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LIGHT ON THE MEXICAN WATER TREATY
FROM THE RATIFICATION PROCEEDINGS
IN MEXICO

A REPORT TO THE COLORADO RIVER
WATER USERS' ASSOCIATION

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LIGHT ON THE MEXICAN WATER TREATY FROM THE RATIFICATION PROCEEDINGS IN MEXICO

(By Northcutt Ely, Washington, D. C.)

INTRODUCTION

This report, prepared for the Colorado River Water Users' Association, deals with the ratification of the Mexican-United States Water Treaty by the Mexican Government, submits a comparison of the conflicting analyses and interpretations officially offered by the Mexican and American negotiators, to their respective Senates, all with particular reference to the Colorado River, and submits certain conclusions and recommendations.

The Mexican Water Treaty must be kept in proper perspective. It has been ratified by both Governments. It is the law of the land and presumably will remain so. From this point on it matters little whether we opposed or supported the ratification of the treaty. All of the Colorado Basin States now have a common interest in protecting the interests of the basin in the interpretation and administration of the treaty, with complete fairness to Mexico.

The treaty is both an international contract and a domestic statute. As a contract, it must and will be fully performed. It is a first mortgage on the waters of the Colorado River system. As a domestic statute, it operates in many ways that do not concern Mexico at all, or are of only incidental interest to her, as her own resolution of ratification specifically demonstrates.

The treaty, both as an international mortgage and a domestic statute, becomes of first-rank importance in the formulation of the comprehensive plan for the development of the Colorado River.

Comprehensive planning for the Colorado Basin's water utilization cannot safely proceed until the weight of this mortgage and the meaning of this domestic statute, collectively constituting the treaty, are more definitely ascertained. If evidence of that necessity were needed, the ratification proceedings in Mexico, discussed in this report, amply provide it.

Anyone who examines the Mexican proceedings will come away with sober respect for the caliber of the Mexican negotiators and what they believe they have accomplished for their country. This is not to say that the Mexican negotiators were right and ours were wrong, in reporting what the treaty accomplished, but, as the conflict in these pages shows, they could not both be right.

Whatever may be done toward clarifying the opposing interpretations of the treaty as a contract, it seems clear that the uncertainties of this document as a domestic statute, governing the operation of American works by American officials who remain subject to American

constitutional and statutory controls and processes, can properly be resolved by domestic legislation without injuring Mexico. Such legislation is, in fact, imperative.

I. SUMMARY OF THE PROCEEDINGS IN MEXICO

1. RELEASE OF TEXT OF TREATY IN MEXICO

On April 20, 1945, the Mexican Government for the first time released the text of the treaty, protocol, and American reservations to the Mexican public. This was 2 days after the American Senate had approved ratification, with 11 reservations. Prior to that time, there had been considerable discussion of the treaty in the Mexican press, but no release of its terms. Explanatory statements by various officials were released along with the treaty text.

2. "ROUND TABLE" PROCEEDINGS

The Mexican Senate did not meet until September 1945. However, commencing July 31, 1945, the Committees on Foreign Relations of the Mexican Senate (there are two of these committees) held a series of "round table" hearings or discussions, which were reported quite fully in the Mexican press, including *El Nacional*, an official Government publication. These hearings were not, strictly speaking, proceedings of the Senate or of its committees, but were meetings of "interested Senators" under the auspices of the two committees. Nevertheless, for reasons stated later, these proceedings became, and may properly be regarded as, part of the legislative history of the treaty in Mexico. They were concluded on September 13, 1945.

3. CHARACTER OF DISCUSSIONS

The proceedings in Mexico were conducted upon a high level of ability, both by the proponents and opponents of the treaty. A reading of them adds professional respect to that which these lawyers and engineers had already earned as shrewd negotiators on behalf of their country. Unfortunately, the text is not available in official form. While it was stated that a "memoria" containing the official Mexican presentation would be printed, together with the stenographic transcript, this has not been done, so far as can be ascertained. The present report is based on newspaper accounts.

4. ISSUE OF CONSTITUTIONALITY UNDER MEXICAN LAW

Very serious doubts were expressed about the constitutionality of the treaty, because of the express prohibition in article 27 of the Mexican Constitution against alienation of either land or water under Mexican dominion, and the frank admission of the Mexican witnesses that this treaty was an exchange of 375,000 acre-feet on the Rio Grande for 1,500,000 acre-feet on the Colorado. Some proponents of the treaty conceded that its ratification might require amendment of the Mexican Constitution.

5. EXCHANGE OF WATERS OF THE COLORADO FOR THOSE OF THE RIO GRANDE

Contrary to assurances given the American Senate that in negotiating the treaty each river was considered separately and did not represent a trade of Colorado River water given to Mexico at the expense of the Colorado Basin States, in exchange for water given Texas, the Mexican negotiators frankly said that Mexico was getting water in her own right on the Colorado by paying for it with waters of the Rio Grande (Cardona, *El Nacional*, August 2, 1945). They cited the Ollendorff doctrine:

If you take care of me on the Colorado, I will take care of you on the Rio Grande, and vice versa (Enriquez, *Excelsior*, August 3, 1945).

6. INTERPRETATION OF THE AMERICAN RESERVATIONS

The meaning of the American reservations was not considered by the Mexican witnesses to be very clear, but the proponents of the treaty said that it would be better to clarify them by an exchange of notes than by Mexican reservations, which would have to go back to the American Senate, where the treaty would not find as favorable a climate as that which had prevailed when the treaty was ratified.

7. DISCUSSION OF HISTORICAL BACKGROUND

It was stated in the Mexican hearings that the present treaty had been proposed by Mexico, not by the United States, in early 1941, in very much the same form as that in which it was finally signed (Enriquez, *Excelsior*, August 4, 1945), and that the text of the present treaty had been agreed upon in Spanish, then translated into English (Martinez de Alba, *El Universal*, September 6, 1945). Between March 27, 1942, and February 16, 1943, Mexico sent four notes defining the problems to be solved (Enriquez, *Excelsior*, August 4, 1945). At one stage of the negotiations, Mexico demanded 2,000,000 acre-feet of Colorado River water, but offered to pay for the regulatory works in quantities of water instead of money (*id.*).

8. DISCUSSION OF ARBITRATION

The Mexican testimony was that the treaty negotiations were precipitated in 1940 by a drought on the Rio Grande. Mexico and the United States were said to have exchanged notes during this period at the rate of one every 20 days. It was stated that the Mexicans brought on the treaty negotiations by threatening arbitration; but the arbitration demanded apparently related to the Rio Grande (Enriquez, *Excelsior*, August 4, 1945).

All this diplomatic background should be published, together with the minutes of the negotiations themselves.

9. THE DOCTRINE OF "UNITY OF THE RIVER"

The official argument for the treaty in Mexico was based on the doctrine of the unity of the river; namely, that the seven American States of the Colorado River Basin, in the Colorado River compact, had abandoned the doctrine of priority of use, or an apportionment

based on the contribution of water by each State to the river, and had substituted a doctrine of equitable apportionment. It was said that a principle which is right and proper for the seven American States ought to apply to the Mexican State of Sonora and Territory of Lower California. The argument is implied, if not expressed, that the treaty is founded upon the Santa Fe compact. Ing. Orive Alba (S. Doc. 98; p. 16) says that Mexico's 1,500,000 acre-feet is included in the difference between the 16,000,000 acre-feet allocated by the compact and the 17,850,000 acre-feet which he says comprised the virgin flow of the stream. This inference that the Mexican allocation, although guaranteed, is a part of the surplus or excess of the flow over and above the compact allocations may have considerable importance.

10. COMMITTEE REPORTS

On September 27, 1945, the two committees submitted a formal report to the Mexican Senate, reciting and discussing the arguments presented in the round-table proceedings, and recommending ratification of the treaty. On the same day this report was approved the transcript of the round-table proceedings was ordered printed in the *Diario de los Debates* (the Mexican equivalent of the Congressional Record), and a draft of decree promulgating the treaty was approved by the Senate. (The *Diario*, however, has not been published since 1942.) The Mexican President signed the instrument of ratification October 16 and exchange of ratifications was ordered. (Note below the interesting omissions in the Mexican resolution of ratification.)

