of Interior. Arizona, beguiled by her own power-seeking politicians and unable to recognize her real enemies, remains uninformed of the fact that the international agreement she so fondly supported extinguished her hopes for a billion-dollar project. Mexico, the victim of State Department "cunning," now has an excellent case against her American neighbor, grounded on the very document that already has given her excessive amounts of water at the Lower Basin's expense. Finally, the Department of State --unaware of the meaning of failure -- insists that the Treaty ought to be enshrined as a "model" for future pacts of its kind.<sup>42</sup>

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<sup>41</sup>Glaeser, "The Mexican Water Treaty: Part Two," Journal of Land and Public Utility Economics, XXII, 359.

<sup>42</sup>U.S., Department of State Bulletin, XLVI, No. 1178, 144; Charles Timm constantly referred to the Treaty as a monument to international harmony. A timely article on the subject of salinity was written by Norris Hundley, Jr., "The Colorado Waters Dispute," Foreign Affairs, XLII, 495-500. Hundley said on page 495: ". . . the Treaty was drawn in haste and without clear provision for handling certain obvious problems. . . It may become a basis for action by the World Court." And on page 500, the author declared that Mexico definitely has a superior cause of action as against the United States.

## APPENDIX A

### DEFINITIONS

Acre-Foot: The flow of water sufficient to cover an acre of land to a depth of one foot; an acre-foot contains 43,560 cubic feet.

Centrifugal Pump: A water-lifting device that utilizes the centrifugal force imparted to the water by a rapidly rotating runner. It is essentially a reversed inward-flow turbine.

Consumptive Use: The net river loss of water incident to irrigation over large areas determined by measuring the inflow and outflow of a river basin over a period of years, dividing the loss by the acreage irrigated.

Deficiency: The amounts by which a series of quantities fall short of a given demand; in other words, the deficiency of a natural stream flow to meet a given irrigation demand determines the storage required, the additional supply necessary, or the limitation of the irrigable area.

Drainage Basin: The area from which water is carried off by a drainage system; a water-shed or catchment area.

Gaging Station: A selected section in a stream channel equipped with a gage and facilities for measuring the flow of water; a place on a stream where data are gathered by which continuous discharge records may be developed.

Intake: The head-works of a conduit; the place of diversion.

Irrigable Area: The area under an irrigation system capable of being irrigated principally as regards quality and elevation of land. It generally includes roads, farm lots, building sites, and miscellaneous areas not actually irrigated.

Percolation: Movement of water through the interstices of a substance, as through soils.

Percolation: Movement of water through the interstices of a substance, as through soils.

Regimen: The condition of a stream and its channel as regards their stability. A river or canal is "in regimen" if its channel has reached a stable form as the result of its flow characteristics.

Second-Foot: A unit of flow that is equal to one cubic foot per second.

Seepage: The percolation of water through the soil; infiltration.

Silt: Water-borne sediment. The term is generally confined to fine earth, sand, or mud, but is sometimes broadened to include all material carried, including both suspended and bed load.

Wasteway: The channel required to convey water discharged into it from a spillway, escape, or sluice; a spillway.

Water Law: In the U. S. was originally based on the common law doctrine of riparian rights. The use of water by the riparian owner is thus limited by his reasonable needs and by consideration of the needs of other riparian owners, higher up, lower down, or opposite. The fact that the use of water by a riparian owner diminishes the volume of water to a certain extent or impairs the purity does not necessarily make the user unreasonable. Riparian owners on opposite banks have a joint and equal right to the use of the water flowing by. Each of them has indeed a claim to half the water flowing by, but only to an ideal share. The common law doctrine of riparian rights has been discarded principally in the arid states as unsuitable for the conditions prevailing there, and in its place the principle of prior appropriation has been introduced. In order to constitute a valid appropriation in this sense a bona fide intention is necessary to apply the water to a beneficial purpose, followed by a diversion of water by means of an artificial installation and its application to a beneficial purpose within a certain period. Such an appropriator has a right as against all later claims to the exclusive use of water to the extent of his actual appropriation. Even the water of tributaries may not be disposed of to the detriment of the earlier appropriator on the main stream.

Weir: A dam across a stream for diverting or for measuring the flow.

## APPENDIX B

### ARTICLES V, VI, AND VII OF THE TREATY OF GUADALUPE HIDALGO

#### Article V

The Boundary line between the two Republics shall commence in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande, otherwise called Rio Bravo del Norte, or opposite the mouth of its deepest branch, if it should have more than one branch emptying directly into the sea; from thence, up the middle of that river, following the deepest channel, where it has more than one, to the point where it strikes the Southern boundary of New Mexico (which runs north of the town called Paso) to its western termination; thence, northward, along the western line of New Mexico, until it intersects the first branch of the river Gila; (or if it should not intersect any branch of that river, then, to the point on the said line nearest to such branch, and thence in a direct line to the same;) thence down the middle of the said branch and of the said river, until it empties into the Rio Colorado; thence, across the Rio Colorado, following the division line between Upper and Lower California, to the Pacific Ocean.

#### Article VI

The vessels and citizens of the United States shall, in all time, have a free and uninterrupted passage by the Gulf of California, and by the river Colorado below its confluence with the Gila, to and from their possessions situated north of the Boundary line defined in the preceding Article; it being understood that this passage is to be by navigating the Gulf of California and the river Colorado, and not by land, without the express consent of the Mexican Government.

If, by the examinations which may be made, it should be ascertained to be practicable and advantageous to construct a road, canal or railway, which should, in whole or in part, run upon the river Gila, or upon its right or its left bank, within the space of one marine league from either margin of the river, the Governments of both Republics will form an agreement regarding its construction, in order that it may serve equally for the use and advantage of both countries.

## Article VII

The river Gila, and the part of the Rio Bravo del Norte lying below the southern boundary of New Mexico, being, agreeably to the fifth Article, divided in the middle between the two Republics, the navigation of the Gila and of the Bravo below said boundary shall be free and common to the vessels and citizens of both countries; and neither shall, without the consent of the other, construct any work that may impede or interrupt, in whole or in part, the exercise of this right; not even for the purpose of favoring new methods of navigation. Nor shall any tax or contribution, under any denomination or title, be levied upon vessels or persons navigating the same, or upon merchandise or effects transported thereon, except in the case of landing upon one of their shores. If, for the purpose of making the said rivers navigable, or for maintaining them in such state, it should be necessary or advantageous to establish any tax or contribution, this shall not be done without the consent of both Governments.

The stipulations contained in the present Article shall not impair the territorial rights of either Republic, within its established limits.

