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IN THE

Supreme Court of the United States

October Term, 1952

No. 40 Original

STATE OF ARIZONA

Complainant

V

STATE OF CALIFORNIA, PALO VERDE IRRIGATION DISTRICT, IMPERIAL IRRIGATION DISTRICT, COACHELLA VALLEY COUNTY WATER DISTRICT, METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, CITY OF LOS ANGELES, CALIFORNIA, CITY OF SAN DIEGO, CALIFORNIA AND COUNTY OF SAN DIEGO, CALIFORNIA.

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REPLY TO DEFENDANTS' ANSWER.

of Arizona

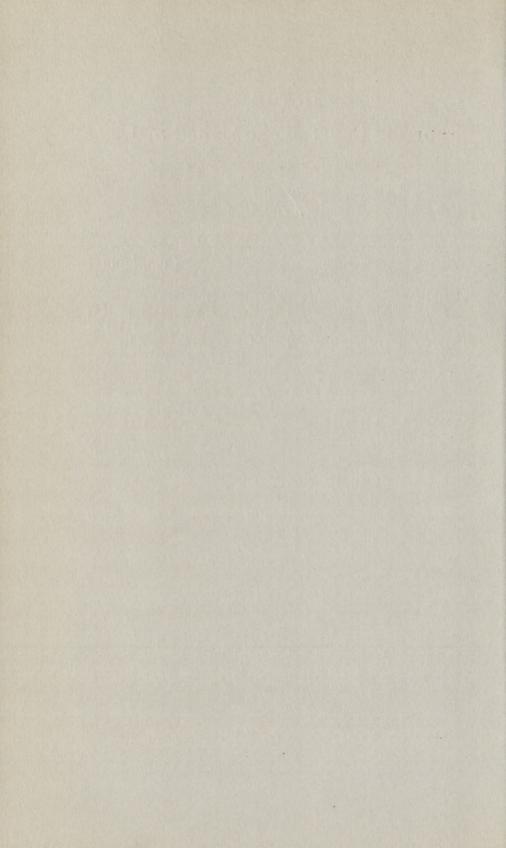


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IN THE

Supreme Court of the United States

October Term, 1952

No. 10 Original STATE OF ARIZONA

Complainant

V

STATE OF CALIFORNIA, PALO VERDE IRRI-GATION DISTRICT, IMPERIAL IRRIGA-TION DISTRICT, COACHELLA VALLEY COUNTY WATER DISTRICT, METROPOLI-TAN WATER DISTRICT OF SOUTHERN CALIFORNIA, CITY OF LOS ANGELES, CALIFORNIA, CITY OF SAN DIEGO, CALI-FORNIA AND COUNTY OF SAN DIEGO, CALIFORNIA.

Defendants

REPLY TO DEFENDANTS' ANSWER.

Complainant, by its duly authorized attorneys, replies to the Answer of Defendants herein as follows:

FOR A GENERAL REPLY TO THE ANSWER

I.

HISTORICAL BACKGROUND OF COLORADO RIVER COMPACT AND RELATED DOCUMENTS CONSTITUTING THE LAW OF THE RIVER.

A. INTRODUCTION

In their Answer to the Bill of Complaint, Defendants have set forth in some detail under the caption: "Historical and Geographical Background" some of the historical data constituting the law of the Colorado River. Many of those allegations are in no way pertinent to the issues involved in the instant case. Complainant will deal with a number of those allegations in more detail later on in this Reply, but for the information of the Court it submits that the pertinent historical background of the Colorado River Compact, (hereinafter called Compact) and the related documents constituting the law of the River is as follows:

B. GEOGRAPHICAL SITUATION

In Paragraph IV of Complainant's Bill of Complaint there is set forth in detail a description of the River, its length, its location and the area of each State within the natural basin of the River. The percentages of contribution of water to the Colorado River by the various States involved as measured at State lines are as follows:

Colorado	59.8%
Utah	14.6%
Arizona	12.1%
Wyoming	9.6%
New Mexico	2.9%
Nevada	0.7%
Mexico	0.2%
California	0.08%

California contributes practically no measurable quantity of water to the Colorado River System. Virtually all of the uses of Colorado River System water in California are outside of the natural drainage basin of the River. The only California uses that are within such natural drainage basin are in the Palo Verde Irrigation District (hereinafter called Palo Verde) and the Yuma Project in California. All uses of water within the area served by the Metropolitan Aqueduct, within the Imperial Irrigation District (hereinafter

called Imperial) and within the Coachella Valley County Water District, (hereinafter called Coachella) are served by transmountain diversions which take the water outside the natural basin of the Colorado River.

Filed with the Answer as Plate 1 in the Appendices thereto is a map which purports to show the boundary of the drainage basin of the Colorado River System. That map is in error as it purports to include within such drainage basin the Imperial Valley and Coachella Valley and surrounding areas in California, all of which drain into the Salton Sea. With this Reply Complainant presents as Appendix No. 1 a map which truly and accurately portrays the boundaries of the drainage basin of the Colorado River System.

The Gila River, a tributary of the Colorado River, flows exclusively within Arizona, with the exception of small tributaries in New Mexico, and reaches the Colorado River at a point near Yuma, Arizona. The geographical situation is such that the Gila River and its tributaries can be put to beneficial consumptive use, within the United States, only in Arizona and in a very limited area in New Mexico. The flow of the Gila River is extremely eccentric and variable. During most of the time the Gila, in many of its reaches, is dry. Water will rise to the surface, then disappear into the sands of the Gila and later come to the surface somewhere down the River. In some exceptional years the River will reach a flood stage, and it is only at those times that there is any appreciable flow from the Gila into the Colorado. In many years there is physically present in the Gila and its tributaries only enough water to permit the beneficial consumptive use of substantially less than 1,000,000 acre-feet.

C. COLORADO RIVER COMPACT

For some time prior to 1922 water was diverted from the mean stream of the Colorado River for irrigation of some land in Imperial, Palo Verde, and the Yuma Project in California. The water supply for these projects was unreliable in times of low flow. Imperial was in part inundated by a break in the Colorado River levee system. These conditions were of great concern to California and caused that State to press for river regulation. In order that the River might be developed with due regard for the rights of all of the Basin States many conferences were held. These resulted in the creation of a commission composed of commissioners named by the governors of the various Basin States and a representative appointed by the President of the United States. Beginning in January, 1922, meetings were held in various parts of the United States. A final meeting took place in Santa Fe, New Mexico beginning on November 9, 1922 and ending on November 24, 1922, when the Compact was executed.

Early in the deliberations of the Commission it became apparent that any attempt to allocate the waters of the Colorado River System to individual States presented an insurmountable problem. By way of compromise it was agreed that the objective of the Commission should be limited to a division of the water between two basins.

In furtherance of this compromise there was drafted and submitted to the Commission on or about November 18, 1922, a proposed Compact which defined the Colorado River System so as to include the Gila River. This proposed definition was strenuously resisted by the Arizona Commissioner who refused to sign the proposed compact if it contained such definition. order to satisfy the Arizona Commissioner and to secure unanimous approval of the Compact there was then prepared and inserted what is now Article III (b) thereof which apportioned an additional beneficial consumptive use of 1,000,000 acre-feet of water per year to the Lower Basin. This was solely and entirely for the purpose of recognizing the use by Arizona of approximately 1,000,000 acre-feet of water from the Gila River per year. That this was the understanding of the Arizona Commissioner is evidenced by the testimony introduced in the hearings of H.R. 5434 (80th Congress) at pages 367-377 of Vol. 2 (the bill for the reauthorization of the Gila Project). Pertinent excerpts from such testimony are included in Appendix No. 2 to this Reply. In Appendix No. 3 to this Reply is a reproduction of an autographed photograph of Herbert Hoover complimenting Commissioner W. S. Norviel of Arizona on his fight for this additional 1,-000,000 acre-feet of water. Excerpts from testimony of R. I. Meeker, who was engineering advisor for the State of Colorado during Compact negotiations, appear at pages 473-481 of the hearings on S. 1175 (80th Congress) and are found in Appendix No. 4 to this Reply.

Following the November 24, 1922 execution of the Compact, negotiations were undertaken by representatives of the States of Arizona, California, and Nevada to effect a Lower Basin compact.

When the Compact was being negotiated in the year 1922, there were in cultivation in Arizona approximately 415,451 acres of land. Practically all of this land was being irrigated by surface waters of the Colorado River and its tributaries in Arizona. This acreage increased until in the year 1929, the time of the Presidential Proclamation making the Compact effective, there were (81,85) acres in cultivation. In the year 1945 this cultivated acreage had increased to 688,-648 acres. This increase was largely caused by the bringing into cultivation of land included in the Roosevelt Irrigation District, the Maricopa County Municipal Water Conservation District No. 1 (irrigated by water from the Agua Fria River, a tributary of the Gila), the Roosevelt Water Conservation District and the San Carlos Irrigation and Drainage District. These four districts have a total acreage of approximately 210,000 acres. Since that date the only considerable developments predicated upon the use of Colorado River System waters are the Wellton-Mohawk Irrigation District in Yuma County now under construction, and additional developments along the main stream of the Colorado River, particularly on the Fort Mohave and Colorado River Indian Reservations. Other increased agricultural development in Arizona is being served by deep wells, the operation of which does not deplete the main stream of the Colorado River or any of its tributaries. The area in cultivation in Arizona

in 1945 and the increased uses by reason of the Wellton-Mohawk Project and the Fort Mohave and Colorado River Indian Reservations are shown in Appendix No. 5 to this Reply.

D. BOULDER CANYON PROJECT ACT

For a long period prior to 1922 California greatly desired to secure river regulation, flood control, and hydroelectric power generation, and pressed Congress for legislation to attain this result. Beginning in the year 1922 a number of bills known as the "Swing-Johnson Bills" were introduced in Congress to authorize the construction of a dam at or near the site of the existing Hoover Dam. These efforts culminated in identical bills introduced in the House of Representatives on December 5, 1927, and in the Senate on December 6, 1927. The bill passed the House and was favorably recommended with amendments by the Senate Committee on Irrigation and Reclamation. It came before the Senate for consideration in December, 1928. Arizona Senators Hayden and Ashurst vigorously opposed the bill in the form in which it was presented. One of the reasons for such opposition was that there was no agreement among the Lower Basin States as to the division of water apportioned by the Compact to that Basin. Many amendments were suggested and many attempts were made to compromise the existing differences of opinion. The Upper Basin States opposed the bill in the form in which it was presented because they believed that the building of the proposed dam and canal would furnish California the opportunity to establish excessive uses of Colorado River System water to the detriment of future development in the other States of the Basin. The legislative history that preceded the final enactment of the bill was given by Senator Hayden in hearings on S.75 and S.J. Res. 4 (81st Congress) before the Senate Committee on Interior and Insular Affairs. Such testimony appears at pages 733-757 of the joint hearing on these matters and excerpts therefrom are included within Appendix No. 6 to this Reply. As stated by Senator Hayden, the bill was amended to include several important provisions for the protection of the States of the Basin other than California. Among such provisions was that requiring the enactment of the California Limitation Act. The full text of this section appears at pages 12-15 of Appendix 2 to the Answer of the Defendants. The requirement for the California Limitation Act is specific, plain and unambiguous. California had to agree to limit its annual use of Colorado River System water to 4,400,-000 acre-feet of the water apportioned by Article III (a) of the Compact and to not more than one-half of any excess or surplus water unapportioned by the Compact, and further that such uses must always be subject to the terms of the Compact. Also by Section 4 (a), Congress interpreted and construed the Compact by authorizing a Tri-State Compact whereby out of the 7,500,000 acre-feet apportioned by Article III (a) Nevada shall be entitled to 300,000 acre-feet and Arizona to 2,800,000 acre-feet, and whereby Arizona shall have the exclusive beneficial consumptive use of the water of the Gila River and its tributaries within that State. The essential provision of this authorized agreement appear on pages 13-14 of Appendix No. 2 to the Answer of the Defendants.