11. FORM OF THE MEXICAN RATIFICATION

The resolution of the Mexican Senate on September 27, 1945, which approved the treaty, specifically accepted the American reservations, except that, as to the American reservations (a), (b), and (c), the Mexican resolution of ratification says:

The Mexican Senate refrains from considering, because it is not competent to pass judgment upon them, the provisions which relate exclusively to the internal application of the treaty within the United States of America and by its own authorities, and which are included in the understandings set forth under the letter (a) in its first part down to the period preceding the words, "It is understood" and under the letters (b) and (c). (See Treaty Series 994, p. 56.)

The rather interesting restriction so placed on reservation (a) results in omitting any agreement by Mexico that the works to be built by the United States are only the eight projects named in reservation (a). The other two reservations singled out, (b) subject American officers to American statutory controls and processes, and alter or control the distribution of water to users within the territorial limits of the United States.

In short, Mexico says she doesn't have to agree to those reservations because they are none of her business; but whether they are her business or not, the fact remains that she has not agreed to them and is not bound by them. The American resolution of ratification insisted that—

these understandings will be mentioned in the ratification of this treaty as conveying the true meaning of the treaty, and will in effect form a part of the treaty.

The Mexican resolution specifically makes a point of "failing to mention" ("hace punto omiso") some of these understandings. Ratifications were nevertheless exchanged between the two nations November 8, 1945, as noted below.

12. EXCHANGE OF RATIFICATIONS

The exchange of ratifications between the two Governments in Washington, November 8, 1945, was evidenced by signature of a supplementary protocol, and the treaty entered into force on that date. President Truman signed a proclamation to that effect on November 27, 1945.

13. DEEP DIFFERENCES DISCLOSED

The Mexican proceedings reveal differences from the account given the American Senate by the American proponents of this treaty with respect to the Colorado River, in three broad categories:

First. As to the assumptions, legal and engineering, on which the treaty was based.

Second. In the interpretation of the document signed.

Third. As to factors on which the treaty is silent.

These differences, so deep in some instances as to indicate that there was no real meeting of the minds on some of the basic factors of the treaty, insofar as the Colorado is concerned, are discussed below.

II. CONFLICTING ASSUMPTIONS UPON WHICH THE TREATY WAS BASED

The argument in both countries raised the following questions, and drew the following official answers:

1. AS TO THE IRRIGABLE AREA IN MEXICO

The assumptions of the American negotiators.—Mr. Lawson, American member of the Boundary and Water Commission, and one of the negotiators, testified (hearings, pt. 1, pp. 77-78):

* * * In the Mexicali Valley, also, there is opportunity for great expansion in the future. Estimates of the areas in Mexico readily irrigable from the Colorado River vary from 800,000 to 1,000,000 acres.

Part 1, page 83:

The CHAIRMAN. If I understand you correctly, you mean that under present conditions the water has to be released in the river, and it goes down into Mexico, and without any treaty it is appropriated to increasing the irrigable territory there, and that if the treaty goes into effect she would be limited to 1,500,000 acre-feet in the future, but if not she could continue to develop and increase her acreage over a larger territory and have a basis in the future for a claim that she had acquired water rights by prior use, and that that would be embarrassing to the United States. Is that about your testimony?

Mr. LAWSON. Yes, Senator. If they are using, as we can assume they are, or if they are irrigating today something like 300,000 acres, they can, with the water supply being furnished, develop about three times that amount, because they have about 800,000 acres of irrigable land in that valley. The water supply is now available for their use. The treaty limits them to less water than they used last year, however.

The assumptions of the Mexican negotiators.—Now for one of the Mexican negotiators, Ing. Adolfo Orive Alba, Chairman of the National Irrigation Commission, corresponding to our Commissioner of Reclamation (with the difference that our Commissioner Bashore testified that he was not consulted until after the treaty was signed). Ing. Orive Alba said, in a formal statement printed August 1, 1945:

Now then, before negotiating the treaty a precise estimate was made of the net area in Mexican territory irrigable with water from the Colorado River under economically practicable conditions. Accordingly, this estimate found that *there was an area of 200,000 net irrigable hectares (494,200 acres) equivalent to a gross area of 300,000 hectares.* This gross area of 300,000 hectares (741,300 acres) is less than that estimated as irrigable by our engineers during the international conferences of 1929 to which we referred at the beginning of this report. The difference between these two estimates is that in the latter, great areas, considered in the estimate of 1929, are eliminated as being useless for agricultural operations due to the large amount of salts that the lands contain. For example, the basin of the Laguna Salada and the lands adjacent to the Gulf were eliminated. There were also eliminated some other areas of lands of poor quality where heavy pumping would be required. [Italics supplied.]

Comparison of the American and Mexican assumptions as to irrigable acreage.—From the foregoing official testimony, it is clear that the American negotiators were completely misinformed as to the area of irrigable land in Mexico. The Americans thought Mexico had at least 800,000 acres; the Mexicans knew that their net irrigable area was 494,200 acres. This discrepancy as to potential uses should be borne in mind in considering the next and similar misunderstanding as to past uses.

2. AS TO THE LAND AND WATER ALREADY PUT TO USE IN MEXICO

The assumptions of the American negotiators.—Mr. Lowry, one of the State Department witnesses, said succinctly what some of his associates said in more detail (hearings, pt. 1, pp. 241, 242):

Let me make one more statement, please. Mexico's use in recent years has approximated 1,800,000 acre-feet annually, and that is increasing. * * *
* * * Another thing I want to point out about this chart is that as the United States expands it will be allowed under this treaty to *cut into the supply now being used by Mexico to the extent of 300,000 acre-feet, cutting Mexico back to 1,500,000 acre-feet.* That is the ultimate figure. [Emphasis supplied.]

The Foreign Relations Committee of the United States Senate accepted these representations. Its report (Ex. Rept. 2, 79th Cong., 1st sess., February 26, 1945) said (p. 4):

Mexico, on the other hand, is now using approximately 1,800,000 acre-feet a year, and in the meantime some 8,000,000 or 9,000,000 acre-feet of water flows through Mexican territory and wastes unused into the Gulf of California. The testimony is that it will be many years hence before this water can all be put to beneficial use in the United States. If and when that time arrives, present Mexican uses must be curtailed. Thus, by placing for all time a limit, measurably below present Mexican diversions, upon the obligation of the United States to supply Colorado River water to Mexico, the treaty provides needed assurance to American agencies and communities in planning future developments.

The assumptions of the Mexican negotiators.—But Ing. Adolfo Orive Alba, whom we have previously introduced, reporting to the Mexican Senate, compared the amount of water Mexico was previously using, and the amount she would use under the treaty as follows:

By means of the treaty the critically fortuitous condition of the crops of 120,000 hectares (296,500 acres) farmed at present is eliminated (*area times 4.1 feet = 1,215,650 acre-feet present annual use; see explanation infra.*)

The treaty permits of *increasing* the cultivated area to the total of the area that can be cultivated economically, that is, to 200,000 net hectares (494,200 acres). [Emphasis, and calculation in parentheses, added.]

As to future uses, he says in more detail:

Now then for the irrigation of the net 200,000 hectares (494,200 acres), in accordance with the coefficient of irrigation observed as an average since the commencement of agricultural work in the Mexicali Valley (1.25 meters or 4.1 feet), a volume of 2,500,000,000 cubic meters (2,026,700 acre-feet) would be needed.

This volume can be obtained with the amount guaranteed by the treaty of 1,850,000,000 cubic meters (1,500,000 acre-feet) in the minimum years or 2,097,000,000 (1,700,000 acre-feet) in the majority of the years plus the water that is pumped from wells—similar to those existing on the laguna—which will more than supply the deficiency between the quantity required and the quantity guaranteed by the treaty.