## ARTICLES I AND IV OF THE GADSDEN PURCHASE TREATY

## Article I

The Mexican Republic agrees to designate the following as her true limits with the United States for the future. Retaining the same dividing line between the two California's, as already defined and established according to the 5th Article of the Treaty of Guadalupe Hidalgo, the limits between the two Republics shall be as follows: Beginning in the Gulf of Mexico, three leagues from land, opposite the mouth of the Rio Grande as provided in the fifth Article of the Treaty of Guadalupe Hidalgo, thence as defined in the said Article, up to the middle of that river to the point where the parallel of 31° 47' north latitude crosses the same, thence due west one hundred miles, thence south to the parallel of 31° 20' north latitude, thence along the said parallel of 31° 20' to the 111th meridian of longitude west of Greenwich, thence in a straight line to a point on the Colorado River twenty English miles below the junction of the Gila and Colorado rivers, thence up the middle of the said river Colorado until it intersects the present line between the United States and Mexico.

The dividing line thus established shall in all time be faithfully respected by the two Governments without any variation therein, unless of the express and free consent of the two, given in conformity to the principles of the Law of Nations, and in accordance with the Constitution of each country respectively.

In consequence, the stipulation in the 5th Article of the Treaty of Guadalupe upon the Boundary line therein described is no longer of any force, wherein it may conflict with that here established, the said line being considered annulled and abolished wherever it may not coincide with the present, and in the same manner remaining in full force where in accordance with the same.

#### Article IV

The Provisions of the 6th and 7th Articles of the Treaty of Guadalupe Hidalgo having been rendered nugatory for the most part by the cession of Territory granted in the First Article of this Treaty, the said Articles are hereby abrogated and annulled and the provisions as herein expressed substituted therefore. The Vessels and Citizens of the United States shall in all Time have free and uninterrupted passage through the Gulf of California to and from their possessions situated North of the Boundary line of the Two Countries. It being understood that this passage is to be by navigating the Gulf of California and the river Colorado, and not by land, without the express consent of the Mexican Government and precisely the same provisions, stipulations and restrictions in all respects are hereby agreed upon and adopted and shall be scrupulously observed and enforced by the Two Contracting Governments in reference to the Rio Colorado, so far and for such distance as the middle of that River is made their common Boundary Line by the First Article of this Treaty.

The several Provisions, Stipulations and restrictions contained in the 7th Article of the Treaty of Guadalupe Hidalgo, shall remain in force only so far as regards the Rio Bravo del Norte below the initial of the said Boundary provided in the First Article of this Treaty. That is to say below the intersection of the  $31^{\circ} 47' 30''$  parallel of latitude with the Boundary Line established by the late Treaty dividing said river from its mouth upwards according to the 5th Article of the Treaty of Guadalupe.

## ARTICLE V OF THE BOUNDARY CONVENTION

## Article V

Rights of property in respect of lands which may have become separated through the creation of new channels as defined in Article II, hereof, shall not be affected thereby, but such lands shall continue to be under the jurisdiction of the country to which they previously belonged.

In no case, however, shall this retained jurisdictional right affect or control the right of navigation common to the two countries under the stipulations of Article VII of the aforesaid Treaty of Guadalupe Hidalgo; and such common right shall continue without prejudice throughout the actually navigable main channels of the said rivers, from the mouth of the Rio Grande to the point where the Rio Colorado ceases to be the international boundary, even though any part of the channel of said rivers, through the changes herein provided against, may be comprised within the territory of one of the two nations.

## APPENDIX C

### EXTRACTS FROM THE 1904 CONCESSION

#### Article 1

The Sociedad de Irrigacion y Terrenos de la Baja California, S. A., is authorized to carry through the canal which it has built in Mexican territory, and through other canals that it may build, if convenient, water to an amount of 284 cubic meters per second from the waters taken from the Colorado River and territory of the U. S. by the California Development Company, and which waters this company has ceded to the Sociedad de Irrigacion y Terrenos de la Baja California, S. A. It is also authorized to carry to the lands of the U. S. the water with the exceptions of that mentioned in the following article:

#### Article 2

From the water mentioned in the foregoing article, enough shall be used to irrigate the land susceptible of irrigation in Lower California, with the water carried through the canal or canals, without in any case the amount of water used exceeding one-half of the volume of water passing through said canals.

#### Article 4

The company is also authorized to connect in Mexican territory the aforesaid canal or canals with the Colorado River, so that it may be able, without injuring the rights of a third party nor the navigation, as long as the river is destined for navigation, to take from said river as much as 284 cubic meters of water per second.

#### Article 18

The company, grantee, is at liberty to enter into contracts and agreements with individuals and private and public corporations for the use of the water granted to it, being subject in prices to be charged to the tariff which with due opportunity shall be presented to the secretary of development for his approval, the company, grantee, having the right, nevertheless, to use said waters in the irrigation of the lands belonging to it.

## Article 22

At no time nor by any reason can the company, grantee, sell or mortgage the concessions made in the present contract to any Governmental or foreign state, nor admit it in partnership, it being null and of no value nor effect whatever, any stipulation made to that end.

## Article 30

The company, grantee, and its company assigns, shall always be considered as Mexican corporations, though all or any of its stockholders should be foreigners, and the corporation shall be subject to the jurisdiction of the courts of the Republic in all the affairs emanating and to be decided within the territory of the Republic; in any of the said affairs the diplomatic foreign agents shall not have any interference.

## APPENDIX D

### A PORTION OF THE COLORADO RIVER COMPACT

The States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, having resolved to enter into a compact under the Act of Congress of the United States of America approved August 19, 1921 (42 Statutes at Large, page 171), and the Acts of the Legislatures of the said States, have through their Governors appointed as their Commissioners:

W. S. Norviel for the State of Arizona; W.F. McClure for the State of California; Delph E. Carpenter for the State of Colorado; J. G. Scrugham for the State of Nevada; Stephen B. Davis, Jr., for the State of New Mexico; R. E. Caldwell for the State of Utah; Frank C. Emerson for the State of Wyoming; who, after negotiations participated in by Herbert Hoover, appointed by the President as the representative of the United States of America, have agreed upon the following articles:

Article I - The major purposes of this compact are to provide for the equitable division and apportionment of the use of the waters of the Colorado River System; to establish the relative importance of different beneficial uses of water; to promote interstate comity; to remove causes of present and future controversies; and to secure the expeditious agricultural and industrial development of the Colorado River Basin, the storage of its waters, and the protection of life and property from floods. To these ends the Colorado River Basin is divided into two basins, and an apportionment of the use of part of the water of the Colorado River System is made to each of them with the provision that further equitable apportionments may be made.

Article II- As used in this compact:

(a) The term "Colorado River System" means that portion of the Colorado River and its tributaries within the United States of America.

(b) The term "Colorado River Basin" means all of the drainage area of the Colorado River System and all other territory within the United States of America to which the waters of the Colorado River System shall be beneficially applied.

(c) The term "States of the Upper Division" means the States of Colorado, New Mexico, Utah, and Wyoming.