The Boulder Canyon Project Act, (hereinafter called Project Act) would never have been adopted except for the inclusion therein of the aforementioned provisions for the protection of the Basin States other than California. The California Legislature enacted the law containing the exact provisions required by said Section 4 (a) and limiting the California use of water to the extent stated therein. (Paragraph X of Complainant's Bill of Complaint sets forth the full text of this Act.)

E. ACTION BY ARIZONA ON THE PROPOSED TRI-STATE COMPACT

The proposed Tri-State Compact authorized by Section 4 (a) of the Project Act was before the Arizona Legislature in 1939 and such Legislature adopted and ratified that proposed Tri-State Compact and approved the Colorado River Compact upon condition that such ratification and approval would be effective if the Tri-

State Compact was ratified by California and Nevada within one year from the effective date of the Arizona Act or such later time as might be granted by the Arizona Governor (Arizona Code Annotated 1939, Section 75-1601 - 1603.) The full text of this statute appears in Appendix No. 7 to this Reply. California and Nevada did not ratify the proposed Tri-State Compact.

F. SUBSEQUENT ACTIONS

Other negotiations have been carried on in an attempt to settle the controversy. None of these negotiations has been successful. Also three unsuccessful attempts have been made by Arizona to secure a judicial solution of the controversy.

The United States Bureau of Reclamation during the years 1942-1948 expanded its Colorado River investigations to include possible additional uses of main stream water in Arizona. As a result of this investigation a report on the Central Arizona Project was made to and approved by the Secretary of the Interior. This report is contained in House Document 136, 81st Congress.

Under date of February 9, 1944, the Secretary of the Interior acting on behalf of the United States entered into a contract with Arizona whereby, subject to certain rights of New Mexico and Utah, Arizona was given the right to receive and put to beneficial consumptive use 2,800,000 acre-feet of main stream water to be delivered from Lake Mead storage, or to be diverted from the main stream and its tributaries above Lake Mead. This contract is set forth in full as Exhibit C to the Complainant's Bill of Complaint. As required by Paragraph 14 of that contract it and the Colorado River Compact were both unconditionally ratified by the Arizona Legislature on February 24, 1944 (see Appendix No. 8 to this Reply).

On October 11, 1948, the States of Arizona, Colorado, New Mexico, Utah, and Wyoming, being the States of the Upper Basin as defined by Article II (f) of the Colorado River Compact, executed a compact which, among other things, apportioned among those states the beneficial consumptive use of water apportioned to the Upper Basin by Article III (a) of the Colorado River Compact. This Upper Basin Compact specifically provides that it shall be subject to the provisions of the Colorado River Compact (see Upper Basin Compact, preamble, Art. I (b), Art. II (b), Art. III (a), and Art. IV (a)). Arizona ratified the Upper Basin Compact in 1949 (Chap. 4, Arizona Session Laws 1949). All the other states having ratified, the required Congressional consent was given by the Act of April 6, 1949 (Chap. 48, Public Law 37, 81st Congress, first session). In the Upper Basin Compact Arizona specifically reserved its rights "as a State of the Lower Division and as a State of the Lower Basin" (Art. XVIII (a)).

(Hereinafter, the paragraph numbers will in each instance be identical with the number of the Paragraph of the Answer to which Reply is made. Instances will occur in which a numbered Paragraph of the Answer contains no affirmative allegation and hence requires no Reply. This will result in the skipping of the number of such Paragraphs.)

REPLY TO FIRST AFFIRMATIVE DEFENSE

1.

- (a) As to Paragraph 1, Complainant says that the allegations thereof descriptive of California projects, water uses, water needs, water rights and water development are immaterial and irrelevant to the issues of this case for the reason that the rights of California to the use of Colorado River System water are defined and limited by the Compact, the Project Act and the California Limitation Act.
- (b) Further replying to said paragraph, Complainant admits that the defendants in this action are the State of California and public agencies of that State authorized to serve water to inhabitants and lands of the State. Denies that the rights claimed by the De-

fendants are in their entirety for projects already constructed and now operating. Additions, extensions, and enlargements of such projects are planned by the Defendants with full knowledge of the limitations imposed upon California uses of Colorado River System water by the Compact, the Project Act, and the California Limitation Act. The water supply to which California is limited by the terms of its Limitation Act is for all the constructed California projects to which reference is made in the Answer. The waters of the Colorado River System furnish only a small portion of the municipal water supply of the Los Angeles and San Diego areas. The water supply available to Southern California from other than Colorado River System sources and from the Colorado River System within the limitations of the California Limitation Act is ample to sustain a population and an agricultural and industrial production substantially greater than now exists.

(c) Arizona has numerous projects where the Colorado River System water to which it now seeks to quiet its title may be beneficially and advantageously used in Arizona. Among these contemplated projects are the Central Arizona Project, the undeveloped portions of the Gila Project as originally described in the finding of feasibility by the Secretary of the Interior dated June 21, 1937, and additional acreage along the Colorado River in Arizona including lands within the Colorado River Indian Reservation and the Fort Mohave Indian Reservation. Arizona does not seek to take water from constructed and operating California projects. Those projects are amply supplied by the quantity of Colorado River System water available to California under the Compact, the Project Act, and the California Limitation Act.

2.

- (a) As to Paragraph 2, Complainant refers to and incorporates herein by reference Paragraph 1 (a) of its Reply to First Affirmative Defense.
- (b) The facts stated in Paragraph 2 (a), as amplified by Plates 6A and 6B and Exhibit A, are admitted

except as herein specifically denied. The minimum water requirement of the Metropolitan Water District of Southern California is substantially less than 1,212,-000 acre-feet per year. The greatest diversion of water made to date from the Colorado River System by the Metropolitan Water District was in 1951 and amounted to 210,310 acre-feet. The average diversion of Colorado-1939 River water by that District for the period 4930 1952 inclusive was 111,186 acre-feet per year. The contracts between the District and the United States contain the provisions set out in Paragraph XI (c) of the Complaint and do not create or constitute à right over and above that permitted by the Compact, Project Act, and the California Limitation Act. As heretofore alleged, the Metropolitan Water District and the area served thereby have other sources of water which when added to the Colorado River System water available to that District are ample to sustain not only the existing population, agriculture and industry, but also very substantial additions thereto. With particular reference to the City of Los Angeles the deliveries of Colorado River System water by the Colorado River Aqueduct for use in that city for the water years 1941 to 1952 inclusive have averaged 7,240 acre-feet per annum and the greatest delivery thereof occurred during the water year 1951-1952 and amounted to only 15,431 acre-feet. Complainant has no knowledge as to the amount of money that has been expended on water facilities to serve the area within the Metropolitan Water District and therefore denies the allegations relative thereto.

- The facts stated in Paragraph 2 (b), as amplified by Plate 3 and Exhibit B, are admitted except as herein specifically denied. The irrigated acreage within Palo Verde in 1952 amounted to 63,800 acres. Complainant has no knowledge as to whether Palo Verde is the oldest irrigated area in the Colorado River Basin or as to the amount of money which has been expended on water facilities to serve that area, and therefore denies the allegations relative thereto.
- (d) The facts stated in Paragraph 2 (c), as amplified by Plates 4 and 5 and Exhibit C, are admitted ex-

cept as herein specifically denied. The irrigated acreage on the Yuma Project in California in 1952 was 11,839 acres. The irrigated acreage within Imperial in 1950 was 404,791 acres. The estimated irrigable acreage within Coachella is about 78,000 acres. The minimmum water requirements of Palo Verde, the Yuma Project in California, Imperial and Coachella are substantially less than 4,150,000 acre-feet of water per annum. All of these districts, except Palo Verde, are served by the All-American Canal. The greatest diversion of water from the Colorado River System by the All-American Canal occurred in 1952 when 3,148,700 acrefeet were diverted for delivery to Imperial, and 495,800 acre-feet for delivery to Coachella. The average diversion of Colorado River System water by the All-American Canal for the period 1936-1952 inclusive was 2,705,-908 acre-feet per year for Imperial, and for the period 1946-1952, 275,946 acre-feet per year for Coachella. All of the water diverted from the Colorado River by the All-American Canal is not put to beneficial consumptive use. There is wasted in the Salton Sea and not put to beneficial consumptive use quantities of water varying from 500,000 to 1,500,000 acre-feet per year. In determining the beneficial consumptive use of water diverted by the All-American Canal there must be deducted from the gross diversions the quantity of water wasted into the Salton Sea and not put to beneficial consumptive use. The appropriation rights, if any, of Palo Verde, Yuma Project in California, Imperial and Coachella have no bearing on the rights of those districts, or any of them, to receive Colorado River System water. Such rights to Colorado River System water exist by virtue of contracts made by the Secretary of the Interior pursuant to the Project Act. Such contracts of each of the districts contain the provisions set out in Paragraph XI (c) of the Complaint and do not in their total constitute a firm right to 4.150,000 acre-feet of water per year. The Complainant has no knowledge of the amount of money which has been expended on water facilities for the area served by the All-American Canal or of the amount of money which Imperial and Coachella will have to pay because of the construction of such facilities and therefore denies the allegations relative thereto.

3.

(a) Admits Paragraph 3 (a) except as to the matters herein specifically denied. Denies that prior to 1920 appropriators in California and to a limited extent in Arizona had appropriated and put to use all of the natural flow of the main stream of the Colorado River which existed in the late summer irrigating season. Denies that any junior appropriators were interfering with uses under any senior appropriations in California or Arizona. Denies that satisfaction of any junior appropriations were dependent upon the construction of any storage works. Denies that the construction of the All-American Canal was of concern to all of the States of the Colorado River Basin. Alleges that the construction of the All-American Canal was of concern primarily to Imperial. Denies that the construction of the mentioned storage works was desired by or essential to all seven States of the Colorado River Basin. Alleges that such storage works were desired and actively promoted by Southern California and not by the basin states except California.