If the coefficient of irrigation in Mexicali Valley should be increased notably, it will be necessary to make a greater use of the abundant (freaticas) water which exists in the subsoil of Mexicali Valley. If, on the contrary, as we hope, by a greater preparation of our farmers the coefficient of irrigation diminishes, it will be practically possible to irrigate the whole of the 200,000 net hectares (494,200 acres) existing with the volume guaranteed by the treaty. [Emphasis supplied.]

Comparison of the American and Mexican assumptions as to land and water already put to use in Mexico.—It is a very plain that the American negotiators, for some reason, were convinced that Mexico was already using 1,800,000 acre-feet of water from the river, and that this use was increasing; hence that a limitation of 1,500,000 acre-feet was a good bargain. But the Mexicans knew that they were using not over 1,216,000 acre-feet, that they were irrigating only 296,000 acres; that the treaty meant an expansion in irrigated area to 494,000 acres, an increase of 67 percent, instead of a decrease as claimed by the American negotiators; and that the treaty, of course, would bring a like increase in the quantity of water used, from 1,216,000 acre-feet to at least 1,500,000, and not a decrease of 300,000 acre-feet as claimed. With continued pumping, the Mexicans stated their expectation of realizing over 2,000,000 acre-feet, compared with 1,216,000 acre-feet produced by all methods, including pumping, prior to the treaty.

These comparisons are the background for the next and probably most basic of the conflicting assumptions which guided the two sets negotiators.

3. AS TO QUANTITY OF WATER WHICH MEXICO COULD PUT TO USE WITHOUT A TREATY

Here we get into three or four related hypotheses such as: First, how much water an arbitration tribunal might award Mexico; second, whether she could get along without storage and diversion works on American soil; and, third, whether an arbitration court would award her the use of those American works. The reports on these points given by the two sets of officials to their respective Senates ran as follows:

The assumptions of the American negotiators.—The Under Secretary of State, Hon. Dean Acheson, testified as follows (hearings, pt. 5, p. 1766):

Senator DOWNEY. All right, Mr. Secretary. Let me then take up another subject.

You assume in your statement a certain understanding, which I will read to you. It is only four or five lines. You say:

"Today some 8,000,000 acre-feet a year of this water are wasting through Mexican territory. There is nothing to stop Mexico's using more and more of this water as time goes on."

Are you sure that we could not, by the use of our dams and reservoirs in the United States, prevent Mexico from using that water?

Mr. ACHESON. I am not an engineering expert. The facts of the matter, as I understand them, are that it will take somewhere in the neighborhood of 25 to 40 years in the United States before all these waters will be put to use. Whether they can be diverted to the Pacific Ocean or to the Mississippi I do not know, of course.

Senator DOWNEY. Mr. Secretary, is it not the basis of your entire argument here, and that of the State Department, that the reason this treaty is imperative is that there is a great volume of water going down to Mexico that we cannot prevent her from using for irrigation, and by using it she builds up a much greater use, thus imperiling our rights?

Mr. ACHESON. That is the statement that I made.

Mr. Tipton, one of the American negotiators, testified (hearings, pt. 3, p. 1065):

Senator WILEY. You take the position, I understand, that without any treaty you feel that the rights of the users of water in the United States would be prejudiced?

Mr. TIPTON. Very definitely so; yes, sir.

Senator WILEY. And you base that primarily upon the idea that Mexican civilization might build up a use that would be a basis for an equitable claim against the water supply of the Colorado River in the future?

Mr. TIPTON. Definitely; with one qualification. Not "might," but "would" build up such a use. There is no question in my mind, sir, about that.

Senator WILEY. That would depend upon whether or not the water of the Colorado were made available for Mexico, would it not?

Mr. TIPTON. No. The water is being made available unavoidably by the operation of works in the United States. Mexico can divert and use that water without the use of United States facilities, which I shall subsequently show.

Senator WILEY. Without the use of them?

Mr. TIPTON. Yes, sir.

At another point, Mr. Tipton summed up the motivation of the treaty concisely, as follows (hearings, pt. 3, p. 951):

* * * It is entirely feasible and practicable at this time for Mexico to build a river bank heading in Mexican territory, just below the upper boundary line only a few hundred yards below the present Rockwood structure, and from such heading to irrigate by gravity all of the lands now supplied from the Rockwood heading in the United States and by extensions of the canal system, to irrigate practically all the lands in the Mexicali Valley on both sides of the river. At the present time, Mexico is watering certain small areas by pumping from the Alamo Canal. Such pumping would have to be continued with the new all-Mexican heading and certain other small areas would have to be supplied by pumping either from the canal system or direct from the river as is the present practice.

The above is on the point that Mexico can divert from the lower Colorado River in her own territory water in sufficient quantity to irrigate a much larger area than now irrigated as was proved in 1905 and 1906 when the entire river flow was discharged through a cut in the river bank and since that date only prevented from overflowing these lands by an elaborate system of levees.

With the large surplus discharge of many times the treaty allocation in the lower Colorado River most certain to be available to Mexico for many years in the future, Mexico's diversion and use is certainly not limited.

Again (pt. 4, p. 1332):

16. If the treaty is not ratified it appears probable that Mexico will continue to increase her uses, with a possibility that she may provide a gravity diversion immediately below the upper boundary without a dam across the river, and that after her uses have substantially increased she will ask that the problem be arbitrated under the Pan-American Republics Arbitration Treaty. If the controversy were arbitrated, the results of the arbitration could well be more unfavorable to the United States interests, including those of California, than are the terms of the treaty. Not only would the quantity of water be involved, but the question of quality, both with respect to salt and silt, could be raised by Mexico. It is believed that those questions are resolved by the treaty.

In short, the American treaty proponents thought that the United States had to have a Colorado River treaty, but that Mexico did not, and we were fortunate to obtain this one. Now let us see what the Mexican negotiators told their Senate on the same subject:

The assumptions of the Mexican negotiators.—Ing. Fernandez MacGregor, Mexican member of the International Boundary and Water Commission, and opposite number of our Mr. Lawson, issued a prepared statement answering a critic of the treaty, saying:

Of the opponents Lic. Manzanera del Campo was the only one who did not limit himself to showing that Mexico has an undeniable right to the waters of the Colorado River (a thing in which we are entirely in accord with him) but went further to fix a quantity of this right in the annual volume of 2,380,000 acre-feet (2,937,000,000 cubic meters).

To make plain to Lic. Manzanera del Campo that the volume of Colorado River water assigned to Mexico by the treaty, and which as a minimum is 1,850,234,000 cubic meters per year, has much more value for our country than that which he calculates, the National Irrigation Commission, at my request, had prepared a graph to which Lic. Enriquez referred briefly, but due to the pressure of time, it was not possible for me to explain. In this I have shown the annual discharge (gastos) from this stream in the form in which the same would occur month by month and year by year if the regulatory works constructed in American territory did not exist. This graph shows clearly that in the irregular form in which the flows would occur, *Mexico, instead of receiving benefits would repeatedly sustain damage; as a rule when the water was available, it would descend in veritable floods which would destroy everything; and on other occasions in the months of the greatest scarcity and the greatest necessity, the channel would be dry.*

Instead, the waters that Mexico will receive in accordance with the treaty will be received regulated by the American works, and at the appropriate time for their application to the lands. For this purpose there is established in the treaty, procedure by means of which the Mexican section of the International Boundary and Water Commission will present each year, in advance, to the American section of the same Commission monthly tables for delivery of the water which our lands are going to need for the following year; and, what is more, there is a stipulation that these tables can be varied 20 percent, plus or minus, 30 days in advance, in the event that the forecasts that shall have been made are not exact. * * *

In the same graph to which I referred it is shown clearly that *even supposing that not a single drop of water of the Colorado River were retained in American territory, the irregular form in which the discharge would arrive in our country would not permit any important area of land to be irrigated; that is to say, supposing that there is accepted as correct the conclusion to which Lic. Manzanera del Campo arrives, not only would we be unable to increase our irrigation system on the Colorado River in Lower California and Sonora up to 200,000 hectares in round figures, as we are going to do when the treaty enters into effect, but probably the area already irrigated would have to be reduced considerably.* * * *

I make the above statements as a Mexican, as a public officer conscious of my duty, having had the good fortune (after having dedicated 21 years of my life to the study of this problem) to have the honor to sign the treaty of February 3, 1944, together with Dr. Francisco Castillo Najera, present Secretary of Foreign Relations; a treaty which, in my opinion, constitutes a prime example of what two friendly countries can do when with all good will and understanding they sit down at the conference table to resolve their problems. The Treaty resolves in a satisfactory and equitable form the problem that confronts the two Governments on their international rivers (El Nacional, September 23, 1945). [Emphasis supplied.]