(d) The term "States of the Lower Division" means the States of Arizona, California, and Nevada.

(e) The term "Lee Ferry" means a point in the main stream of the Colorado River one mile below the mouth of the Paria River.

(f) The term "Upper Basin" means those parts of the States of Arizona, Colorado, New Mexico, Utah, and Wyoming within and from which waters naturally drain into the Colorado River System above Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River System which are now or shall hereafter be beneficially served by waters diverted from the system above Lee Ferry.

(g) The term "Lower Basin" means those parts of the States of Arizona, California, Nevada, New Mexico, and Utah within and from which waters naturally drain into the Colorado River System below Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River System which are now or shall hereafter be beneficially served by waters diverted from the system below Lee Ferry.

(h) The term "domestic use" shall include the use of water for household, stock, municipal, mining, milling, industrial, and other like purposes, but shall exclude the generation of electric power.

#### Article III-

(a) There is hereby apportioned from the Colorado River system in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.

(b) In addition to the apportionment in paragraph (a), the Lower Basin is hereby given the right to increase its beneficial consumptive use of such waters by one million acre-feet per annum.

(c) If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River System, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be equally borne by the Upper Basin and the Lower Basin, and whenever necessary the States of the Upper Division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provided in paragraph (d).

(d) The States of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact.

(Remainder of text omitted through Article XI)

In witness whereof the Commissioners have signed this compact in a single original, which shall be deposited in the archives of the Department of State of the United States of America and of which a duly certified copy shall be forwarded to the Governor of each of the signatory States.

Done at the City of Santa Fe, New Mexico, this twenty-fourth day of November, A. D., one thousand nine hundred and twenty-two.

(Signed) W. S. Norviel  
(Signed) W. F. McClure  
(Signed) Delph E. Carpenter  
(Signed) J. G. Scrugham  
(Signed) Stephen B. Davis, Jr.  
(Signed) R. E. Caldwell  
(Signed) Frank C. Emerson

Approved:

(Signed) Herbert Hoover

## APPENDIX E

### PORTIONS OF BOULDER CANYON PROJECT ACT

An act to provide for the construction of works for the protection and development of the Colorado River Basin, for the approval of the Colorado River compact, and for other purposes.

BE IT ENACTED BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA IN CONGRESS ASSEMBLED, That for the purpose of controlling the floods, improving navigation and regulating the flow of the Colorado River, providing for storage and for the delivery of the stored waters thereof for reclamation of public lands and other beneficial uses exclusively within the United States, and for the generation of electrical energy as a means of making the project herein authorized a self-supporting and financially solvent undertaking, the Secretary of the Interior, subject to the terms of the Colorado River compact hereinafter mentioned, is hereby authorized to construct, operate, and maintain a dam and incidental works in the main stream of the Colorado River at Black Canyon or Boulder Canyon adequate to create a storage reservoir of a capacity of not less than twenty million acre-feet of water and a main canal and appurtenant structures located entirely within the United States connecting the Laguna Dam, or other suitable diversion dam, which the Secretary of the Interior is hereby authorized to construct if deemed necessary or advisable by him upon engineering or economic considerations, with the Imperial and Coachella Valleys in California, the expenditures for said main canal and appurtenant structures to be reimbursable, as provided in the reclamation law, and shall not be paid out of revenues derived from the sale or disposal of water power or electric energy at the dam authorized to be constructed at said Black Canyon or Boulder Canyon, or for water for potable purposes outside of the Imperial and Coachella Valleys; PROVIDED HOWEVER, That no charge shall be made for water or for the use, storage, or delivery of water for irrigation or water for potable purposes in the Imperial or Coachella Valleys; also to construct and equip, operate, and maintain at or near said dam, or cause to be constructed, a complete plant and incidental structures suitable for the

fullest economic development of electrical energy from the water discharged from said reservoir; and to acquire by proceedings in eminent domain, or otherwise, all lands, rights of way, and other property necessary for said purposes.

(Sections 2 and 3 are omitted.)

#### Section 4

(a) This act shall not take effect and no authority shall be exercised hereunder and no work shall be begun and no moneys expended on or in connection with the works or structures provided for in this act, and no water rights shall be claimed or initiated hereunder, and no steps shall be taken by the United States or by others to initiate or perfect any claims to the use of water pertinent to such works or structures unless and until (1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact, mentioned in section 13 hereof, and the President by public proclamation shall have so declared, or (2) if said States fail to ratify the said compact within six months from the date of the passage of this act then, until six of said States, including the State of California, shall ratify said compact and shall consent to waive the provisions of the first paragraph of Article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and shall have approved said compact without conditions, save that of such six-State approval, and the President by public proclamation shall have so declared, and, further, until the State of California, by act of its legislature, shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of this act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this act and all water necessary for the supply of any rights which may now exist, shall not exceed 4,200,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of Article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact.

The States of Arizona, California, and Nevada are authorized to enter into an agreement which shall provide

(1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus water unapportioned by the Colorado River compact, and (3) that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State, and (4) that the waters of the Gila River and its tributaries, except return flow after the same enters the Colorado River, shall never be subject to any diminution whatever by any allowance of water which may be made by treaty or otherwise to the United States of Mexico but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico by the lower basin, and (5) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses, and (6) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact, and (7) said agreement to take effect upon the ratification of the Colorado River compact by Arizona, California, and Nevada.

(Sections 4 b through 19 are omitted.)

#### Section 20

Nothing in this act shall be construed as a denial or recognition of any rights, if any, in Mexico to the use of the waters of the Colorado River System.

#### Section 21

That the short title of this act shall be "Boulder Canyon Project Act."

Approved, December 21, 1928.

## APPENDIX F

### SANTA FE FORMULA OF 1943 (As proposed by the Department of State)

It is proposed that the U. S. make the following deliveries of water to Mexico in complete satisfaction of any and all demands by Mexico now or hereafter, whether on the basis of established use, equity, or otherwise:

A. The United States shall deliver each year, at designated places so far as practicable, at the international boundary and distribute through the year as requested by Mexico and approved by the U. S. an amount of water equal to 10% of diversions for that year from the Colorado River for agricultural and domestic use in the States of Arizona, California, and Nevada.

B. In addition to the deliveries specified in paragraph A, the U. S. shall deliver, at designated places so far as practicable, at the international boundary from the Colorado River: Provided, That the aggregate amount of water divertible under this paragraph B shall never be less than 750,000 acre-feet in any year: And provided further, That the aggregate deliveries by the U. S. to Mexico, including the amounts specified in paragraph A, shall not be more than 2,000,000 acre-feet in any year.

C. Mexico shall not demand, and the U. S. shall not be required to make, deliveries of water to Mexico at rates in excess of 5,000 cubic feet per second.

D. Mexico shall not demand, and the U. S. shall not be required to make, deliveries of water which cannot be beneficially used in Mexico.