(b) Admits the allegations of Paragraph 3 (b).

4.

- (a) As to Paragraph 4, Complainant refers to and incorporates herein Paragraph 1 (a) of its Reply to the First Affirmative Defense.
- (b) The Complainant denies each and every allegation of Paragraph 4 (a) except as herein admitted. Admits that on November 24, 1922, irrigation distribution systems were in operation providing service to Palo Verde, Imperial, and the Yuma Project in California. Denies that said irrigation systems were complete. Denies that the acreage served was approximately 610,000 acres and alleges that as of said date the irrigated acreage so served did not exceed 461,000 acres and the beneficial consumptive use thereon of Colorado River System water did not exceed 2,350,000 acre-feet per year. On said date the Arizona irrigated acreage

served by water diverted from the main stream of the Colorado River amounted to 73,000 acres with appropriative rights for sufficient water to irrigate said acreage. On said date a substantially complete irrigation distribution system had been constructed in Arizona on the Gila River, a tributary of the Colorado River, to serve approximately 393,000 acres of land on which there was a beneficial consumptive use of the waters of the Gila River and its tributaries of 990,000 acre-feet per annum

343000

Denies that on November 24, 1922, there were vested appropriative rights, valid under the laws of California, to the beneficial consumptive use of not less than 6,000,000 acre-feet of Colorado River System water per year. The appropriative rights in California as of that date are immaterial to the issues here. Such rights, if any, were and are merged into the contracts of the California districts with the Secretary of the Interior. The alleged California rights are limited by, and may not exceed, those existing by virtue of the contracts between the various California districts and the Secretary of the Interior. By the terms of each of said contracts the quantity of water to be delivered to the districts is subject to the availability of such water under the Compact and the Project Act. Allegations made by attorneys for Arizona in the case of Arizona v. California, 283 U.S. 423, are immaterial to the issues here. At the time of the presentation of said case to this Court Arizona had not ratified the Compact and had no contract with the Secretary of the Interior. Arizona has now ratified that Compact and has such a contract with the Secretary of the Interior. Its appropriative rights, whatever they may have been, are now subject to the availability of water under the Compact, the Project Act, and the Arizona contract with the Secretary of the Interior. As of November 24, 1922, the average annual beneficial consumptive use of water in Arizona from the Gila River and its tributaries amounted to 990,000 acre-feet of water per annum.

5.

As to Paragraph 5, Complainant admits the execution of the Compact as there alleged. Denies that Ari-

zona ever rejected or refused to ratify said Compact. Alleges that Arizona did ratify said Compact on February 24, 1944. Denies that the effect of the Compact, whether as a six-state compact or a seven-state compact, as pleaded in Paragraph 5 of the Answer or in any other portion of the Answer, is in conformity with the reports of the negotiators of said Compact or with the legislative history of the Project Act. Alleges that the reports of the Compact negotiators and the legislative history of the Project Act sustain the positions taken by the Complainant in its Bill of Complaint and in this Reply.

6.

Admits each and every allegation of Paragraph 6.

7.

As to Paragraph 7, Complainant admits that Article II of the Compact contains the definitions as set out in Exhibit A to the Complainant's Bill of Complaint (page 34). The Gila River which is a part of the Colorado River System rises partially in New Mexico and partially in Arizona. It flows across Arizona and joins the main stream of the Colorado River near Yuma, Arizona. Article III (b) was written into the Compact to compensate Arizona for its use of the waters of the Gila River and its tributaries. Prior to the execution of the Compact substantially all of the waters of the Gila River had been appropriated and put to beneficial consumptive use in Arizona. While the California areas served by the defendant districts are within the Colorado River Basin and the Lower Basin as defined by the Compact, such areas, except for a portion of the area served by the Palo Verde district and that portion served by the Yuma Project in California, are without the natural drainage basin of the Colorado River System and waters diverted from the Colorado River System for use in such areas do not return to the river but waters not consumptively used in such areas flow into the Salton Sea or the Pacific Ocean. (The natural drainage basin of the Colorado River and its tributaries is shown by Appendix No. 1).

As to Paragraph 8, Complainant admits the allegations thereof except as specifically controverted herein. The apportionment made by Article III (a) of the Colorado River Compact does not include and was not intended to include, any of the waters of the Gila River or its tributaries. The 7,500,000 acre-feet of water per year apportioned to the Lower Basin by Article III (a) was and is within the water present in the main stream and measured at Lee Ferry, a point approximately 675 miles northerly and upstream from the confluence of the Gila River and the Colorado River. Denies that the term "beneficial consumptive use" ever had or now has the meaning alleged in said paragraph and further denies that such meaning was ever accepted or approved by the Compact negotiators or by the State legislatures which ratified the Compact, or by the Congress of the United States. Section 4 (a) of the Project Act defines "consumptive use" as "diversions less returns to the river." This does not and cannot mean that returns must be measured for each individual diversion. While diversions may be measured by the use of expensive recording devices which require the maintenance of a large and skilled staff, no method of the measurement of the extremely variable return flows has ever been devised. Return flows occur through drainage, seepage, and percolation. In a highly irrigated area, such as that existing in the basin of the Gila River and its tributaries, it is impossible to segregate the return flows from the various diversions. The only practical method of measuring beneficial consumptive use of water is by the net main stream depletion method. This was recognized by the negotiators of the Compact and by the negotiators of the Upper Colorado River Basin Compact. The definition of consumptive use as set forth in the Mexican Water Treaty was not intended to apply and does not apply to the apportionment made by the Compact. Arizona at all times has asserted, and now asserts, that it and New Mexico are entitled to the exclusive beneficial consumptive use of the waters of the Gila River and its tributaries measured in terms of main stream depletion. Such uses of the waters of the Gila River and its tributaries are chargeable to the apportionment made by Article III (b) of the Compact and are only chargeable to the apportionment made by Article III (a) of the Compact to the extent that such uses exceed 1,000,000 acre-feet of water per annum. As of June 25, 1929 beneficial consumptive use of water of the Gila River and its tributaries was approximately 960,000 acre-feet. Such use now is estimated to amount to 1,170,000 acre-feet per annum. Admits that the words "per annum" as used in the Compact mean "each year" and not an average of uses over a period of years. Alleges that the meaning to be applied to the term "per annum" is not material to the issues of this case. From a practical standpoint beneficial consumptive use is most satisfactorily measured upon an average basis. Until such time as there is full use of the apportionment made by the Compact in either the Lower Basin or the Upper Basin, no issue is presented as to whether or not uses shall be measured annually or on an average.

9.

Admits every allegation of Paragraph 9 except those specifically controverted herein. Alleges that Article III (b) relates solely to the waters of the Gila River and its tributaries. Alleges that no States other than Arizona and New Mexico have any right to the use of the waters of the Gila River and its tributaries. California's contention that it may assert claims to water apportioned by Article III (b) is contrary to the construction placed thereon by the Arizona Legislature which ratified the Compact and by the Congress of the United States which gave its consent to the Compact. The beneficial consumptive use of water apportioned by Article III (b) is for the sole and exclusive use of Arizona and New Mexico.

10.

Complainant admits the allegations of Paragraph 10 except as herein controverted. Denies that, in the event there is a deficiency to supply the rights of Mexico to Colorado River System water, the beneficial consump-

tive use of water apportioned by Article III (b) of the Compact must be curtailed either partially or wholly before the beneficial consumptive use apportioned by Article III (a) is curtailed. When and if any curtailment of Lower Basin use is required to satisfy the Mexican right, then such curtailment must be of the use apportioned by Article III (a). Denies that the Gila River and its tributaries are subject to any obligations imposed by the Mexican Water Treaty. Alleges that the intent of Congress is shown by the provisions of the second paragraph of Section 4 (a) of the Project Act which provides that:

"(3) 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 **."

11.

Admits the allegations of Paragraph 11 except as specifically denied herein. Denies that the quantity of 75,000,000 acre-feet specified in Article III (d) bears no quantitative relationship to the beneficial consumptive use of 7,500,000 acre-feet apportioned to either the Upper Basin or Lower Basin by Article III (a). Alleges that the 75,000,000 acre-feet specified in Article III (d) bears a direct quantitative relationship to the 7,500,000 acre-feet per year apportioned to the Lower Basin by Article III (a).

12.

Admits the allegations of Paragraph 12.

13.

Admits the allegations of Paragraph 13 except as denied herein. Denies the allegations of unnumbered subparagraph fourth of Paragraph 13. Alleges that the defendants, and none of them, have any firm rights

to the use of any waters of the Colorado River System which are surplus over that apportioned by Articles III (a), (b), and (c) of the Compact. No contract between the United States and any or all of the defendants can give the defendants or any of them any right to or claim upon such surplus water. No use of any of such surplus water by the defendants or any of them can give to the defendants or any of them any right to the continued use of such water.

14.

As to Paragraph 14, Complainant admits the provisions of Compact Article VII therein alleged. As to the other allegations of Paragraph 14, Complainant says that the facts are as stated in Paragraph XVIII of the Bill of Complaint. The rights of the Indians and Indian Tribes in or to the waters of the Colorado River System or the use thereof and the obligations of the United States to the Indians or Indian Tribes are not material or relevant to the determination of the issues presented in this case. In order to make certain that rights of Indians and Indian Tribes will not be adversely affected by this litigation, Complainant offers and firmly binds itself to stipulate with the other parties to this cause, including the intervenor the United States of America, that any decree to be entered herein may, if the Court approves, contain the following provisions so far as the rights of the Indians and Indian Tribes are concerned, to-wit:

"That the decree does not affirm, deny, validate, invalidate, or affect in any manner whatsoever any obligation or obligations of the United States of America to Indians and Indian Tribes and does not in any respect affect or deny the existence, validity or extent of such obligations; and that the decree is not intended to be and shall not be construed as establishing, validating, extending, inhibiting, or limiting existing Indian uses or the extent of rights or claims that may now exist or may hereafter be established or made by or on behalf of the Indians or Indian tribes in or to the waters of the Colorado

River System, or to the beneficial consumptive use thereof."

15.

Admits the allegations of Paragraph 15 except as denied herein. Denies that the term "unimpaired" as used in Article VIII of the Compact means unimpaired as to both quantity and quality. Alleges that said term means unimpaired as to quantity only. Denies that the defendants' rights existing on and prior to June 25, 1929 are as alleged in Paragraph 28 of the Answer and avers that such rights were and are as alleged in the Bill of Complaint and this Reply.

16.

Admits the allegations of Paragraph 16.