Lic. Ernesto Enriquez, an eminent Mexican authority on international law, who participated in the negotiations, testified:

6. In practice, the treaty not only is convenient, but is indispensable to us. *The United States of America can get along without it; our country cannot. Moreover, the favorable result of a judgment of arbitration that Mexico might win would not give in the end results as good as those obtained through this international instrument.*

7. If the treaty were not ratified, it would be almost impossible to hope that for many years we would be able to negotiate another; and in this the matter of time has always been adverse to us (Excelsior, August 2, 1945). [Emphasis supplied.]

At another point, Lic. Enriquez was reported by the official newspaper of the Mexican Government as follows:

A judgment in arbitration, said Enriquez, on treating this aspect of the agreement, 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 rivers, with the object of obtaining a better use of the flow. *Enriquez stated his opinion that possibly with respect to the Colorado there would be conceded to Mexico an award greater than that which the present treaty assigns to her, but that quantity would have to be received in accord with natural flow conditions of the river. Mexico could not pretend to use without compensation of any sort the costly works for management and regulation made in the United States.* Consequently, if our country did get more water, it would receive it not in the months of low stage of the river, but divided according to the natural flow of the river, and therefore in the summer, which is when water is really most valuable for irrigation, its portion would be much less than that which it can have available in accordance with the treaty, which permits it to demand the water in greater quantity, according to its necessities in the months of greatest consumption (El Nacional, August 7, 1945). [Emphasis supplied.]

The same official newspaper reports the following exchange between the chairman of the committee, Lic. Garcia de Alba, and one of the opponents, Lic. Manzanera del Campo (El Nacional, September 13, 1945):

Senator Garcia de Alba, presiding, initiated the period of interrogation by asking Lic. Manzanera del Campo: Which will be most beneficial to Mexico, to receive 2,300,000 acre-feet of wild, unregulated (bronca) water, or in place thereof 1,500,000 acre-feet of regulated (quantitativas) waters, at the times when they are necessary, such as during the months of low stages in the river? Manzanera del Campo responded categorically that it was obvious that he would prefer the controlled waters.

Before leaving this point of who needed the treaty, Mexico or the United States, let us turn again to the informative report of Ing. Orive Alba.

After referring to the construction of Boulder Dam and the All-American canal Orive Alba states (p. 12):

We Mexican engineers, when we saw that these gigantic works were being executed, understood that there approached the critical moment for Mexico in which the lands of the Mexicali Valley ran the danger of returning to their condition of one of the most inhospitable deserts in the world through lack of water, since our country would have to depend on taking water, in the manner that it might best be able to do it, from the Colorado River by using occasional surpluses that might flow through said river.

In 1942 the All-American canal entered into operation; that is, it was no longer necessary to carry the water of the Colorado River through Mexican territory in order to irrigate American lands and therefore it was not possible for Mexico to take part of the 50 percent of the water in the Alamo Canal to which it had the right, and this canal remained abandoned for the exclusive service of Mexico, which already had in cultivation that year more than 120,000 hectares (300,000 acres) in Mexicali Valley.

The situation in 1942 showed us how well founded were our fears because that year, during several of the hottest weeks, there came from the great American dams constructed on the Colorado River only a small volume which did not permit of filling the requirements of irrigation in Mexico. And with this came the clamor of the public landholders, the small owners, and colonists of our Colorado River irrigation district, who saw their crops lost for lack of water. But there is even more, for at the end of the summer, there came from Boulder Dam a great flow of water which overflowed in Mexico, inundating cultivated lands and ruining the crops of other thousands of hectares.

That is, even when it is true that the total volume of the surpluses which flow through the Colorado River will still be very great in many years, its current is from now on so irregular that it can be stated that, while during some weeks the

Mexican lands of the Mexicali Valley can be dying of thirst, in the following weeks they may be choked and submerged by the inundations provoked by discharges from the American dams.

Under these conditions the agriculture of the Mexicali Valley is in desperate condition. In order to better it, without the treaty, it has been necessary for the Mexican Government, in the years 1943 and 1944 and the present year, to be constantly requesting of the American Government that the discharges be now increased, that tomorrow they be diminished, that part of the water be furnished through the All-American Canal, etc.

This critical situation makes clear how unfounded is the opinion of some of our citizens who believe that Mexico should not be preoccupied in the case of the Colorado River and that the treaty was not needed, as it could always take the abundant water which inevitably flows in the Colorado River. We insist that, effectively, in the case of the Colorado River as in the case of the Mexican tributaries of the Rio Grande, there will always be surpluses which will flow in the beds of said rivers but these surpluses cannot be used in irrigation due to their eminently irregular regimen in present years and much less in future years. The only solution for using them would be to regulate them by a storage dam and we must remember that at the beginning of this exposition we said that in Mexico there is not the slightest possibility of storing the surplus water of the Colorado River, a possibility which exists for the surplus waters that flow in the Rio Grande.

For this and many other reasons we who know the problems of the Mexicali Valley in its painful reality have always been convinced that there was no other solution than that which a treaty gives which guarantees water from the Colorado River for the irrigation of its lands.

The treaty which is under consideration resolves this problem (Orive Alba; El Universal, August 1, 1945; U. S. Senate Doc. No. 98, 79th Cong., pp. 14, 15).

At another point this eminent Mexican authority, having told of Mexico's "desperate condition" without a treaty, painted the following contrasting picture of her happy situation under the treaty (El Universal, August 1, 1945; U. S. Senate Doc. No. 98, 79th Cong., pp. 14, 15):

It is necessary to note that as Mexico did not have any place to regulate the waters of the Colorado River in order to distribute them day by day, during each year, according to the needs of irrigation, *it was necessary to arrange by means of the treaty for the United States to deliver that water to us 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.* Besides this, on account of the topographical conditions of the lands to be irrigated on both banks of the Colorado River, it was necessary to arrange that the water of the Colorado River be delivered to us when desired by Mexico, compatible with the needs of the lands to be irrigated at three different points.

1. At Pilot Knob, in order to irrigate the high lands which are found adjacent to the Colorado River on its right bank.

2. At San Luis, Sonora, in order to irrigate the high lands which are found on the left bank of the Colorado River.

3. At the Colorado River, in order that by means of the construction of an international dam at the site where Mexico may desire it the rest of the lands on both banks of the river can be irrigated.

Mexico even has the possibility, if it so desires, of obtaining construction by Arizona of a canal which would carry waters of the Colorado River from a diversion dam constructed on the section of the river bounding the lands of Sonora.

These are the advantages obtained by the treaty which cannot be relegated to a second place, but which for our country have fundamental importance because if it were not for them we would not be able even to use the annual volume that the treaty assigns to Mexico. [Emphasis supplied.]

SUMMARY

So much for the assumptions upon which the treaty was based. The two sets of hearings make it very clear that one group of negotiators or the other was totally mistaken:

First. As to the irrigable acreage in Mexico.

Second. As to the land and water already put to use in Mexico.

Third. As to the amount of water Mexico could put to use without a treaty; in short on the whole basic question as to who needed a treaty, the United States or Mexico.

III. CONFLICTING INTERPRETATIONS

Let us turn now to the second class of differences disclosed by the Mexican hearings, namely, the conflicting interpretations placed by the two sets of negotiators upon the language they agreed upon in the treaty itself.