E. Mexico shall concede that it may not acquire any interest in, or make any claim to, the use of Colorado River waters in excess of the allocations made herein; and any deliveries under paragraph A and the minimum 750,000 acre-feet delivery specified in paragraph B shall be subject to such excess water arriving and being available at the international boundary.

F. In case of extraordinary drought or serious accident to the irrigation system in the U. S., the amount of water delivered to Mexico shall be diminished in the same proportion as the water delivered to lands under the irrigation system below Boulder Dam in the U. S.

## APPENDIX G

### TREATY BETWEEN THE UNITED STATES OF AMERICA AND MEXICO RELATING TO THE UTILIZATION OF THE WATERS OF THE COLORADO AND OTHER STREAMS SIGNED AT WASHINGTON ON 3 FEBRUARY 1944

The Government of the United States of America and the Government of the United Mexican States: animated by the sincere spirit of cordiality and friendly cooperation which happily governs the relations between them; taking into account the fact that Articles VI and VII of the Treaty of Peace, Friendship and Limits between the United States of America and the United Mexican States signed at Guadalupe Hidalgo on February 2, 1848, and Article IV of the boundary treaty between the two countries signed at the City of Mexico December 30, 1853, regulate the use of the waters of the Rio Grande (Rio Bravo) and the Colorado River for purposes of navigation only; considering that the utilization of these waters for other purposes is desirable in the interest of both countries, and desiring, moreover, to fix and delimit the rights of the two countries with respect to the waters of the Colorado and Tijuana Rivers, and of the Rio Grande (Rio Bravo) from Fort Quitman, Texas, United States of America, to the Gulf of Mexico, in order to obtain the most complete and satisfactory utilization thereof, have resolved to conclude a treaty and for this purpose have named as their plenipotentiaries:

The President of the United States of America:

Cordell Hull, Secretary of State of the United States of America, George S. Messersmith, Ambassador Extraordinary and Plenipotentiary of the United States of America in Mexico, and Lawrence M. Lawson, United States Commissioner, International Boundary Commission, United States and Mexico; and

The President of the United Mexican States:

Francisco Castillo Najera, Ambassador Extraordinary and Plenipotentiary of the United Mexican States in Washington, and Rafael Fernandez MacGregor, Mexican Commissioner, International Boundary Commission, United States and Mexico; who, having communicated to each other their respective Full Powers and having found them in good and due form, have agreed upon the following:

I - Preliminary Provisions  
Article 1

For the purpose of this Treaty it shall be understood that:

- (a) "The United States" means the United States of America.
- (b) "Mexico" means the United Mexican States.
- (c) "The Commission" means the International Boundary and Water Commission, United States and Mexico, as described in Article 2 of this Treaty.
- (d) "To divert" means the place where the act of diverting the water is effected.
- (f) "Conservation capacity of storage reservoirs" means that part of their total capacity additional to that provided for silt retention and flood control.
- (g) "Flood discharges and spills" means the voluntary or involuntary discharge of water for flood control as distinguished from releases for other purposes.
- (h) "Return flow" means that portion of diverted water that eventually finds its way back to the source from which it was diverted.
- (i) "Release" means the deliberate discharge of stored water for conveyance elsewhere or for direct utilization.
- (j) "Consumptive use" means the use of water by evaporation, plant transpiration or other manner whereby the water is consumed and does not return to its source of supply. In general it is measured by the amount of water diverted less the part thereof which returns to the stream.
- (k) "Lowest major international dam or reservoir" means the major international dam or reservoir situated farthest downstream.
- (l) "Highest major international dam or reservoir" means the major international dam or reservoir situated farthest upstream.

Article 2

The International Boundary Commission established pursuant to the provisions of the Convention between the United States and Mexico signed in Washington March 1, 1889 to facilitate the carrying out of the principles contained in the Treaty of November 12, 1884 and to avoid difficulties occasioned by reason of the changes which take place in the beds of the Rio Grande (Rio Bravo) and the Colorado River shall hereafter be known as the International Boundary and Water Commission, United States and Mexico, which shall continue to function for the entire period during which the present Treaty shall continue in force. Accordingly,

the term of the Convention of March 1, 1889 shall be considered to be indefinitely extended, and the Convention of November 21, 1900 between the United States and Mexico regarding that Convention shall be considered completely terminated.

The application of the present Treaty, the regulation and exercise of the rights and obligations which the two Governments assume thereunder, and the settlement of all disputes to which its observance and execution may give rise are hereby entrusted to the International Boundary and Water Commission, which shall function in conformity with the powers and limitations set forth in this Treaty.

The Commission shall in all respects have the status of an international body, and shall consist of a United States Section and a Mexican Section. The head of each Section shall be an Engineer Commissioner. Wherever there are provisions in this Treaty for joint action or joint agreement by the two governments, or for the furnishing of reports, studies or plans to the two Governments, or similar provisions, it shall be understood that the particular matter in question shall be handled by or through the Department of State of the United States and the Ministry of Foreign Relations of Mexico.

The Commission or either of its two Sections may employ such assistants and engineering and legal advisers as it may deem necessary. Each Government shall accord diplomatic status to the Commissioner, designated by the other Government. The Commissioner, two principal engineers, a legal adviser, and a secretary, designated by each Government as members of its Section of the Commission, shall be entitled in the territory of the other country to the privileges and immunities appertaining to diplomatic officers. The Commission and its personnel may freely carry out their observations, studies and field work in the territory of either country.

The jurisdiction of the Commission shall extend to the limitrophe parts of the Rio Grande (Rio Bravo) and the Colorado River to the land boundary between the two countries, and to works located upon their common boundary, each Section of the Commission retaining jurisdiction over that part of the works located within the limits of its own country. Neither Section shall assume jurisdiction or control over works located within the limits of the country of the other without the express consent of the Government of the latter. The works constructed, acquired or used in

fulfillment of the provisions of this Treaty and located wholly within the territorial limits of either country, although these works may be international in character, shall remain, except as herein otherwise specifically provided, under the exclusive jurisdiction and control of the Section of the Commission in whose country the works may be situated.

The duties and powers bested in the Commission by this Treaty shall be in addition to those vested in the International Boundary Commission by the Convention of March 1, 1889, and other pertinent treaties and agreements in force between the two countries except as the provisions of any of them may be modified by the present Treaty.

Each Government shall bear the expenses incurred in the maintenance of its Section of the Commission. The joint expenses, which may be incurred as agreed upon by the Commission, shall be borne equally by the two Governments.

### Article 3

In matters in which the Commission may be called upon to make provision for the joint use of international waters, the following order of preferences shall serve as a guide:

1. Domestic and municipal uses.
2. Agriculture and stock-raising.
3. Electric power.
4. Other industrial uses.
5. Navigation.
6. Fishing and hunting.
7. Any other beneficial uses which may be determined by the Commission.