17.

As to Paragraph 17, admits that in the year 1923 the legislatures of California, Colorado, Nevada, New Mexico, Utah, and Wyoming ratified the proposed Compact. Denies that the Arizona Legislature rejected that Compact. Alleges that the Arizona Legislature ratified the Compact on February 24, 1944 (Appendix No. 8).

18.

As to Paragraph 18 alleges that the said governor had no authority or power to accept or reject the proposed Compact as that power and authority was vested solely in the Legislature of Arizona.

19.

As to Paragraph 19, Complainant says that as to the ratification of the Compact as a Six-State Compact prior to the enactment by California of its Limitation Act the facts are as stated herein and not otherwise. Colorado by its Act of February 26, 1925 waived the provisions of Article XI of the Compact, ratified said Compact and provided that the Compact should become effective:

" * * whenever at least six of the signatory states shall have consented thereto and the Congress of the United States shall have given its consent and approval, Provided, however, that this Act shall be of no force or effect until a similar Act or Resolution shall have been passed or adopted by the Legislatures of the States of California, Nevada, New Mexico, Utah, and Wyoming."

The Nevada Act of March 18, 1925, the New Mexico Act of March 17, 1925, the Utah Act of March 13, 1925, and the Wyoming Act of February 25, 1925 contained substantially identical language. The California Act of April 8, 1925 waived the provision of Article XI and ratified the Compact with the following proviso:

"* * provided, however, that said Colorado River Compact shall not be binding or obligatory upon the State of California by this or any former approval thereof, or in any event until the President of the United States shall certify and declare (a) that the Congress of the United States has duly authorized and directed the construction by the United States of a dam in the main stream of the Colorado River, at or below Boulder Canyon, adequate to create a storage reservoir of a capacity of not less than twenty million acre-feet of water; and, (b) that the Congress of the United States has exercised the power and jurisdiction of the United States to make the terms of said Colorado River Compact binding and effective as to the waters of said Colorado River."

Until the enactment of the Project Act on December 21, 1928, there was no consent by the Congress of the United States to a Six-State Compact. The consent granted by the Project Act was conditioned upon ratification by all seven basin states within a six months period or upon ratification by six states including California, and the passage by California of an act limiting its uses in accordance with Section 4 (a) (2) of the Project Act. In either event a proclamation by the President of the United States was required to make the Compact effective. Prior to the enactment of the Project Act, Utah, by its Act of January 19, 1927, had repealed its aforementioned Act of March 13, 1925. On January 10, 1929, California ratified the Compact

as a Seven-State Compact. On March 4, 1929, California enacted its Limitation Act and ratified the Compact as a Six-State Compact. On that date there was no effective ratification of the Compact by Utah. On March 6, 1929, Utah ratified the Compact as a Six-State Compact. Upon such action by Utah, and not before, there was a compliance with the conditions established by the Project Act except for the requisite Presidential proclamation. On June 25, 1929, the President of the United States proclaimed the Compact effective. Until such proclamation by the President the Compact had no force and effect. In the effective ratification of the Compact by each of the Colorado River Basin States, in the California Limitation Act, in the grant of consent by Congress in the Project Act, and in the presidential proclamation of June 25, 1929, there was no inhibition against the ratification of the Compact by Arizona and there was no action which would deprive Arizona of the benefits to which it was entitled under either the Project Act or the California Limitation Act in the event that the Compact should thereafter be ratified by Arizona.

20.

Admits the allegations of Paragraph 20 except as herein specifically denied. Denies that the legislation referred to in the second unnumbered subparagraph of Paragraph 20 was solely for the purpose of making possible the construction of the projects there mentioned or to assure them an adequate water supply. Alleges that such legislation had many other purposes including the grant of consent to the Compact and the protection of the rights of and water uses in the various Colorado River Basin states. Denies that the legislative history of the Project Act supports the positions taken with reference thereto by the defendants in their answer. Alleges that the legislative history of that Act supports the position of the complainant as asserted in its bill of complaint and in this reply.

21.

Admits the allegations of Paragraph 21 except as specifically denied herein. Denies that the term "ex-

cess or surplus waters unapportioned by said Compact" as used in the Project Act includes the increase of 1,000,000 acre-feet per annum permitted to the Lower Basin by Article III (b) of the Compact. Alleges that Article III (b) of the Compact pertains to the use of the waters of the Gila River and its tributaries and that the use of such waters is for the benefit of Arizona and New Mexico and the water users in these states. Alleges that Section 4 (a) of the Project Act as originally presented to the Senate Committee on Irrigation and Reclamation, 70th Congress, First Session in S. 1274 read as follows:

"Sec. 4 (a) 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 until the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have approved the Colorado River Compact mentioned in Section 12 hereof."

The Arizona Senators refused to accept or approve the bill in such form. Thereafter, to protect Arizona and the other Colorado River Basin states, except California, Section 4 (a) was amended and passed in the form appearing in Appendix 2 to the Answer, pp. 12-13. The effect of the Project Act as so enacted into law and of the subsequent California Limitation Act is as stated in Paragraphs XXIV and XXV of the Bill of Complaint.

22.

Admits the allegations of Paragraph 22 except as specifically denied herein. Admits that the Secretary of the Interior made contracts with the defendants as alleged in the last sentence of the first unnumbered subparagraph of Paragraph 22 but alleges that such contracts, and each and all of them, create in the defendants no rights to the use of water in excess of the rights to which California is limited by its Limitation Act.

Alleges that the Secretary has made a contract with Arizona for the delivery to and use by Arizona of 2,800,000 acre-feet of main stream water plus one-half of the surplus or excess water unapportioned by the Compact. Such contract with Arizona, in accordance with the Project Act and the California Limitation Act, leaves Arizona free to use, in addition to the quantities of water stated in said contract, 1,000,000 acre-feet per annum of the waters of the Gila River and its tributaries.

Denies Section 4 (a) (1) of the Project Act recognizes any right in California to the use of any water covered by Article III (b) of the Compact. Denies that the so-called Tri-State Agreement authorized by the second paragraph of Section 4 (a) of the Project Act recognizes "an allocation to Arizona of one-half of any excess or surplus waters unapportioned by Article III (a) of the Colorado River Compact." Alleges that such recognized allocation to Arizona includes "one-half of the excess or surplus waters unapportioned by the Colorado River Compact." The use of the water covered by Article III (b) of the Compact is apportioned. The term "excess or surplus waters" does not include and was not intended to include the use of any of the water referred to in Article III (b) of the Compact. It was the intent of the Project Act and the California Limitation Act to deny to California and its water users any rights to the use of water apportioned by Article III (b). Admits that the so-called Tri-State Agreement proposed by the second paragraph of the Project Act makes no provisions for uses by Utah and New Mexico. which States are partly within the Lower Basin. Arizona has recognized in its Complaint that its rights to the use of 3,800,000 acre-feet of water per year plus one-half of the excess or surplus waters unapportioned by the Compact are subject to the rights of Utah and New Mexico as Lower Basin States.

By act of its Legislature in 1939 (Arizona Code Annotated, Secs. 75-1601 to 75-1603 inclusive) Arizona ratified the Tri-State Compact authorized by the second paragraph of Section 4 (a) of the Project Act

upon the condition that the States of California and Nevada ratify such proposed Tri-State Compact. Both California and Nevada failed to ratify such Tri-State Compact. Such 1939 Act of the Arizona Legislature appears as Appendix No. 7 of this Reply. Said 1939 Act of the Arizona Legislature also ratified the Compact without reservation but upon the condition that the Tri-State Compact be ratified by California and Nevada within the time fixed by such Act.

23.

Admits the allegations of Paragraph 23.

24.

Admits the allegations of Paragraph 24. Alleges that the California Limitation Act is not and was not conditioned either upon the ratification or the non-ratification of the Colorado River Compact by Arizona. The limitations imposed by said Act are and were unconditional and are now, and at all times since its enactment have been, binding upon California and all of its water users.

25.

Admits the allegations of Paragraph 25.

26.

Admits the allegations of Paragraph 26 except that it denies that the effect of the Act therein referred to is as stated in Paragraph 59 of the Traverse in the Defendants' Answer.

27.

Denies the allegations of Paragraph 27. Alleges that the effect of the Compact, the Project Act, and the California Limitation Act is as stated in the Bill of Complaint and in this Reply.

28.

(a) As to Paragraph 28, Complainant refers to and incorporates herein by reference Paragraph 1 (a) of its Reply to the First Affirmative Defense.

(b) Denies the allegations of Paragraph 28. Alleges that on June 25, 1929, projects had been constructed and were in operation in California for the irrigation of no more than 473,500 acres of land which required a net main stream depletion of about 2,902,000 acrefeet of water per annum. The maximum quantity of Colorado River System water reasonably required by Palo Verde, the Colorado River Aqueduct and the All-American Canal at this time is not in excess of 3,663,000 acre-feet per annum. All uses of Colorado River System water in California are limited by the Project Act and California Limitation Act as averred in the Complaint and in this Reply. Appropriative rights, if any, to the use of Colorado River System water under California law are not binding upon the United States, Arizona or any other Colorado River Basin State except California. Such rights, if any, were and are merged into the contracts between the California districts and the United States and are subject to the provisions of the Compact, Project Act, and Limitation Act.

29.

Admits the allegations of Paragraph 29 except that it denies that the contracts therein mentioned conclusively provide for the payment of any fixed sum on account of the cost of the Imperial Dam and All-American Canal, and alleges that there is as yet no definite agreement between the United States and the California entities for the repayment of such costs. The effect of the contracts mentioned in Paragraph 29 is as set forth in the Bill of Complaint and in this Reply.

30.

Admits the allegations of Paragraph 30 except that it alleges that the effect of the contracts therein mentioned is as set forth in the Bill of Complaint and in this Reply.

31.

Admits the allegations of Paragraph 31.

32.

Admits the allegations of Paragraph 32 except that it denies that any so-called Statutory Compact relative to the use of the waters of the Colorado River System now exists or ever existed between the United States and California. Colorado River System water is available for use in California only pursuant to and in compliance with the Compact, the Project Act, and the California Limitation Act. The Seven Party Water Agreement is without any validity, force, or effect whatsoever to create any rights in California or in any of its water users to the use of Colorado River System Water in excess of 4,400,000 acre-feet per year.

33.

As to Paragraph 33, admits that the Secretary of the Interior promulgated the amended general regulations therein mentioned and that such regulations are now in full force and effect. Denies all other allegations of Paragraph 33. Alleges that such general regulations and the amendments thereto cannot and do not increase the quantity of water available for use in California under the Compact, the Project Act, and the California Limitation Act.

34.

Admits that the United States has made the contracts with the defendant Districts therein alleged and denies all other allegations of said paragraph. Alleges that the effect of said contracts is as set forth in the Bill of Complaint and in this Reply.