It is clear that there was no meeting of the minds at all upon several points:

First. As to the quality of the water which the United States guaranteed to deliver.

Second. As to the operation of the extraordinary drought clause.

Third. As to several important factors upon which the treaty is silent. Thus (a) the circumstances which would entitle Mexico to 1,700,000 acre-feet instead of 1,500,000, and (b) as to Mexico's right to discharge as much return flow as she pleases into the closed basin of Salton Sea, thereby drowning out American farm lands in Imperial Valley.

To take these up in order:

(1) CONFLICTING INTERPRETATIONS AS TO QUALITY OF WATER TO BE DELIVERED TO MEXICO

The American interpretation.—Mr. Tipton, one of the American negotiators, testified so categorically and emphatically as to the intent of the negotiators that it is difficult not to believe he spoke accurately. He testified (hearings, pt. 2, p. 322):

Senator DOWNEY. Mr. Tipton, is there any statement in the treaty as to the quality of water that must be delivered by the United States to Mexico?

Mr. TIPTON. We are protected on the quality, sir.

Senator DOWNEY. *That is, you would mean by that statement that we could perform the terms of our treaty with Mexico by delivering to her water that would not be usable?*

Mr. TIPTON. Yes, sir.

Senator DOWNEY. *And you think that some court in the future would uphold that kind of interpretation, that we could satisfy in whole or in part our obligation to Mexico under this treaty of delivering 1,500,000 acre-feet of water, even though some or all of it were not usable for irrigation purposes?*

Mr. TIPTON. *That is my interpretation of the treaty, sir. During the negotiations, that question was argued strenuously. Memoranda passed back and forth during negotiations indicate what the intent was. Language was placed in the treaty to cover that situation and to cover only that situation.* [Emphasis supplied.]

Part 2, page 338:

Senator DOWNEY. Are you one of the consulting engineers of the Boundary Commission?

Mr. TIPTON. Yes, sir; I am, sir.

Senator DOWNEY. I understand you to say that in your opinion there is no guaranty to be implied from this treaty that the water furnished to Mexico shall be of such quality that it will be usable for irrigation?

Mr. TIPTON. That is correct, sir.

Senator DOWNEY. I think you also stated that you based that opinion, in part, at least, on conversations and exchanges of data between the two Governments leading up to the treaty?

Mr. TIPTON. That is correct, sir.

Senator DOWNEY. Mr. Chairman, I would like to request at this time that the chairman request the State Department to make available to the committee the exchange of all documents or correspondence tending to show any admission by the Government of Mexico that in the interpretation of this treaty she would not rely upon the fact that she was entitled to water of a quality that would be usable.

The CHAIRMAN. I will consult with the Department. I do not care to stop the proceedings at this moment to do so.

Senator DOWNEY. This is a point of rather grave importance to us. Would the chairman consider that it is a proper request?

The CHAIRMAN. The Chair will consult with the State Department. He does not care to be catechized about what he is going to do. The witness has gone over the subject of the treaty several times already. Proceed.

Part 2, page 341:

Senator DOWNEY. Returning to the question of any implied guaranty in the treaty that water shall be of sufficient quality to be available for irrigation, I suppose that you formed your opinion merely from the language of the treaty itself, without regard to those conversations and exchanges between the two Governments that you have spoken of. Would you still be of the opinion that from the language of the treaty itself a court or an international arbitration tribunal would not hold that Mexico was entitled to water that was fit for irrigation purposes?

Mr. TIPTON. That is my unqualified opinion, Senator, because the language of the treaty resulted from these conversations that you mention, and the language of the treaty was just as plain as it was possible to make it, and in my unqualified opinion the language of the treaty is such that Mexico could not ask for more water than 1,500,000 acre-feet for any purpose whatsoever.

Senator DOWNEY. You do not think that just adding three simple words, "regardless of quality," would have made it any plainer?

Mr. TIPTON. The language of the treaty is perfectly plain.

Senator DOWNEY. Now, Mr. Tipton, you say that if the treaty had included the expression, "regardless of quality," that might perhaps have prevented the Mexican Senate from ratifying the treaty?

Mr. TIPTON. *The ones in the Mexican Senate are not so conversant with the situation on the river as those who negotiated the treaty. Those who negotiated the treaty understood fully what they were doing. They understand fully what the condition might be ultimately, while those in the Senate might not be conversant with that condition. The language in the treaty is plain and it means one thing, and one thing only, and the ones who negotiated this treaty for Mexico understand it. They also understand about what the quality might be under ultimate conditions. In other words, there was no tendency on the part of the United States negotiators to work out something that was bad for Mexico, and Mexico's negotiators, on the other hand, knew plainly what they were doing, and the language was agreed to with one purpose in mind, and they understand it.* [Emphasis supplied.]

Part 2, p. 342, 343 (continued):

Senator DOWNEY. I understood you this morning to say that there had been memoranda signed by both Governments.

Mr. TIPTON. I did not mean to convey that impression. I meant that there were memoranda passed from the American negotiators to the Mexican negotiators indicating plainly what the intent of the American negotiators was; and there was not only one; there were several. As a result of that *the American demands were accepted and there was written into the treaty the present language which is supposed to cover the situation.* Whether it does or whether it does not is a question of interpretation of language and a question of legal interpretation of language. But the language is there to express an intent, and I know what the intent was.

Senator DOWNEY. On the part of the United States?

Mr. TIPTON. On the part of the Mexican negotiators.

Senator DOWNEY. *Is the intent on the part of the Mexican negotiators expressed in writing?*

Mr. TIPTON. *I do not know, sir; but I am just telling you that as one of the negotiators, whether it was in writing or not, it was understood.* [Emphasis supplied.]

The Mexican interpretation.—But now let us listen to the Mexican negotiators, reporting to their Senate on the question of quality of water:

Ing. Orive Alba, chairman of the National Irrigation Commission, testified:

With respect to the possibility that the waters of the Colorado River which are delivered to us may be of poor quality, because they contain dissolved salts, we are able to affirm, based on reasons of legal and technical nature, that fortunately such a danger does not exist. In the official report to the Senate that the National Irrigation Commission is terminating, this theme will be considered more fully, in order to do away with any doubt that may be had in this respect. It is not within the purpose and the time set for this report to do it as fully as is necessary, but we may point out at least the following reasons:

(a) The negotiations of the treaty on the part of the American delegation and later its approval by the American Senate were made by taking as a fundamental basis the official document called the Santa Fe agreement, which with the approval of the American Federal Government distributed, since 1922, the main stream of the Colorado River among the American States of the upper and lower basins, and specified that the waters assigned to Mexico should be taken from the excess which the average virgin volume of the river (22,000,000,000 cubic meters) (17,835,000 acre-feet) had over the volume distributed among the American States of the upper and lower basins (20,000,000,000 cubic meters) (16,213,600 acre-feet). Our assignment of 1,850,000,000 cubic meters (1,500,000 acre-feet) is included, then, within the 2,000,000,000 cubic meters (1,621,000 acre-feet) of the difference. The virgin waters of the Colorado River are of good quality. Besides this, even a superficial study of the treaty shows, from the introduction to the transitory articles with which it terminates, that it is inspired with the fact that "it is to the interests of both countries to take advantage of these waters in other uses and consumptions * * * in order to obtain its most complete and satisfactory utilization." This is a paragraph transcribed from the preface. In article 27 of the transitory articles it is clearly stated that the use to which these waters are to be put is that of irrigation. *Therefore, in this treaty, as in any other of its kind, it is understood that the water must be of good quality. Mexico has the right to have the water that is assigned to it from the Colorado River proceed entirely from the virgin volume of the current, but knowing that this is physically impossible to obtain for any use of water downstream on any river fully utilized, as is the Colorado River, our country 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.* [Emphasis supplied.]

One of the critics of the treaty in Mexico, Lic. Esquivel Obregon, president of the Academy of Jurisprudence and Legislation, offered seven reservations. Reservation No. 5 read as follows:

The United States undertake that the waters delivered to Mexico from the Colorado River shall satisfy, as to chemical composition, the indispensable requirements for agricultural use, so that the lands which receive them may use them (Excelsior, August 9, 1945).