All of the foregoing uses shall be subject to any sanitary measures or works which may be mutually agreed upon by the two Governments, which hereby agree to give preferential attention to the solution of all border sanitation problems.

(Articles 4 to 9 pertaining to the Rio Grande are omitted.)

## III - Colorado River

## Article 10

Of the waters of the Colorado River, from any and all sources, there are allotted to Mexico:

(a) A guaranteed annual quantity of 1,500,000 acre-feet (1,850,234,000 cubic meters) to be delivered in accordance with the provisions of Article 15 of this Treaty.

(b) Any other quantities arriving at the Mexican points of diversion, with the understanding that in any year in which, as determined by the United States Section, there exists a surplus of waters of the Colorado River in excess of the amount necessary to supply uses in the United States and the guaranteed quantity of 1,500,000 acre-feet (1,850,234,000 cubic meters) annually to Mexico, the United States undertakes to deliver to Mexico, in the manner set out in Article 15 of this Treaty, additional waters of the Colorado River system to provide a total quantity not to exceed 1,700,000 acre-feet (2,096,931,000 cubic meters) a year. Mexico shall acquire no right beyond that provided by this subparagraph by the use of the waters of the Colorado River system, for any purpose whatsoever, in excess of 1,500,000 acre-feet (1,850,234,000 cubic meters) annually.

In the event of extraordinary drought or serious accident to the irrigation system in the United States, thereby making it difficult for the United States to deliver the guaranteed quantity of 1,500,000 acre-feet (1,850,234,000 cubic meters) a year, the water allotted to Mexico under subparagraph (a) of this Article will be reduced in the same proportion as consumptive uses in the United States are reduced.

## Article 11

(a) The United States shall deliver all waters allotted to Mexico wherever these waters may arrive in the bed of the limitrophe section of the Colorado River, with the exceptions hereinafter provided. Such waters shall be made up of the waters of the said river, whatever their origin, subject to the provisions of the following paragraphs of this Article.

(b) Of the waters of the Colorado River allotted to Mexico by subparagraph (a) of Article 10 of this Treaty, the United States shall deliver, wherever such waters may arrive in the limitrophe section of the river, 1,000,000 acre-feet (1,233,489,000 cubic meters) annually from the time the Davis dam and reservoir are placed in operation until January 1, 1980, and thereafter 1,125,000 acre-feet

(1,387,675,000 cubic meters) annually, except that, should the main diversion structure referred to in subparagraph (a) of Article 12 of this Treaty be located entirely in Mexico and should Mexico so request, the United States shall deliver a quantity of water not exceeding 25,00 acre-feet (30,837,000 cubic meters) annually, unless a larger quantity may be mutually agreed upon, at a point, to be likewise mutually agreed upon, on the international land boundary near San Luis, Sonora, in which event the quantities of 1,000,000 acre-feet (1,233,489,000 cubic meters) and 1,125,000 acre-feet (1,387,675,000 cubic meters) provided hereinabove as deliverable in the limitrophe section of the river shall be reduced by the quantities to be delivered in the year concerned near San Luis, Sonora.

(c) During the period from the time the Davis dam and reservoir are placed in operation until January 1, 1980, the United States shall also deliver to Mexico annually, of the water allotted to it, 500,000 acre-feet (616,745,000 cubic meters), and thereafter the United States shall deliver annually 375,000 acre-feet (462,558,000 cubic meters), at the international boundary line, by means of the All-American Canal and a canal connecting the lower end of the Pilot Knob Wasteway with the Alamo Canal or with any other Mexican Canal which may be substituted for the Alamo Canal. In either event the deliveries shall be made at an operating water surface elevation not higher than that of the Alamo Canal at the point where it crossed the International boundary line in the year 1943.

(d) All the deliveries of water specified above shall be made subject to the provisions of Article 15 of this Treaty.

## Article 12

The two Governments agree to construct the following works:

(a) Mexico shall construct at its expense, within a period of five years from the date of the entry into force of this Treaty, a main diversion structure below the point where the northernmost part of the international land boundary line intersects the Colorado River. If such diversion structure is located in the limitrophe section of the river, its location, design and construction shall be subject to the approval of the Commission. The Commission shall thereafter maintain and operate the structure at the expense of Mexico. Regardless of where such diversion structure is located, there shall simultaneously be constructed such levees, interior drainage facilities and other works, or improvements to existing works, as in the opinion of the Commission shall be necessary to protect

lands within the United States against damage from such floods and seepage as might result from the construction, operation and maintenance of this diversion structure. These protective works shall be constructed, operated and maintained at the expense of Mexico by the respective Sections of the Commission, or under their supervision, each within the territory of its own country.

(b) The United States, within a period of five years from the date of the entry into force of this Treaty, shall construct in its own territory and at its expense, and thereafter operate and maintain at its expense, the Davis storage dam and reservoir, a part of the capacity of which shall be used to make possible the regulation at the boundary of the waters to be delivered to Mexico in accordance with the provisions of Article 15 of this Treaty.

(c) The United States shall construct or acquire in its own territory the works that may be necessary to convey a part of the waters of the Colorado River allotted to Mexico to the Mexican diversion points on the international land boundary line referred to in this Treaty. Among these works shall be included: the canal and other works necessary to convey water from the lower end of the Pilot Knob Wasteway to the international boundary, and, should Mexico request it, a canal to connect the main diversion structure referred to in subparagraph (a) of this Article, if this diversion structure should be built in the limitrophe section of the river, with the Mexican system of canals at a point to be agreed upon by the Commission on the international land boundary near San Luis, Sonora. Such works shall be constructed or acquired and operated and maintained by the United States Section at the expense of Mexico. Mexico shall also pay the costs of any sites or rights of way required for such works.

(d) The Commission shall construct, operate and maintain in the limitrophe section of the Colorado River, and each Section shall construct, operate and maintain in the territory of its own country on the Colorado River below Imperial Dam and on all other carrying facilities used for the delivery of water to Mexico, all necessary gaging stations and other measuring devices for the purpose of keeping a complete record of the waters delivered to Mexico and of the flows of the river. All data obtained as to such deliveries and flows shall be periodically compiled and exchanged between the two Sections.

### Article 13

The Commission shall study, investigate and prepare plans for flood control on the Lower Colorado River between Imperial Dam and the Gulf of California, in both the United States and Mexico, and shall, in a Minute, report

to the two Governments the works which should be built, the estimated cost thereof, and the part of the works to be constructed by each Government. The two Governments agree to construct, through their respective Sections of the Commission, such works as may be recommended by the Commission and approved by the two Governments, each Government to pay the costs of the works constructed by it. The Commission shall likewise recommend the parts of the works to be operated and maintained jointly by the Commission and the parts to be operated and maintained by each Section. The two Governments agree to pay in equal shares the cost of joint operation and maintenance, and each Government agrees to pay the cost of operation and maintenance of the works assigned to it for such purpose.