35.

Denies the allegations of Paragraph 35 except that it admits the existence of the so-called "Agreement of Compromise between the Imperial Irrigation District and the Coachella Valley County Water District," and admits that the rights of the Districts therein mentioned to the use of Colorado River System water are each and all subject to the availability thereof under the Compact, the Project Act, and the California Limitation Act.

Denies all the allegations of Paragraph 36. Alleges that the use of Colorado River System water within the State of California is limited by the Project Act and the Limitation Act to the quantities of water therein mentioned and that no contracts between the United States and the Metropolitan District, or any other California contracting entity, and no contract between the California contracting entities can create any right to the use in California of more than 4,400,000 acre-feet of water per annum apportioned by Article III (a) of the Compact plus not more than one-half of the excess or surplus waters unapportioned by said Compact. The 1,000,000 acre-feet of water referred to in Article III (b) is not available for use in California and is not included within the term "surplus or excess water." Rights to the use of surplus or excess water have never been determined and cannot be determined until after October 1, 1963.

37.

- (a) As to Paragraph 37, Complainant refers to and incorporates herein by reference Paragraph 1 (a) of its Reply to the First Affirmative Defense.
- (b) Alleges that as to the use by California of 4,-400,000 acre-feet of water apportioned by Article III (a) of the Compact and the use by Arizona of 2,800,000 acre-feet of water apportioned by Article III (a) of the Compact and as to the use by Nevada of 300,000 acre-feet of water apportioned by Article III (a) of the Compact, the contracts between the United States and the California contracting entities, the contract between the United States and Arizona, and the contract between the United States and Nevada are on a parity. No one of said contracts has any priority or any preferential rights over any other contract. All pertain to the apportionment of III (a) water. So far as the California contracts provide for the delivery of more than 4,400,000 acre-feet of water per annum, such contracts relate to "surplus or excess water" and the reference is to water which is surplus or excess over that apportioned by Article III (a), (b), and (c.) Such surplus

may not be determined or apportioned until after October 1, 1963. The contract between the United States and Arizona is paramount and superior to any claims by California for the use of Colorado River System water in excess of 4,400,000 acre-feet per annum.

REPLY TO SECOND AFFIRMATIVE DEFENSE

38.

Paragraph 38 of the Answer incorporates by reference all the allegations of the First Affirmative Defense (Paragraphs 1 to 37 inclusive). The plaintiff in reply incorporates by reference its reply to said paragraphs 1 to 37 inclusive.

39.

- (a) As to Paragraph 39 (a) admits that California ratified the Compact as a Six-State Compact and denies each and every other allegation thereof. California has ratified the Compact as a Seven-State Compact and as a Six-State Compact. The legislative history of the ratification of said Compact by California discloses that
 - (1) California ratified the Compact as a Seven-State Compact on February 3, 1923 (Act of February 3, 1923; Ch. 17, 45th Session; Statutes and Amendments to the Codes, 1923, pp. 1530-1535;
 - (2) California conditionally ratified the Compact as a Six-State Compact on April 8, 1925 (Act of April 8, 1925; Ch. 33, 46th Session; Statutes and Amendments to the Codes, 1925, pp. 1321-1322);
 - (3) California again ratified the Compact as a Seven-State Compact on January 10, 1929 (Act of January 10, 1929; Ch. 1, 48th Session, Statues and Amendments to the Codes, 1929, pp. 1-7);
 - (4) California ratified the Compact as a Six-State Compact on March 4, 1929 (Act of March 4, 1929; Ch. 15, 48th Session; Statutes and Amendments to the Codes, 1929, pp. 37-38);

The California Limitation Act was enacted March 4, 1929, the same date as the ratification of the Compact by California by the Act referred to in (4) above. Such Act, referred to in (4) above, provides in part;

"* * * and said Compact shall become binding and obligatory upon the State of California, and upon the other signatory states which have ratified or may hereafter ratify said Compact when at least six of the signatory states shall have consented thereto, approved and ratified the same, and the Congress of the United States shall have given its consent and approval; * * *." (emphasis supplied)

The Project Act was enacted December 21, 1928. Section 4 (a) thereof provides in substance that the Act shall not become effective until the seven Colorado River Basin states shall have ratified the Compact and the President of the United States shall have so publicly proclaimed or "if said states fail to ratify the said Compact within six months from the date of the passage of this Act" then until six states, including California, ratify the Compact and the President of the United States so publicly proclaims and the State of California passes an act limiting its uses as therein stated. Section 13 (a) of the Project Act provides:

"The Colorado River Compact signed at Santa Fe, New Mexico, November 24, 1922, pursuant to act of Congress approved August 19, 1921, entitled "An act to permit a compact or agreement between the States of Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming respecting the disposition and apportionment of the waters of the Colorado River, and for other purposes," is hereby approved by the Congress of the United States, and the provisions of the first paragraph of Article II of the said Colorado River compact, making said compact binding and obligatory when it shall have been approved by the legislature of each of the signatory States, are hereby waived, and this approval shall become effective when the State of California and at least five of the other States mentioned, shall have

approved or may hereafter approve said compact as aforesaid and shall consent to such waiver, as herein provided."

On June 25, 1929, the President of the United States proclaimed the Compact effective. There is nothing in the ratification of the Compact by California, or by any other state, or by the United States which precludes Arizona from ratifying said Compact. The California Limitation Act was enacted "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 the Project Act. There is no provision in the California Limitation Act that its provisions shall not be effective in the event Arizona ratifies the Compact. There is no provision in the Project Act that the conditions imposed by Section 4 (a) shall not be effective when and if Arizona ratifies the Compact after the expiration of the six-month period therein mentioned. There is no provision in the legislative action of any of the states of Colorado, Nevada, New Mexico, Utah, or Wyoming which destroys or in any way affects the ratification of the Compact by any of such states in the event that California passed its Limitation Act and Arizona ratified the Compact after six months from the effective date of the Project Act. By its action in passing its Limitation Act and ratifying the Compact as a Six-state Compact within less than three months after the passage of the Boulder Canyon Project Act and more than three months before the expiration of the six months period mentioned in Section 4 (a) of the Project Act, California intended that the provisions of the said Limitation Act should be effective regardless of whether Arizona thereafter ratified said Compact.

(b) Denies the allegation of Paragraph 39 (b). California could not have passed its Limitation Act only because of the alleged rejection of the Compact by Arizona because the six months period specified in Section 4 (a) of the Project Act had not half expired at the time of the enactment of the California Limitation Act. California enacted the Limitation Act because it de-

sired the construction of Hoover Dam, the All-American Canal and the other facilities authorized by the Project Act. Neither the ratification nor the non-ratification of the Compact by Arizona was any inducement to California in its enactment of the said Limitation Act.

- (c) Denies the allegations of Paragraph 39 (c). As a result of the passage of the Project Act and the California Limitation Act and the ratification of the Compact the defendants received the benefits averred in Paragraph XXIV of the Complaint.
 - (d) Denies the allegations of Paragraph 39 (d).

40.

As to Paragraph 40 admits that the three original actions in the United States Supreme Court referred to in said paragraph were instituted by Arizona. The issues presented therein and the decisions of the Court thereon are as stated in the opinions of the Court reported at 283 U.S. 423, 292 U.S. 341, and 298 U.S. 558. All of said actions were brought and determined before Arizona ratified the Compact and before Arizona had entered into a water delivery contract with the United States (Exhibit C to Complaint). In none of said cases could Arizona rely upon or receive any benefit from the Compact or related documents. Admits that the pleadings and briefs of Arizona in the case decided in 283 U.S. 423 contained the extracts appearing at pages 386-399, Appendix 28 to Answer. None of said allegations or statements are material to the issues presented in the instant case. Denies all allegations of said Paragraph 40 not herein specifically admitted.

41.

As to Paragraph 41, admits that the capacities of the water facilities therein mentioned and the terms of the contracts therein averred were reported to the excutive and legislative branches of the United States Government. Denies that there ever has been any administrative or legislative construction by the United States of the Compact and related documents which conflicts with the construction of those documents set forth in the Bill of Complaint and in this Reply. Denies all allegations of Paragraph 41 not herein specifically admitted.

Further replying to Paragraph 41, Complainant alleges that the Congress of the United States by its enactment of the Project Act and the Secretary of the Interior of the United States by his execution of the February 9, 1944 water contract with Arizona have construed the Compact and the rights of Arizona as follows:

- (1) Arizona has the right to the beneficial consumptive use of 2,800,000 acre-feet of water diverted from the main stream of the Colorado River either above or below Hoover Dam subject only to the rights of Utah and New Mexico as Lower Basin States.
- (2) If and when any surplus waters of the Colorado River System unapportioned by Article III (a), (b), and (c) of the Compact are apportioned to the Lower Basin, Arizona shall be entitled to one-half thereof less a quantity not to exceed one-twenty-fifth of the total to the State of Nevada and less whatever rights Utah and New Mexico may have in and to such surplus.
- (3) Arizona has the right to the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of Arizona.
- (4) 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 by reason of any allowance of water by treaty to Mexico.

Further replying to Paragraph 41, Complainant says that the 1949 action of Congress in granting its consent to the Upper Colorado River Basin Compact constitutes a recognition by Congress of the fact that Arizona is a party to the Colorado River Compact of 1922 and a reaffirmation by the Congress of the integrity of the

Colorado River Compact and its related statutes both state and Federal, including the California Limitation Act.

42.

- (a) Denies the allegations of Paragraph 42 (a).
- (b) As to Paragraph 42 (b) denies that the defendants took any of the actions therein mentioned in reliance upon any action or non-action by Arizona. The defendants were motivated entirely by a desire to obtain the construction and use of the facilities made possible by the Compact, the Project Act, and the California Limitation Act. Denies that the defendants, or any of them, have underwritten all the cost of Hoover Dam. Alleges that substantially all of the construction costs of Hoover Dam will be repaid by revenues derived from charges imposed upon the use of falling water for the production of hydroelectric power which is sold to Lower Basin consumers at rates substantially less than electric power generated by fuel can be produced and sold.

Denies that the defendants have developed an economy which is dependent upon the construction of the Compact and related documents as set forth in their Answer. Alleges that the Defendants each and all well knew that but for the enactment of the Project Act and the California Limitation Act, the Compact would not have become effective and well knew that said Limitation Act was passed for the benefit of Arizona and the other Colorado River Basin States except California. Denies that either the defendants, or any of them, or the Congress or the executive officers of the United States took any action whatsoever in reliance upon any action or non-action or representation or interpretation of Alleges that all actions by the defendants and by the United States in connection with the development of the water resources of the Lower Colorado River Basin were taken in reliance upon the terms, conditions, and provisions of the Compact, the Project Act, and the California Limitation Act as construed and applied in the Bill of Complaint and in this Reply. Denies all allegations of Paragraph 42 (b) not herein specifically admitted.