Replying to this demand for a reservation, Ing. 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 (Excelsior, August 10, 1945).

Lic. Ernesto Enriquez, the eminent international lawyer, said, with respect to this reservation on quality of water, that he wanted it noted that the treaty said plainly that they must be waters useful for agriculture (El Nacional, August 11, 1945).

The reservation was never voted upon.

(2) CONFLICTING INTERPRETATIONS AS TO THE OPERATION OF THE "EXTRAORDINARY DROUGHT" CLAUSE

The Colorado River drought clause.—The testimony of the negotiators here and in Mexico likewise demonstrated that there was no real meeting of the minds with respect to the "extraordinary drought" clause on the Colorado. This clause (art. 10) reads:

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.

The Rio Grande drought clause in the 1944 treaty.—This differs from the drought clause on the Rio Grande, which excuses the Mexicans in the case of serious accident to their "hydraulic system" (not their irrigation system) making it difficult for them to "make available" (not deliver) annually the "run-off of 350,000 acre-feet" (not "from any and all sources"), which is the "minimum contribution" (not the "guaranteed quantity") from the Mexican tributaries. In such event any deficiencies existing at the end of a 5-year cycle "shall be made up in the following 5-year cycle with water from the said measured tributaries."

The drought clause in the 1906 Rio Grande treaty.—The Colorado River clause differs also from that in the Rio Grande Treaty of 1906. The American Senate committee report on the 1944 treaty says (p. 3):

In the 1906 convention the reduction of deliveries to Mexico is based upon the reduction of deliveries to lands in the United States rather than upon a reduction of consumptive uses in the United States, as in the present treaty. This change in the basic factor was made at the instance of the negotiators for the United States, in order to take care of situations where waters are not "delivered" in the technical sense, but where, nevertheless, consumptive uses must be curtailed during periods of drought.

The American interpretation.—The American negotiators of the 1944 treaty explaining this Colorado River drought clause, testified (pt. 1, p. 106):

Senator McFARLAND. Was there any negotiating at all in regard to setting up and spelling that out as to what a drought is—how much water would have to be on hand before it would be considered a drought?

Mr. CLAYTON. No, sir. Any actual determination will be made here in the United States, because here is where the records are kept and here is where the water is. However, I think in practical effect it would work out this way: We have a measuring stick furnished by the Colorado River compact that obligates the upper basin to deliver to the lower basin in 10-year progressive series 75,000,000 acre-feet of water every 10 years. The drought, of course, would be felt first in the upper basin. That is where the rainfall and snowfall are primarily, and the effects would be felt there first. If that represented such a drought that they had to curtail deliveries to the lower basin, I would say that was a drought within the meaning of the compact and that deliveries to Mexico would be diminished correspondingly. *The drought does not have to occur simultaneously in all portions of the basin. It is sufficient if it occurs in any portion and results in the curtailment of usage.* [Emphasis supplied.]

Mr. Clayton, counsel for the International Boundary Commission, and actual draftsman of much of the treaty, testified as follows (pt. 1, p. 108):

Senator MURDOCK. The question I have in mind is this: Suppose that the use of water in the upper basin has to be curtailed over a 10-year period in order to deliver to the lower basin 75,000,000 acre-feet, so that there is an actual curtailment of the use in the upper basin—must there also be a curtailment of use in the upper basin to supply that part of the water that goes to Mexico?

Mr. CLAYTON. Of course, 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. If you are speaking about a curtailment in the upper basin as a result of drought conditions, as ordinarily it would be, then, of course, there will be a curtailment also of the deliveries to Mexico.

Part 1, page 109:

Senator MURDOCK. I am not afraid of the periods when there is a surplus. The crucial thing in this treaty is the years when there is a drought. When there is plenty of water, nobody cares; the question becomes academic. But when there is not enough water, then the question in my mind is who loses? Where does it come from? How do we get the water down to Mexico?

Mr. CLAYTON. *There is no obligation to deliver all of the allocation to Mexico when there is a curtailment of use anywhere in the United States. The Mexican deliveries will be curtailed, too.* [Emphasis supplied.]

Mr. Tipton, previously identified, testified (pt. 3, p. 1084):

Mr. TIPTON. In my opinion, sir, my interpretation of one condition when the "extraordinary drought" provision of the treaty would be invoked would be when the upper basin would be required to curtail its uses in order to deliver its 75,000,000 acre-feet at Lees Ferry under the compact.

Senator MURDOCK. Is that your definition of "extraordinary drought"?

Mr. TIPTON. That would be my personal definition of one condition when the provision would be invoked.

Senator MURDOCK. I think it is important to get that straight. Now, if I have followed you, whenever the upper basin has to curtail to any degree its beneficial, consumptive use in order to supply the lower basin with the 75,000,000 acre-feet over a 10-year period, that constitutes, in your opinion, an extraordinary drought under the treaty?

Mr. TIPTON. That is correct, sir. That certainly would constitute an extraordinary drought, in my opinion.

Part 3, page 1985:

Senator WHITE. Was there any effort at the time the treaty was negotiated by the negotiators—any statement or effort by them—to determine what is meant by "extraordinary drought"?

Mr. TIPTON. No, sir.

Senator WHITE. It was left wide open?

Mr. TIPTON. It was left open. It was not discussed at great length, except the point I brought out, that the criterion of reduction in use in the United States should apply not only to the lower basin, as it does in the upper Rio Grande Treaty, but that it should apply throughout the basin.

Part 3, page 1088:

Mr. TIPTON. * * * Senator Millikin asked two questions. His first question was, as I understood it—and I hope the Senator will correct me if I am wrong—if there was no curtailment in the consumptive uses, but there was a depletion of reservoir capacity, whether or not we could invoke this provision. I said I did not think so.

His second question was this—that if, accompanying the commencement of depletion of water in main stream storage, there also was a curtailment of use—actual curtailment of consumptive use—by virtue of a lack of water in the upper basin above our main stream reservoirs, whether or not under that condition this provision could be invoked. I said that it could be so interpreted.

Senator LA FOLLETTE. But you were not certain?

Mr. TIPTON. I was not certain.

Senator LA FOLLETTE. One other thing that I got from this series of questions was the fact that in the negotiation of this treaty, in which you participated, as I understand it, there was not very much discussion of this provision with the Mexican negotiators. *I came to the conclusion, therefore—and if I am wrong, I wish to be corrected—that this particular language in the treaty—this drought-clause language—was arrived at without a full meeting of the minds of the negotiators as to what its actual provisions involved.*

Mr. TIPTON. I think, Senator, that that resulted from this fact—

Senator LA FOLLETTE. *Is that true? Am I correct in that deduction?*

Mr. TIPTON. *You are substantially correct, sir.*

Senator LA FOLLETTE. Then, I might just say that it seems rather strange to me—I have never participated in the negotiation of a treaty—because, as I see it, regardless of your statement that you do not think it is very important, *this is the one clause in the treaty which could result in any diminution of water delivered to Mexico under the guaranty and that, therefore, if, despite your conclusion that we will not face that situation, it should occur, it would be the one clause in the treaty*

about which more controversy, more difficulty, and more friction between the two nations might arise than was contemplated in the enforcement of the sliding-scale provision. I cannot quite understand, frankly, why there was not a full meeting of the minds of the negotiators, or at least an understanding between those who did negotiate it on the part of the respective countries as to exactly how this drought clause would operate. [Emphasis supplied.]

Part 3, page 1089:

Senator LA FOLLETTE. Is there a full agreement and meeting of the minds on the part of the American negotiators of this treaty as to exactly how this clause will operate, because I have heard you interpolate in many of your answers, "in my personal opinion," or words to that general effect?

Mr. TIPTON. I will answer you, Senator, in this way: This has not been discussed by the American negotiators in the detail it has been discussed here.

Senator LA FOLLETTE. Do you mean that the language was proposed and agreed to without the American negotiators having an understanding of exactly how it would operate, if and when it was invoked?