#### Article 14

In consideration of the use of the All-American Canal for the delivery to Mexico, in the manner provided in Articles 11 and 15 of this Treaty, of a part of its allotment of the waters of the Colorado River, Mexico shall pay to the United States:

(a) A proportion of the costs actually incurred in the construction of Imperial Dam and the Imperial Dam - Pilot Knob section of the All-American Canal, this proportion and the method and terms of repayment to be determined by the two Governments, which, for this purpose, shall take into consideration the proportionate uses of these facilities by the two countries, these determinations to be made as soon as Davis dam and reservoir are placed in operation.

(b) Annually, a proportionate part of the total costs of maintenance and operations of such facilities, these costs to be prorated between the two countries in proportion to the amount of water delivered annually through such facilities for use in each of the two countries.

In the event that revenues from the sale of hydro-electric power which may be generated at Pilot Knob become available for the amortization of part or all of the costs of the facilities named in subparagraph (a) of this Article, the part that Mexico should pay of the costs of said facilities shall be reduced or repaid in the same proportion as the balance of the total costs are reduced or repaid. It is understood that any such revenue shall not become available until the cost of any works which may be constructed for the generation of hydro-electric power at said location has been fully amortized from the revenues derived therefrom.

## Article 15

A. The water allotted in subparagraph (a) of Article 10 of this Treaty shall be delivered to Mexico at the points of delivery specified in Article 11, in accordance with the following two annual schedules of deliveries by months, which the Mexican Section shall formulate and present to the Commission before the beginning of each calendar year:

## Schedule I

Schedule I shall cover the delivery, in the limitrophe section of the Colorado River, of 1,000,000 acre-feet (1,233,489,000 cubic meters) of water each year from the date Davis dam and reservoir are placed in operation until January 1, 1980, and the delivery of 1,125,000 acre-feet (1,387,675,000 cubic meters) of water each year thereafter. This schedule shall be formulated subject to the following limitations:

With reference to the 1,000,000 acre-foot (1,233,489,000 cubic meter) quantity:

(a) During the months of January, February, October, November and December the prescribed rate of delivery shall be not less than 600 cubic feet (17.0 cubic meters) nor more than 3,500 cubic feet (99.1 cubic meters) per second.

(b) During the remaining months of the year the prescribed rate of delivery shall be not less than 1,000 feet (99.1 cubic meters) per second.

With reference to the 1,125,000 acre-foot (1,387,675,000 cubic meter) quantity:

(a) During the months of January, February, October, November and December the prescribed rate of delivery shall be not less than 675 cubic feet (19.1 cubic meters) nor more than 4,000 cubic feet (113.3 cubic meters) per second.

(b) During the remaining months of the year the prescribed rate of delivery shall be not less than 1,125 cubic feet (113.3 cubic meters) per second.

Should deliveries of water be made at a point of the land boundary near San Luis, Sonora, as provided for in Article 11, such deliveries shall be made under a sub-schedule to be formulated and furnished by the Mexican Section. The quantities and monthly rates of deliveries under such sub-schedule shall be in proportion to those specified for Schedule I, unless otherwise agreed upon by the Commission.

## Schedule II

Schedule II shall cover the delivery at the boundary line by means of the All-American Canal of 500,000 acre-feet (616,745,000 cubic meters) of water each year from the date Davis dam and reservoir are placed in operation until January 1, 1980, and the delivery of 375,000 acre-feet (462,558,000 cubic meters) of water each year thereafter. This schedule shall be formulated subject to the following limitations:

With reference to the 500,000 acre-foot (616,745,000 cubic meter) quantity:

(a) During the months of January, February, October, November and December the prescribed rate of delivery shall be not less than 300 cubic feet (8.5 cubic meters) nor more than 2,000 cubic feet (56.6 cubic meters) per second.

(b) During the remaining months of the year the prescribed rate of delivery shall be not less than 500 cubic feet (14.2 cubic meters) nor more than 2,000 cubic feet (56.6 cubic meters) per second.

With reference to the 375,000 acre-foot (462,558,000 cubic meter) quantity:

(a) During the months of January, February, October, November and December the prescribed rate of delivery shall be not less than 225 cubic feet (6.4 cubic meters) nor more than 1,500 cubic feet (42.5 cubic meters) per second.

(b) During the remaining months of the year the prescribed rate of delivery shall be not less than 375 cubic feet (10.6 cubic meters) nor more than 1,500 cubic feet (42.5 cubic meters) per second.

B. The United States shall be under no obligation to deliver, through the All-American Canal more than 500,000 acre-feet (616,745,000 cubic meters) annually from the date Davis dam and reservoir are placed in operation until January 1, 1980, or more than 375,000 acre-feet (462,558,000 cubic meters) annually thereafter. If, by mutual agreement, any part of the quantities of water specified in this paragraph are delivered to Mexico at points on the land boundary otherwise than through the All-American Canal, the above quantities of water and the rates of deliveries set out under Schedule II of this Article shall be correspondingly diminished.

C. The United States shall have the option of delivering, at the point on the land boundary mentioned in subparagraph (c) of Article 11, any part or all of the water to be delivered at that point under Schedule II of this Article during the months of January, February, October, November and December of each year, from any source whatsoever, with the understanding that the total specified annual quantities to be delivered through the All-American Canal shall not be reduced because of the exercise of this option, unless such reduction be requested by the Mexican Section, provided that the exercise of this option shall not have the effect of increasing the total amount of scheduled water to be delivered to Mexico.

D. In any year in which there shall exist in the river water in excess of that necessary to satisfy the requirements in the United States and the guaranteed quantity of 1,500,000 acre-feet (1,850,234,000 cubic meters) allotted to Mexico, the United States hereby declares its intention to cooperate with Mexico in attempting to supply additional quantities of water through the All-American Canal as such additional quantities are desired by Mexico, if such use of the Canal and facilities will not be detrimental to the United States, provided that the delivery of any additional quantities through the All-American Canal shall not have the effect of increasing the total scheduled deliveries to Mexico. Mexico hereby declares its intention to cooperate with the United States by attempting to curtail deliveries of water through the All-American Canal in years of limited supply, if such curtailment can be accomplished without detriment to Mexico and is necessary to allow full use of all available water supplies, provided that such curtailment shall not have the effect of reducing the total scheduled deliveries of water to Mexico.

E. In any year in which there shall exist in the river water in excess of that necessary to satisfy the requirements in the United States and the guaranteed quantity of 1,500,000 acre-feet (1,850,234,000 cubic meters) allotted to Mexico, the United States Section shall so inform the Mexican Section in order that the latter may schedule such surplus water to complete a quantity up to a maximum of 1,700,000 acre-feet (2,096,931,000 cubic meters). In this circumstance the total quantities to be delivered under Schedules I and II shall be increased in proportion to their respective total quantities and the two schedules thus increased shall be subject to the same limitations as those established for each under paragraph A of this Article.