(c) Denies the allegations of Paragraph 42 (c).

REPLY TO THIRD AFFIRMATIVE DEFENSE

FOR A FIRST REPLY TO THE THIRD AF-FIRMATIVE DEFENSE.

Complainant says that any and all allegations as to the so-called appropriative rights of California and its water users are immaterial and irrelevant to any consideration or determination of the issues in the instant case for the reasons that:

- (1) Appropriative rights, if any, under California law are not binding upon the United States, the State of Arizona or any other Colorado River Basin State except the State of California.
- (2) Whatever rights California and any of its water users may have had at any time to the use of the waters of the Colorado River System are now, and at all times since the effective date of the Compact have been, subject to the terms of the Compact, the Project Act, and the California Limitation Act.
- (3) Any rights to the use of Colorado River System water are also subject to the terms and provisions of the various contracts between the Secretary of the Interior and the contracting California entities.

FOR A SECOND REPLY TO THE THIRD AFFIRMATIVE DEFENSE.

43.

Paragraph 43 of the Answer incorporates by reference all the allegations of the First and Second Affirmative Defenses (Paragraph 1 to 42 inclusive). The Complainant in reply incorporates by reference its Reply to said Paragraphs 1 to 42 inclusive.

44.

- (a) As to Paragraph 44 (a), admits that there are approximately 120.500 acres within the boundaries of Palo Verde. This includes 16,000 acres of Mesa land which can only be served by a pump system which has not as yet been constructed. Of the total acreage only about 64,000 acres were irrigated in 1952 and only a total of 75,000 acres are irrigable. The Complainant is without knowledge or information as to the year when water was first diverted from the Colorado River System for use within the Palo Verde area and is without knowledge or information as to whether or not water has been continuously diverted for use in said area after the year in which the first diversions occurred. Palo Verde has entered into a contract with the United States for the delivery to that District of water from the Colorado River System. Such contract makes the delivery of water contingent upon the availability thereof under the Compact and the Project Act. Any and all use of Colorado River System water by Palo Verde is subject to the California Limitation Act. Admits that the District and its predecessors in title have constructed some works to divert and use water from the Colorado River System and that some works are now in operation for this purpose. Complainant is without knowledge or information as to the extent of such works or as to the facts concerning the operation thereof. Denies all allegations of Paragraph 44 (a) not specifically herein admitted.
- (b) As to Paragraph 44 (b), admits that there are approximately 25,000 acres of land under the Yuma Project in California. A part of such land, the exact quantity thereof being unknown to the Complainant, lies within Indian Reservations. Of this total acreage approximately 12,000 acres are irrigable and in 1952, there were irrigated approximately 12,000 acres. Admits the statutes referred to in Paragraph 44 (b), but denies their applicability to any issues presented for determination in this case. Complainant is without knowledge or information as to the appropriative rights, if any, of the Yuma Project in California under the laws of Cali-

fornia, as to the year when water was first diverted from the Colorado River System for use on the Yuma Project in California, and as to whether water has been continuously diverted for use in said area after the year in which the first diversion occurred. The Yuma Project in California is irrigated by water diverted from the Colorado River System by the All-American Canal. The right to take Colorado River System water through the All-American Canal is contingent upon the availability of such under the Compact and the Project Act. Any and all use of Colorado River System water by or in the Yuma Project in California is subject to the California Limitation Act. Complainant denies all allegations in Paragraph 44 (b) not herein specifically admitted.

(c) As to Paragraph 44 (c), admits that there are approximately 900,000 acres within the boundaries of Imperial. Complainant has no knowledge as to whether said District is committed to include 90,000 acres or any part thereof in addition thereto. area of 900,000 acres includes approximately 325,-000 acres in the areas known as East Mesa and No distribution systems have ever West Mesa. been constructed to serve the lands located on either the East Mesa or West Mesa. The Bureau of Reclamation, in a joint study with the University of California, has reported adversely on the irrigation of either the East Mesa or the West Mesa because of poor soil conditions. Of the total acreage within the District there is a maximum of about 600,000 acres of irrigable land and of this, approximately 400,000 acres were actually irrigated in the year 1950. The Complainant is without knowledge or information as to the appropriative rights, if any, of Imperial under the laws of the State of California, as to when water was first diverted from the Colorado River System for use within the District, and as to whether water has been continuously diverted for use in said area after the year in which the first diversion occurred. Imperial has entered into contracts with the United States for the delivery to that District of water from the Colorado River System. Such contracts make the delivery of water contingent upon the availability thereof under the Compact and the Project Act. Any and all use of Colorado River System water by or in Imperial is subject to the California Limitation Act. Complainant admits that the District and its predecessors in title and its water users have constructed some works to divert and use water from the Colorado River System and that some works are now in operation for this purpose. Complainant is without knowledge or information as to the extent of such works, or as to the fact concerning the operation thereof. Denies all allegations of Paragraph 44 (c) not specifically admitted herein.

(d) As to Paragraph 44 (d), Complainant is without knowledge or information as to the total number of acres within the boundaries of Coachella. Alleges that the project of the United States Bureau of Reclamation for the irrigation of lands within Coachella contemplates the irrigation of only 78,000 acres of such land. Complainant has no knowledge or information as to the quantity of land now irrigated within Coachella. Complainant is without knowledge or information as to the appropriative rights, if any, of Coachella under the California law, as to when water was first diverted from the Colorado River System for use within Coachella, and as to whether water has been continuously diverted for use within said area after the year within which the first diversion occurred. Coachella has entered into a contract with the United States for the delivery of water from the Colorado River System. Such contract makes the delivery of water contingent upon the availability thereof under the Compact and the Project Act. Any and all uses of Colorado River System water by or in Coachella is subject to the California Limitation Act. Admits that Coachella, its predecessors and property owners have constructed some works to divert and use water from the Colorado River System and that some works are now in operation for this purpose. Complainant is without knowledge or information as to the extent of such works, or as to the facts concerning the operation thereof. Denies all allegations of paragraph 44 (d) not specifically admitted herein.

(e) Denies all the allegations of Paragraph 44 (e) except that it admits the existence of the August 18, 1931 agreement and the February 14, 1934 agreement of compromise between Imperial and Coachella. The legal effect of such agreements is immaterial and irrelevent to the issues of this case. All uses of Colorado River System waters within California are controlled by the Compact, the Project Act, and the California Limitation Act.

45.

- (a) As to Paragraph 45 (a) admits that the City of Los Angeles is within The Metropolitan Water District of Southern California. The Complainant is without knowledge or information as to the appropriative rights, if any, of the City of Los Angeles or The Metropolitan Water District under the laws of California and as to the commencement of construction of works for the diversion of Colorado River System water for use in the Los Angeles area. The use of Colorado River System water by The Metropolitan Water District and by the cities and communities within that District is governed by contracts between that District and the Secretary of the Interior. The delivery of water thereunder is subject to the availability thereof under the Compact and the Project Act. Any and all uses of Colorado River System water by or in the City of Los Angeles are subject to the California Limitation Act. Denies all allegations of Paragraph 45 (a) not specifically admitted.
- (b) As to Paragraph 45 (b), Complainant admits that the City of San Diego is now included within The Metropolitan Water District of Southern California and that a portion of the County of San Diego is also within that District. Complainant is without knowledge or information as to the appropriative rights, if any, of the City of San Diego, County of San Diego, or the Metropolitan Water District under the laws of Cali-

- fornia. Admits the existence of the October 4, 1946 agreement between the City of San Diego, County of San Diego, San Diego County Water Authority, and The Metropolitan Water District. The legal effect of such agreement is immaterial and irrelevant to the issues of this case. Any and all uses of Colorado River System water by or in either the City of San Diego or the County of San Diego are subject to the California Limitation Act. Denies all allegations of Paragraph 45 (b) not herein specifically admitted.
- (c) As to Paragraph 45 (c), Complainant admits a number of cities, districts, and other entities are included within The Metropolitan Water District of Southern California but Complainant has no knowledge or information as to the number or extent thereof. Complainant has no knowledge or information as to the appropriative rights, if any, of the Cities of Los Angeles and San Diego for the use of water of the Colorado River System, as to whether or not such alleged rights are now administered by The Metropolitan District or as to the appropriations, if any, by The Metropolitan District of waters of the Colorado River System. Complainant is further without knowledge or information as to when the first diversion of water from the Colorado River System was made within The Metropolitan Water District area and as to whether Colorado River System water has been continuously used in said area since the year in which the first diversion occurred. Any and all uses of Colorado River System water by or in The Metropolitan Water District are subject to the California Limitation Act. Denies all allegations of Paragraph 45 (c) not herein specifically admitted.
- (d) Complainant admits that The Metropolitan Water District and the Cities of Los Angeles and San Diego have constructed some works to divert and use water from the Colorado River and that some works are now in operation for this purpose. Complainant is without knowledge or information as to the extent of such works or as to the facts concerning the operation thereof. Denies all allegations of Paragraph 45 (d) not herein specifically admitted.

46.

Denies all the allegations of Paragraph 46. Alleges that all uses of Colorado River water within California are governed by the Compact, the Project Act, and the California Limitation Act. Appropriative rights, if any, to the use of Colorado River System water in California, are not binding upon Arizona or any other Colorado River Basin State and are immaterial to any issue presented in this case.

47.

As to Paragraph 47, Complainant admits that the appropriations of Colorado River System water for beneficial consumptive use on the Yuma Project in Arizona, portions of the Colorado River Indian Reservation, and miscellaneous uses from the main stream and tributaries of the Colorado River, including the Gila River, are prior to claimed appropriations of the Defendants. Denies that the beneficial consumptive use of the waters of the Gila River and its tributaries in Arizona is 2,000,000 acre-feet per annum, and alleges that the beneficial consumptive use of the waters of the Gila River and its tributaries in Arizona is as set forth in the Bill of Complaint and in this Reply. Denies the allegations of Paragraph 47 not heretofore expressly admitted. Alleges that all uses of Colorado River System water within California are governed by the Compact, the Project Act, and the California Limitation Act. Appropriative rights, if any, to the use of Colorado River System water in California are not binding upon the United States, Arizona, or any other Colorado River Basin state; and are immaterial to any issue presented in this case.

REPLY TO FOURTH AFFIRMATIVE DEFENSE.

48.

Paragraph 48 of the Answer incorporates by reference all the allegations of the First, Second, and Third Affirmative Defenses (Paragraphs 1 to 47 inclusive).

The complainant in reply incorporates by reference its Reply to said Paragraphs 1 to 47 inclusive.

49.

As to Paragraph 49 alleges that the question of the indispensability of the United States as a party to this case is now moot as the United States has sought and been granted leave to intervene.

50.