Mr. TIPTON. Not in the detail it has been discussed here.

Senator LA FOLLETTE. I did not ask you about the detail, but was it discussed sufficiently to the point where you knew exactly how this was going to be interpreted from the standpoint of the negotiators of the treaty for the United States?

Mr. TIPTON. I cannot speak—it was discussed; yes, sir.

Senator LA FOLLETTE. Was there any difference of opinion among the American negotiators as to how it would be interpreted and how it would be invoked and how it would be operated if it was invoked?

Mr. TIPTON. I hesitate to say that there was a consensus of the negotiators that it would be invoked when curtailment in the upper basin was caused in order that the upper basin might make its delivery at Lees Ferry. That was discussed as one criterion. I would hesitate to say, Senator, that there was a consensus of the American negotiators on that basis, and I would not say there was not consensus. That condition would be a most unfavorable interpretation to the United States, and, in my opinion—my personal opinion—that would be a measure which could not be controverted.

Senator LA FOLLETTE. I understand that that would be one criterion, one way to measure it; but I must say that it does strike me as rather strange that this provision got into the treaty without a full understanding on the part of the United States negotiators as to exactly what it meant, how it would operate, and when it would be invoked; and, secondly, that that understanding on the part of the United States negotiators was not conveyed to, fully understood by, and threshed out with those negotiating the treaty on the part of Mexico.

Part 4, pages 1228-1229:

Senator WILEY. As I listened to your interpretation the other day, I got the impression, that you have partially confirmed now, that "extraordinary drought" meant something different from what the average man would think it meant. But I call your attention to article X. It says:

"In the event of extraordinary drought or serious accident to the irrigation system in the United States"—that is the way it is used—"thereby making it difficult for the United States to deliver the guaranteed quantity of 1,500,000 acre-feet 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."

Then, there must be not only, first, the extraordinary drought or serious accident, but there must also be something to make it difficult for the United States to deliver?

Mr. TIPTON. That is correct.

Senator WILEY. With those two factors, we then begin to reduce the amount to Mexico?

Mr. TIPTON. That is correct, sir. In other words, the interpretation of the word "difficult" is in the hands of the United States Commissioner. He can determine that it is difficult if the upstream reservoirs are threatened with depletion by reduction in run-off in the upper basin. It is within his discretion to make the determination of what constitutes extraordinary drought and as to what constitutes difficulty in making deliveries.

Senator WILEY. Yes; but it is not enough to have simply an extraordinary drought; there must be also difficulty for our Government to deliver the quantity of 1,500 before we can start to reduce?

Mr. TIPTON. That is correct.

Senator WILEY. In other words, your theory is that these reservoirs, even if there is an extraordinary drought up north, are full, and that they are full for the purpose of taking care of the first allotment to Mexico?

Mr. TIPTON. That is right, to enable the United States to increase her uses as against Mexico's present uses. The capacity required for such purpose however will be minor.

Senator HAWKES. Mr. Chairman, may I ask a question just for my information?

The CHAIRMAN. Surely.

Senator HAWKES. Is there anything in the treaty that says what you have just said, and that is, that our Commissioner can decide whether it is difficult? I have understood that there is not. I have understood that the Commissioners have to agree on it.

Mr. TIPTON. No; I do not think, an extraordinary drought, sir.

Senator HAWKES. Can you refer to the thing that says that our Commissioner can decide it alone?

Mr. TIPTON. I think the lack of saying anything would indicate that it is at the discretion of our Commissioner. As a matter of fact it is assumed at the present time that the actual determination would be made by the United States Bureau of Reclamation.

So much for the proceedings in this country. Now let us listen to the report on the extraordinary drought clause given by the Mexican negotiators to their Senate.

The Mexican interpretation.—Ing. Orive Alba explained the difference between the drought clauses on the Rio Grande and Colorado as follows (El Universal, August 1, 1945; S. Doc. No. 98, p. 10):

The difference is the following: In the case of the Rio Grande, Mexico does not agree to deliver the guaranteed volume in all and each one of the years—as, on the other hand, happens in the case of the Colorado River—but Mexico has the choice, according to the treaty, of giving the volume guaranteed in lesser or greater annual volumes, if the annual guaranteed volume is completed in cycles of 5 years. This, which is beneficial for Mexico, because it gives Mexico great elasticity in covering its obligations and which does not exist for the United States, in the case of the Colorado River, is compensated by the fact of having to pay the deficiencies in the following cycle of 5 years. On the other hand, in the case of the Colorado River, in which the United States, as we will see, is obligated to furnish us with exactly the volume guaranteed and even with the monthly distribution which our irrigation demand requires, there would be no object in having the deficiencies caused by extraordinary droughts compensated by paying us the water in the following years, since we would not have any place to store the excess volume of water from the abundant years to compensate for the dry ones, while, on the other hand, in the case of the Rio Grande the international storage dams are there.

Answering objections to the treaty, Ing. Orive Alba had this to say:

Page 17:

4. That in a year of drought the treaty permits the volume guaranteed to Mexico to be reduced and that the treaty only promises to reduce American volumes in an equal proportion, which would be very difficult to carry out in practice. A reading of the final paragraph of transitory article 10 shows that the objection is completely unjust since the case is entirely the contrary. *The amount guaranteed to Mexico can only be reduced in cases of extreme drought and only if that extraordinary drought should bring about the reduction of all consumptions in the United States.*

Lic. Ernesto Enriquez, the expert on international law, was reported as saying (Excelsior, August 8, 1945):

Only in cases of generalized drought would the clause enter into effect in the case of the Colorado River. With respect to the Rio Grande, we do not commit ourselves to let pass water in determined periods. For this reason, the two drought clauses are distinct, and if either of them results favorably, it is ours. [Emphasis supplied.]

The unsettled question.—The question, in short, remains open: Can we invoke the drought clause if the reservoirs on the Gila River system are dry but those on the Colorado are full, and vice versa? Can we invoke the clause if the upper basin finds difficulty in delivering the compact guaranteed quantity of 75,000,000 acre-feet, while the lower basin reservoirs are full? If the run-off is 50 percent but the consumptive uses in this country are maintained by drafts on storage which American irrigation has paid for, can deliveries to Mexico be reduced? The Mexican negotiators seemed to have little doubt on this. Lic. Enriquez stated (El Nacional, August 8, 1945):

Moreover, in these cases of drought there will be offered to us daily waters of the Colorado River by virtue of which Mexico has no need for storage works. The great dams, such as Boulder and Davis, will serve to regulate the delivery of the waters in the periods of low flow of the river.

3. FACTORS UPON WHICH THE TREATY IS SILENT

There are two other blank spots in the treaty, upon which the legislative history throws very little light:

(a) *The existence of a surplus.*—The standard by which existence of a surplus is to be determined, entitling Mexico to receive 1,700,000 acre-feet instead of 1,500,000, was left completely open by the treaty. If the reservoirs are full but the run-off is below normal, what duty rests upon the American Commissioner? It seems reasonably clear that this is a matter which the treaty leaves to American determination, and the direction to the American Commissioner in this respect ought to be spelled out by Congress before it authorizes any comprehensive plan of development of the Colorado River Basin.

(b) *Discharge of return flow into Salton Sea.*—The treaty is completely blank as to the quantity of return flow which the Mexican water users may dump into the closed basin of the Salton Sea, thereby drowning out lands of the Imperial and Coachella Valleys. This was frankly admitted by Mr. Tipton to have been overlooked. The American negotiators apparently regarded the matter as of little importance because only 45,000 or 50,000 acre-feet annually have been flowing from Mexican lands into the Salton Sea. But this is because diversions through the Alamo Canal have not exceeded 1,200,000 acre-feet annually and, more important, because under American management losses were held to very low levels. The treaty specifically allows Mexico to divert without limit not only 1,500,000 acre-feet per year, but "any other quantities arriving at the Mexican points of diversion" (art. 10), and provides in article 17 that—

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 damages caused by such use.