F. Subject to the limitations as to rates of deliveries and total quantities set out in Schedules I and II, Mexico shall have the right, upon thirty days notice in advance to the United States Section, to increase or decrease each monthly quantity prescribed by those schedules by not more than 20% of the monthly quantity.

G. The total quantity of water to be delivered under Schedule I of paragraph A of this Article may be increased in any year if the amount to be delivered under Schedule II is correspondingly reduced and if the limitations as to rates of delivery under each schedule are correspondingly increased and reduced.

(Article 16 pertaining to the Tijuana River is omitted.)

## V - General Provisions

### Article 17

The use of the channels of the international rivers for the discharge of flood or other excess waters shall be free and not subject to limitation by either country, and neither country shall have any claim against the other in respect of any damage caused by such use. Each Government agrees to furnish the other Government, as far in advance as practicable, any information it may have in regard to such extraordinary discharges of water from reservoirs and flood flows on its own territory as may produce floods on the territory of the other.

Each Government declares its intention to operate its storage dams in such manner, consistent with the normal operations of its hydraulic systems, as to avoid as far as feasible, material damage in the territory of the other.

### Article 18

Public use of the water surface of lakes formed by international dams shall, when not harmful to the services rendered by such dams, be free and common to both countries, subject to the police regulations of each country in its territory, to such general regulations as may appropriately be prescribed and enforced by the Commission with the approval of the two Governments for the purpose of the application of the provisions of this Treaty, and to such regulations as may appropriately be prescribed and enforced for the same purpose by each Section of the Commission with respect to the areas and borders of such parts of those lakes as lie within its territory. Neither Government shall use for military purposes such water

surface situated within the territory of the other country except by express agreement between the two Governments.

#### Article 19

The two Governments shall conclude such special agreements as may be necessary to regulate the generation, development and disposition of electric power at international plants, including the necessary provision for the export of electric current.

#### Article 20

The two Governments shall, through their respective Sections of the Commission, carry out the construction of works allotted to them. For this purpose the respective Sections of the Commission may make use of any competent public or private agencies in accordance with the laws of the respective countries. With respect to such works as either Section of the Commission may have to execute on the territory of the other, it shall, in the execution of such works, observe the laws of the place where such works are located or carried out, with the exceptions hereinafter stated.

All materials, implements, equipment and repair parts intended for the construction, operation and maintenance of such works shall be exempt from import and export customs duties. The whole of the personnel employed either directly or indirectly on the construction, operation or maintenance of the works may pass freely from one country to the other for the purpose of going to and from the place of location of the works, without any immigration restrictions, passports or labor requirements. Each Government shall furnish, through its own Section of the Commission, convenient means of identification to the personnel employed by it on the aforesaid works and verification certificates covering all materials, implements, equipment and repair parts intended for the works.

Each Government shall assume responsibility for and shall adjust exclusively in accordance with its own laws all claims arising within its territory in connection with the construction, operation or maintenance of the whole or of any part of this Treaty, be agreed upon in the future.

#### Article 21

The construction of the international dams and the formation of artificial lakes shall produce no change in

the fluvial international boundary, which shall continue to be governed by existing treaties and conventions in force between the two countries.

The Commission shall, with the approval of the two Governments, establish in the artificial lakes, by buoys or by other suitable markers, a practicable and convenient line to provide for the exercise of the jurisdiction and control vested by this Treaty in the Commission and its respective Sections. Such line shall also mark the boundary for the application of the customs and police regulations of each country.

#### Article 22

The provisions of the Convention between the United States and Mexico for the rectification of the Rio Grande (Rio Bravo) in the El Paso-Juarez Valley signed on February 1, 1933, shall govern so far as delimitation of the boundary, distribution of jurisdiction and sovereignty, and relations with private owners are concerned, in any places where works for the artificial channeling, canalization or rectification of the Rio Grande (Rio Bravo) and the Colorado River are carried out.

#### Article 23

The two Governments recognize the public interest attached to the works required for the execution and performance of this Treaty and agree to acquire, in accordance with their respective domestic laws, any private property that may be required for the construction of the said works, including the main structures and their appurtenances and the construction materials therefor, and for the operation and maintenance thereof, at the cost of the country within which the property is situated, except as may be otherwise specifically provided in this Treaty.

Each Section of the Commission shall determine the extent and location of any private property to be acquired within its own country and shall make the necessary request upon its Government for the acquisition of such property.

The Commission shall determine the cases in which it shall become necessary to locate works for the conveyance of water or electrical energy and for the servicing of any such works, for the benefit of either of the two countries, in the territory of the other country, in order that such works can be built pursuant to agreement between the two Governments. Such works shall be subject to the

jurisdiction and supervision of the Section of the Commission within whose country they are located.

Construction of the works built in pursuance of the provisions of this Treaty shall not confer upon either of the two countries any rights either of property or of jurisdiction over any part whatsoever of the territory of the other. These works shall be part of the territory and be the property of the country wherein they are situated. However, in the case of any incidents occurring on works constructed across the limitrophe part of a river and with supports on both banks, the jurisdiction of each country shall be limited by the center line of such works, which shall be marked by the Commission, without thereby changing the international boundary.

Each Government shall retain, through its own Section of the Commission and within the limits and to the extent necessary to effectuate the provisions of this Treaty, direct ownership, control and jurisdiction within its own territory and in accordance with its own laws, over all real property -- including that within the channel of any river -- rights of way and rights in rem, that it may be necessary to enter upon and occupy for the construction, operation or maintenance of all the works constructed, acquired or used pursuant to this Treaty. Furthermore, each Government shall similarly acquire and retain in its own possession the titles, control and jurisdiction over such works.

#### Article 24

The International Boundary and Water Commission shall have, in addition to the powers and duties otherwise specifically provided in this Treaty, the following powers and duties:

(a) To initiate and carry on investigations and develop plans for the works which are to be constructed or established in accordance with the provisions of this and other treaties or agreements in force between the two Governments dealing with boundaries and international waters; to determine, as to such works, their location, size, kind and characteristic specifications; to estimate the cost of such works; and to recommend the division of such costs between the two Governments, the arrangements for the furnishing of the necessary funds, and the dates for the beginning of the works, to the extent that the matters mentioned in this subparagraph are not otherwise covered by specific provisions of this or any other Treaty.

(b) To construct the works agreed upon or to supervise their construction and to operate and maintain such works or to supervise their operation and maintenance, in accordance with the respective domestic laws of each country. Each Section shall have, to the extent necessary to give effect to the provisions of this Treaty, jurisdiction over the works constructed exclusively in the territory of its country whenever such works shall be connected with or shall directly affect the execution of the provisions of this Treaty.