As to Paragraph 50, admits that the United States has been granted leave to intervene in this case. All parties whose presence is essential to a determination of this case are now before the Court.

REPLY TO AFFIRMATIVE ALLEGATIONS CONTAINED IN TRAVERSE

57.

As to Paragraph 57 (b), admits the execution and existence of the Seven-Party Agreement. Complainant is without knowledge or information as to the purpose of that agreement. Alleges that insofar as said agreement attempts to apportion among the California water users any rights to the consumptive use of Colorado River System water in excess of 4,400,000 acre-feet per year it was and is without any force, effect, or validity whatsoever. Denies all of the allegations of Paragraph 57 (b) not specifically admitted herein.

As to Paragraph 57 (d), denies that the defendants have or own rights to the use of the quantities of Colorado River System water therein set forth. Alleges that the defendants collectively have no firm right to use any Colorado River System water in excess of 4,400,000 acre-feet per year. The quantities of Colorado River System water unapportioned by Article III (a), (b), and (c) of the Compact have never been determined and may not be apportioned until after October 1, 1963. Denies all allegations of Paragraph 57 (d) not specifically admitted herein.

58.

As to Paragraph 58 (a), admits the affirmative allegations therein relating to Hoover, Parker and Davis Dams.

As to Paragraph 58 (b), alleges that the facilities therein referred to store, take and divert water only from the main stream of the Colorado River and none of them store, take or divert any water from the Gila River or any of its tributaries. Admits all other allegations of Paragraph 58 (b).

As to Paragraph 58 (c), admits that the facilities mentioned therein have the physical capacity to divert Colorado River System water greatly in excess of 4,-400,000 acre-feet per year. Denies that the defendants, or any of them, have any firm right to take, divert, and use more than 4,400,000 acre-feet of Colorado River System water per year. Alleges that the quantity of surplus or excess water has never been determined and under the Compact may not be determined until after October 1, 1963. Denies that any claim of California or any of its water users to 5,362,000 acre-feet of water per year from the Colorado River System or to any quantity of water from the Colorado River System in excess of 4,400,000 acre-feet per year is rightful or that any of the defendants are lawfully entitled thereto. California and its water users have only the right to use such of the waters of the Colorado River System as are available to them under the Compact, the Project Act, and the California Limitation Act.

59.

As to Paragraph 59 (c), denies the execution, existence, and validity of the so-called Statutory Compact. Denies that the interpretation, intent, and effect of the Compact as set out in the First Affirmative Defense and as relied on by California are in conformity with the text of that document, the legislative history thereof, or the contemporaneous interpretations thereof. The intent, meaning, and effect of that Compact is as set forth in the Bill of Complaint and in this Reply, and the intent, meaning and effect so relied on by Arizona is in

conformity with the intent of the Congress of the United States as expressed in the Project Act, and in conformity with the intent of the Secretary of the Interior as shown by his execution of the February 9, 1944 Arizona water contract. Alleges that any interpretations presented by Arizona in the case of Arizona v. California, 283 U. S. 423, are irrelevant and immaterial to the issues herein presented because such case was presented and determined prior to the ratification of the Compact by Arizona and the execution by Arizona and the Secretary of the Interior of the Arizona water contract. Denies that Arizona rejected the Compact. Denies each and every allegation of Paragraph 59 (c) not specifically admitted herein.

As to Paragraph 59 (d), denies the execution, existence, or validity of the so-called Statutory Compact. Alleges that Arizona in this action seeks to establish its rights as they exist under the Compact, the Project Act, and the California Limitation Act, which Limitation Act was passed for the benefit of Arizona and other Basin States, and that Arizona is entitled to receive such benefit. Denies all allegations of Paragraph 59 (d) not specifically admitted herein.

As to Paragraph 59 (e), admits the allegations thereof. Alleges that the quotation from the Arizona contract therein referred to is only a partial quotation. The full text of the Arizona Water Contract appears as Exhibit C to the Bill of Complaint.

60.

As to Paragraph 60, admits the existence of the March 30, 1942 and January 3, 1944 contracts between the United States and the State of Nevada pertaining to the delivery of Colorado River System water for use in Nevada in a quantity not to exceed 300,000 acre-feet per year. Complainant has no knowledge or information as to whether Nevada has contended that its rights to the use of Colorado River System water are not limited to 300,000 acre-feet per year or any other specific quantity, or as to legislation for the authorization of projects in Nevada requiring an aggregate annual

beneficial consumptive use of more than 300,000 acrefeet of Colorado River System water per year.

61.

As to Paragraph 61, admits that the rights of New Mexico and Utah to the use of Colorado River System water apportioned by the Compact to the Lower Basin have never been determined. Denies that there are any present or potential controversies between Arizona and either Utah or New Mexico over the use of waters of the Colorado River apportioned by the Compact to the Lower Basin.

62.

As to Paragraph 62, admits the allegations thereof except that it denies that the term "any and all sources" as used in the Mexican Water Treaty means the entire Colorado River System. Alleges that the waters of the Gila River and its tributaries, except return flow after the same enters the Colorado River, are not subject to any diminution whatever by reason of the Mexican Water Treaty.

63.

As to Paragraph 63, alleges that there is available to Arizona, Nevada, New Mexico, and Utah out of the waters of the Colorado River System apportioned to the Lower Basin by the Compact the beneficial consumptive use of a total of 4,100,000 acre-feet of water per year. This includes the use of the waters of the Gila River and its tributaries. In addition said States have a right to an undetermined quantity of surplus water not apportioned by the Compact. Any and all rights to the use in the Lower Basin of main stream water are subject to a charge for losses from main stream Lower Basin reservoirs in the same proportion as the consumptive use of such storage water in each State bears to the total consumptive use of such storage water in the Lower Basin, and to a charge in some undetermined amount if and when some diminution of uses in the Lower Basin is required to satisfy the Mexican Water Treaty. Unless and until there is some need for curtailment to satisfy the Mexican Water Treaty

and until the facts under which such curtailment is required can be known, there is and can be no determination of the charge, if any, to be imposed by reason of the Mexican Water Treaty. The share of beneficial consumptive use of Colorado River System water in the Lower Basin to which Arizona, New Mexico, and Utah are entitled has been determined and is the quantity of 3,800,000 acre-feet of water per year. Likewise the share to which Nevada is entitled has been determined and is the quantity of 300,000 acre-feet of water per year. Denies all allegations of Paragraph 63 not specifically admitted herein.

64.

As to Paragraph 64, admits that the provisions of Article 7(a), 7(b), 7(d), 7(j) and 7(1) of the February 9, 1944 water contract between the United States and Arizona are as set forth in Exhibit C to the Bill of Complaint, pp. 47-50. Denies that any of said provisions relates to the rights of Indians or Indian Tribes. As to the other allegations of Paragraph 64, Complainant refers to, and by this reference incorporates herein, its reply to Paragraph 14 of the First Affirmative Defense.

65.

As to Paragraph 65, denies that there are known and defined underground sources of water in Arizona which are dependent upon the Colorado River System for water. Complainant has no knowledge or information as to the contributions, if any, of said underground water basins to the Colorado River System. Denies that the beneficial consumptive use of water by Arizona water users from underground water sources are chargeable to Arizona against its share of Colorado River System water. The use of water from underground water sources in Arizona is a beneficial consumptive use of water which would otherwise be unavailable for use either in Arizona or any other portion of the Lower Basin. Admits that there has been expansion of irrigated acreage in Arizona since 1944 and that this has occurred in part from leasing and sale of State owned lands. Denies that such expansion has occurred with knowledge of the inadequacy of the water supply. Denies that Arizona has failed to enact effective legislation to control the use of the underground water supply, and alleges Arizona has enacted legislation for the purpose of controlling the use of underground water. Denies that there has been any reckless or speculative expansion of irrigated acreage in Arizona or waste of water in Arizona. Denies that the water supply presently available to the Central Arizona area is ample to sustain a population and industrial and agricultural production greater than that which now exists and alleges that the water supply is insufficient to sustain the present population and industrial and agricultural production. Alleges that the effect of a failure to secure a greater quantity of water for the Central Arizona area than that now available will have the effects alleged in Paragraphs XIX and XXVII of the Complaint.

As to the allegations relative to the reports of the Secretary of the Interior on the Central Arizona Project, Complainant says that none of such allegations is material or relevant to the issues presented for determination in this case.

66.

As to Paragraph 66, Complainant admits that the congressional actions therein mentioned occurred but denies that such actions, or any of them, resulted from the matters and things alleged in said Paragraph 66. Alleges that the United States Bureau of Reclamation has found that the Central Arizona Project has both engineering and economic feasibility. Denies the allegations of Paragraph 66 not specifically admitted herein.

70.

As to Paragraph 70, admits that the facilities therein mentioned were constructed under the terms, provisions, and limitations of the laws and treaty therein mentioned. Alleges that none of such facilities would have been constructed but for the Compact, the Project Act, and the California Limitation Act. Admits that the

defendants have used such facilities and have benefited therefrom, and that to the extent averred in the Bill of Complaint and in this Reply Arizona has benefited therefrom. Complainant does not deny the validity or integrity of the Compact, the Project Act, or California Limitation Act, and to the contrary the Complainant in its Bill of Complaint and Reply asserts and relies upon the validity and integrity of the Compact, the Project Act, and the California Limitation Act. Denies all allegations of Paragraph 70 not herein specifically admitted.

72.

As to Paragraph 72, alleges that by the use of the facilities therein mentioned the defendants have acquired no firm right to take and divert from the Colorado River System any quantities of water in excess of 4,400,000 acre-feet per year. The fact that such facilities are designed to take and divert more than that quantity of water does not create in the defendants, or any of them, any rights to the use of the waters of the Colorado River System in excess of 4,400,000 acre-feet of water per year. Complainant admits that the diversions stated for the year 1946-1952 inclusive are substantially correct. Admits that such quantities are greater than the beneficial consumptive uses of such water in California, and that such quantities are subject to diminution in the amount that the diversions would not result in net main stream depletions in the quantities of water so diverted. Alleges that the returns to the stream from such diversions have never been determined. Denies that all of the diversions remain. ing after the deductions above mentioned were or are being put to beneficial consumptive use in California. Alleges that there is wasted in the Salton Sea and not put to beneficial consumptive use quantities of water varying from 500,000 to 1,500,000 acre-feet per year, and that there are substantial quantities of Colorado River water wasted into the Pacific Ocean. Admits the intent of the defendants as stated in Paragraph 72 but alleges that such intent is wrongful and not in conformity with the Compact, the Project Act, and the California Limitation Act. Denies all allegations in Paragraph 72 not specifically admitted.

75.

As to Paragraph 75, Complainant alleges that it is entitled to the relief sought in its Bill of Complaint.