Are New River and Alamo River, through which Mexican return flow drains into the Salton Sea Basin, "international rivers"?

As to the quantity involved, it will be remembered that the Senate Committee on Foreign Relations accepted the State Department's view (report, p. 4) that return flow from some 3,000,000 acre-feet applied in Arizona would yield over 900,000 acre-feet per year. If a like ratio should apply to the 2,000,000 acre-feet which Mexico expects to divert

and pump, the return flow into the Salton Sea could very quickly become catastrophic.

The Mexican proceedings, quite understandably, did not agitate this question in any manner.

IV. CONCLUSION

From all the foregoing, perhaps the following conclusions can be drawn:

1. THE WEIGHT OF THE TREATY'S BURDEN

The failure of the treaty to evidence a meeting of the minds either upon factual assumptions or upon the language of the document, coupled with its silence upon factors of vital importance, make it impossible to assign any definite weight to the burden it imposes upon the waters of the Colorado River system either as to priority, quantity, quality, or the geographical distribution of the burden.

2. RELATION TO THE "COMPREHENSIVE PLAN" ON THE COLORADO

The comprehensive development of the Colorado River requires a more exact definition of the Mexican burden and a clearer blueprint of the administration of the treaty as a domestic statute. Until such definitions are effected, and until the geographical distribution of the burden is determined by interstate agreement or litigation, the only safe assumptions are the most adverse assumptions.

The effect of the treaty on unbalancing the water budget is illustrated in sharp focus by the analysis of the main-stream water budget of the lower basin, prepared by Mr. Raymond Matthew:

Water budget, Lower Colorado River Basin, main stream only

[Quantities in million acre-feet, to nearest hundred thousand]

Total available water supply from main stream.....	9.2
Less reservoir losses.....	.9
Net supply.....	8.3
Demand, on supply:	
Nevada, Utah, New Mexico.....	0.4
Arizona (claimed by State).....	2.8
California (by contracts).....	5.4
Mexico (by treaty).....	1.5
	10.1
Deficit.....	1.8
Total available supply.....	8.3
Deducting Nevada, Utah, New Mexico, and Mexico demands.....	1.9
Remainder for Arizona and California.....	6.4
If California contracts satisfied, Arizona would have.....	1.0
If Arizona gets 2.8, California would have.....	3.6
Or—	
Less than historic use before Boulder Dam was built.	
Less than III (a) limitation.	

No sound planning can be done for new projects until the water budget is balanced again in some way.

3. LEGISLATION RECOMMENDED

A number of questions left unsettled by the treaty can be resolved by domestic legislation. Indeed, the treaty's silence on some of these points was defended upon that very ground, and the Mexican resolution of ratification, *supra*, the Mexican Senate—

refrains from considering, because it is not competent to pass judgment upon them, the provisions which relate exclusively to the internal application of the treaty within the United States of America and by its own authorities—

etc. It seems imperative that these blanks be closed by domestic law before the circumstances, interpretations, and explanations responsible for the ratification of the treaty by the American Senate fade too far into the past. Among the objectives of such legislation appear the following:

(a) Construction of Sentinel Dam, to control the floods of the Gila, before the Mexican diversion dam is permitted to obstruct the main stream of the Colorado. The Gila, not the Colorado, furnished the flood which broke into Imperial Valley in 1905-06, and the building of the Mexican diversion dam recreates the danger of a similar disaster.

(b) Definition of the spheres of jurisdiction of the Secretary of the Interior and the Secretary of State, now covered only by a transitory interdepartmental memorandum. The majority report, in this respect, assumes that works used only partly for treaty purposes will be under the—

control of those Federal agencies which now or hereafter may be vested by domestic law with such jurisdiction and control.

(c) *Protective works and control of waste water.*—The Secretary of the Interior must be authorized to do what reservation (k) contemplates, namely, assure the Salton Sea Basin from flooding by Mexican waste water. The one sure control is through the seasonal timing of the releases from the storage dams under the Secretary's control.

(d) Standard for the determination of "surplus" or "excess" entitling Mexico to 1,700,000 acre-feet under article 10 (b) of the treaty. Everyone, at least on this side of the border, agrees that this is a matter for American determination, but by whom and how?

It should be borne in mind, and the point cannot be overemphasized, that the guaranty of 1,500,000 acre-feet means a real obligation of 1,700,000 acre-feet, plus reservoir losses, before giving any consideration at all to the "surplus" clause. This is for the reason that the United States gets no credit for water delivered in excess of the schedule fixed by Mexico, but is charged with all deficiencies. For instance if a heavy wind retards arrival of the ordered water at the border on Monday by 500 second-feet (which is quite normal), and this water comes down on Tuesday, over and above the amount scheduled, the United States gets no credit for Tuesday's excess but is charged with Monday's shortage. As a minimum, 200,000 acre-feet annually will be thus thrown out of any accounting. Mexico, in normal years, will get not less than 1,700,000 acre-feet and be charged with 1,500,000; in surplus years, she will get not less than 1,900,000 acre-feet, and be charged with 1,700,000.

(e) *Use of the All-American Canal for supplying such surplus.*—The treaty (art. 15-D) assumes that when there is a surplus, additional

waters will be supplied through the All-American Canal only "if such use of the canal and facilities will not be detrimental to the United States." A domestic statute ought to vest authority in the Secretary of the Interior to make that determination, and stipulate what sort of interference with the rights of the American users of the canal, for whom it was built and who in any event will continue to be dependent on it for their existence, constitutes a "detriment."

(f) *Determination of extraordinary drought.*—The majority report on the treaty assumed that—

The existence of a drought and the consequent curtailment of uses are purely factual matters, easily determinable from the data accumulated by the interior agencies of the United States.

If this is so, Congress should designate the Interior Department as the "interior agency," and give it standards to follow in making its determinations. The conflicting testimony in Mexico and the United States makes it clear that no one knows now what standards are to be applied by these "interior agencies."

(g) *Quality of water.*—The American negotiators have made it so clear that the Secretary of the Interior is not required by the treaty to release water from storage in the dams he controls in order to improve the quality of the flow reaching Mexico, that Congress should so provide, while this testimony is fresh in mind, and before some future Secretary, in the absence of congressional direction, adopts the equally clear and diametrically opposite interpretation reported by the Mexican negotiators.

(h) *Provision for the acquisition of property.*—The treaty leaves to each nation, under its own laws, the problem of acquisition of the property to be taken for treaty purposes. The majority report said:

Property in the United States, of course, must be acquired either by voluntary agreement with the owners or through condemnation proceedings. In such proceedings, the courts will pass upon the necessity of the acquisition and the amount of the compensation which should justly be paid the owner (p. 9).

Reservation (b) to the treaty subjects the "powers and functions" of officers of the United States to "statutory and constitutional controls and processes." The Mexican resolution of ratification disclaims any interest in reservation (b). These statutory controls should be spelled out.

One of the blank spots in the treaty is the failure to say anything at all about the investment of several million dollars made in levees and canals in Mexico by American farmers who will continue to bear a bonded debt, a mortgage on American land, incurred to finance these works. The United States, under the treaty, is to acquire the headworks of this canal system, which are in the United States, and it should properly compensate the American farmers for the whole canal and levee system thus severed. This does not involve any relations or negotiations between Mexico and the United States.

There are other provisions which should properly appear in legislation to implement the treaty.

No domestic legislation can cure the ambiguities in the Colorado River Treaty with Mexico, considered as a contract; but domestic legislation consistent with the official American interpretation of the treaty can and should clarify the application of the document as a domestic statute and fix the direction and course for the American

administrators of American works affected by the treaty (primarily the Secretary of the Interior). In short, domestic legislation can and should supply the omissions and resolve the ambiguities of the treaty respecting purely domestic matters. Until such legislation is enacted, the treaty fails of its proclaimed purpose of clearing the way for the comprehensive development of the Colorado River, because no one can estimate either the true weight of this first mortgage on the water supply, guaranteed "from any and all sources," nor the distribution of that burden among the American projects dependent upon water from these same sources.

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