(c) In general to exercise and discharge the specific powers and duties entrusted to the Commission by this and other treaties and agreements in force between the two countries, and to carry into execution and prevent the violation of the provisions of those treaties and agreements. The authorities of each country shall aid and support the exercise and discharge of these powers and duties, and each Commissioner shall invoke when necessary the jurisdiction of the courts or other appropriate agencies of his country to aid in the execution and enforcement of these powers and duties.

(d) To settle all differences that may arise between the two Governments with respect to the interpretation or application of this Treaty, subject to the approval of the two Governments. In any case in which the Commissioners do not reach an agreement, they shall so inform their respective governments reporting their respective opinions and the grounds therefor and the points upon which they differ, for discussion and adjustment of the difference through diplomatic channels and for application where proper of the general or special agreements which the two Governments have concluded for the settlement of controversies.

(e) To furnish the information requested of the Commission jointly by the two Governments on matters within their jurisdiction. In the event that the request is made by one Government alone, the Commissioner of the other Government must have the express authorization of his Government in order to comply with such request.

(f) The Commission shall construct, operate and maintain upon the limitrophe parts of the international streams, and each Section shall severally construct, operate and maintain upon the parts of the international streams and their tributaries within the boundaries of its own country, such stream gaging stations as may be needed to provide the hydrographic data necessary or convenient for the proper functioning of this Treaty. The data so obtained shall be compiled and periodically exchanged between the two Sections.

(g) The Commission shall submit annually a joint report to the two Governments on the matters in its charge.

The Commission shall also submit to the two Governments joint reports on general or any particular matters at such other times as it may deem necessary or as may be requested by the two Governments.

#### Article 25

Except as otherwise specifically provided in this Treaty, Articles III and VII of the Convention of March 1, 1889 shall govern the proceedings of the Commission in carrying out the provisions of this Treaty. Supplementary thereto the Commission shall establish a body of rules and regulations to govern its procedure, consistent with the provisions of this Treaty and of Articles III and VII of the Convention of March 1, 1889 and subject to approval of both Governments.

Decisions of the Commission shall be recorded in the form of Minutes done in duplicate in the English and Spanish languages, signed by each Commissioner and attested by the Secretaries, and copies thereof forwarded to each Government within three days after being signed. Except where the specific approval of the two Governments is required by any provision of this Treaty, if one of the Governments fails to communicate to the Commission its approval or disapproval of a decision of the Commission within thirty days reckoned from the date of the Minute in which it shall have been pronounced, the Minute in question and the decisions which it contains shall be considered to be approved by that Government. The Commissioners, within the limits of their respective jurisdiction, shall execute the decisions of the Commission that are approved by both Governments.

If either Government disapproves a decision of the Commission the two Governments shall take cognizance of the matter, and if an agreement regarding such matter is reached between the two Governments, the agreement shall be communicated to the Commissioners, who shall take such further proceedings as may be necessary to carry out such agreement.

#### V - Transitory Provisions

(Article 26 pertaining to the Rio Grande is omitted.)

#### Article 27

The provisions of Article 10, 11, and 15 of this Treaty shall not be applied during a period of five years from the date of the entry into force of this Treaty, or until the Davis dam and the major Mexican diversion structure on the Colorado River are placed in operation, should

these works be placed in operation prior to the expiration of said period. In the meantime Mexico may construct and operate at its expense a temporary diversion structure in the bed of the Colorado River in territory of the United States for the purpose of diverting water into the Alamo Canal, provided that the plans for such structure and the construction and operation thereof shall be subject to the approval of the United States Section. During this period of time the United States will make available in the river at such diversion structure river flow now currently required in the United States, and the United States will cooperate with Mexico to the end that the latter may satisfy its irrigation requirements within the limits of those requirements for lands irrigated in Mexico from the Colorado River during the year 1943.

## VII - Final Provisions

### Article 28

This Treaty shall be ratified and the ratifications thereof shall be exchanged in Washington. It shall enter into force on the day of the exchange of ratifications and shall continue in force until terminated by another Treaty concluded for that purpose between the two Governments.

IN WITNESS WHEREOF the respective Plenipotentiaries have signed this Treaty and have hereunto affixed their seals.

DONE in duplicate in the English and Spanish languages, in Washington on this third day of February, 1944.

For the Government of the United States of America:

Cordell Hull (Seal)

George S. Messersmith (Seal)

Lawrence M. Lawson (Seal)

For the Government of the United Mexican States:

F. Castillo Najera (Seal)

Rafael Fernandez MacGregor (Seal)

## PROTOCOL

The Government of the United States of America and the Government of the United Mexican States agree and understand that:

Wherever, by virtue of the provisions of the Treaty between the United States of America and the United Mexican States, signed in Washington on February 3, 1944, relating to the utilization of the waters of the Colorado and Tijuana Rivers and of the Rio Grande from Fort Quitman, Texas, to the Gulf of Mexico, specific functions are imposed on, or exclusive jurisdiction is vested in, either of the Sections of the International Boundary and Water Commission, which involve the construction or use of works for storage or conveyance of water, flood control, stream gaging, or for any other purpose, which are situated wholly within the territory of the country of that Section, and which are to be used only partly for the performance of treaty provisions, such jurisdiction shall be exercised, and such functions, including the construction, operation and maintenance of the said works, shall be performed and carried out by the Federal agencies of that country which now or hereafter may be authorized by domestic law to construct, or to operate and maintain, such works. Such functions or jurisdictions shall be exercised in conformity with the provisions of the Treaty and in cooperation with the respective Section of the Commission, to the end that all international obligations and functions may be coordinated and fulfilled.

The works to be constructed or used on or along the boundary, and those to be constructed or used exclusively for the discharge of treaty stipulations, shall be under the jurisdiction of the Commission or of the respective Section, in accordance with the provisions of the Treaty. In carrying out the construction of such works the Sections of the Commission may utilize the services of public or private organizations in accordance with the laws of their respective countries.

This Protocol, which shall be regarded as an integral part of the aforementioned Treaty signed in Washington on February 3, 1944, shall be ratified and the ratifications thereof shall be exchanged in Washington. This Protocol shall be effective beginning with the day of the entry into force of the Treaty and shall continue effective so long as the Treaty remains in force.

IN WITNESS WHEREOF the respective Plenipotentiaries have signed this Protocol and have hereunto affixed their seals.

DONE in duplicate, in the English and Spanish languages, in Washington, this fourteenth day of November, 1944.

For the Government of the United States of America:

E. R. Stettinius, Jr.  
Acting Secretary of State  
of the United States of America

For the Government of the United Mexican States:

F. Castillo Najera  
Ambassador Extraordinary and Plenipotentiary  
of the Mexican States in Washington

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