REPLY TO MATTERS CONTAINED IN EXHIBITS, APPENDICES, AND PLATES.

As to Exhibits A, B, and C to the Answer, Complainant alleges that the allegations thereof have no material bearing on the issues tendered by the Bill of Complaint, the Answer and this Reply. Complainant alleges that the rights of the defendants and each of them to the use of the waters of the Colorado River System are subject to the availability thereof under the Compact, the Project Act, and the California Limitation Act. Such rights are neither enlarged nor diminished by the facts averred in the said Exhibits. Insofar as the facts set out in said Exhibits are different from the facts alleged in the Bill of Complaint and in this Reply, the Complainant neither admits nor denies them but relies on its position that they are immaterial, irrelevent, and incompetent to either prove or disprove any of the issues presented by the instant case. Insofar as the conclusions of either fact or law set forth in said Exhibits are concerned the Complainant denies each and all of them except such as are specifically admitted in the Bill of Complaint and in this Reply.

Π

Complainant admits that Appendices Nos. 1 to 27 inclusive to the Answer correctly state the provisions of the various matters therein copied. Alleges that the effect of the pertinent compact, statutes, regulations,

agreements, and contracts contained in said appendices are as stated in the Bill of Complaint and in this Reply and not otherwise.

Admits that the pleadings and briefs of Arizona in the case of Arizona vs. California, 283 U. S. 423, contain the matters appearing in Appendix No. 28. Denies Appendix No. 28 contains all the pleadings and briefs in that case. Alleges that none of the pleadings and briefs in that case is material to this case.

Complainant denies the accuracy of the map appearing on Plate 1. Such map incorrectly shows the Imperial and Coachella Valleys within the natural drainage basin of the Colorado River System. The Imperial and Coachella Valleys actually drain into the Salton Sea and do not drain into the Colorado River or any of its tributaries.

Admits that the maps shown by Plates 2 to 6B inclusive are substantially accurate, but reserves the right to rely on different or other maps if the proper presentation of this case requires.

FOR FURTHER REPLY

Complainant denies each and every affirmative allegation of the Answer not specifically admitted in this Reply.

WHEREFORE, Complainant prays as in its Bill of Complaint except that Complainant says that, through inadvertence, Paragraph VI of the Prayer of the Bill of Complaint is inaccurate and does not conform to the allegations of Paragraph XXII (3) of the Bill of Complaint or with the allegations of Paragraph 63 of this Reply. In place of such Paragraph VI the Complainant prays that:

Losses of water in and from reservoirs located in the Lower Basin on the main stream of the Colorado River shall be charged against the apportionment to Arizona and California respectively in the same proportion as the consumptive use of water delivered from storage in such Reservoirs in the State against which the charge is made currently bears to the total consumptive use in the Lower Basin of water delivered from storage in such Reservoir.

Respectfully submitted,

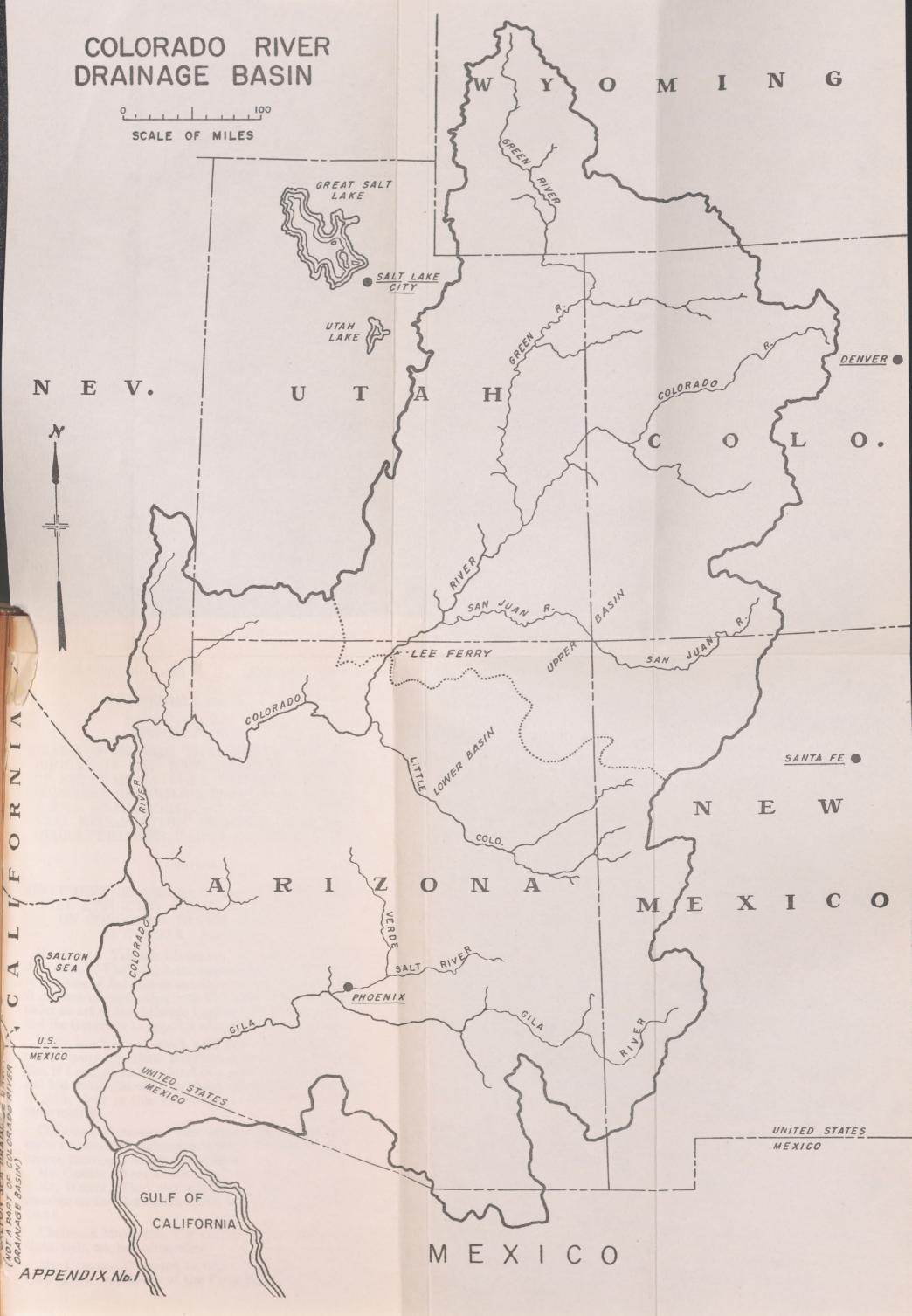
John H. Moeur Chief Counsel, Arizona Interstate Stream Commission

Burr Sutter
Assistant Counsel,
Arizona Interstate Stream Commission

Perry M. Ling Special Counsel Arizona Interstate Stream Commission

Ross F. Jones
Attorney General of Arizona

John Henley Eversole
Chief Assistant Attorney General
of Arizona



APPENDIX No. 2

Excerpts From

"HEARINGS BEFORE THE COMMITTEE ON IRRIGATION AND RECLAMATION, HOUSE OF REPRESENTATIVES, SEVENTY-NINTH CONGRESS, SECOND SESSION, ON H. R. 5434, A BILL REAUTHORIZING THE GILA FEDERAL RECLAMATION PROJECT, AND FOR OTHER PURPOSES, PART 2, JULY 8-22, 1946;"

STATEMENT OF CHARLES A. CARSON, SPE-CIAL ATTORNEY, STATE OF ARIZONA, ON COLORADO RIVER MATTERS, PHOENIX, ARIZONA

Mr. Carson. Yes, Mr. Chairman. My name is Charles A. Carson, of Phoenix, Ariz., appearing here on behalf of the State of Arizona as special attorney for the State of Arizona in connection with Colorado River matters, under an act of the Arizona Legislature, which authorized the Governor to appoint attorneys and engineers.

There has been so much said here on the question and so many questions interjected here that I would like, if I can, to make a kind of a general geographical and historical statement without interruption in order to get it clear in this record as to Arizona's view on these matters.

Chairman Murdock. The witness may proceed to make a connected statement without interruption. Of course, there will be questions later.

Mr. Carson. Yes; as soon as I am through.

Mr. White. That was apparently for the ranking member on the Democratic side, was it not, Mr. Chairman?

Chairman Murdock. The matter about asking questions, well, no, not altogether.

Mr. Carson. I wanted to call your attention to the map on the wall there of the Colorado River Basin.

This map on the wall represents by this outline the natural drainage basin of the Colorado River system, with the one exception that down here on the California side of the river it also takes in an area which comprises the Imperial irrigation district, the Coachella Valley, the Metropolitan water district area, and the county of San Diego. That is not a natural part of the Colorado River Basin. The basin line at that point is indicated with this dotted line [indicating on map]. This map [indicating] does not show the areas in the upper basin outside of the natural drainage area of the basin from which water may be utilized.

The definition of the Colorado River compact takes into account not only the natural drainage basin but also areas upon which water from the basin might be utilized, and in that connection it is interesting to note that the natural drainage basin comprises some 240,000 square miles, of which Arizona contains 103,000 square miles; California, 4,000 square miles; Nevada, 12,000 square miles; Utah, 40,000 square miles; New Mexico, 23,000 square miles; Colorado, 39,000 square miles; and Wyoming, 19,000 square miles.

This history of the controversies concerning the Colorado River is not particularly important for the consideration of this bill, it seems to me, with some notable exceptions.

The first development, aside from a small development in the Palo Verde area was at Blythe, and the Yuma project, both in California and in Arizona was begun about 1895 by some California financiers who owned land in the Imperial Valley of California and in the Mexicali Valley of Old Mexico, and at that time they initiated the right to divert water through the old Alamo Canal through Mexico for the use of the Imperial Valley and also for the use of the Mexican land.

That contract provided that, of the water flowing through that canal, Mexico should be entitled to one-half.

The plan involved in the filing of water rights and in the operation contemplated a canal of 10,000 cubic feet per second capacity, which, if it ran all year, would be some 7,000,000 acre-feet of water, of which Mexico would be entitled to one half.

Then coming on down, the material thing, it seems to me, to this issue is this: Remember at that time, if you please, that Arizona was a territory. In the early stages of this Arizona had not acquired the status of statehood, and did not acquire that status until 1912 when the Constitution of Arizona was adopted in accordance with the enabling act of Congress passed in 1910.

In that enabling act there is a significant provision, the United States required that Arizona by its constitution agree that the United States withdraw from entry and reserve all of the power dam sites on the Colorado River across the State of Arizona with the right to withdraw and reserve the lands bordering that stream across the State of Arizona, which Arizona did by the adoption of its constitution. So that Arizona has never had the ordinary rights enjoyed by the other basin States to control or to build or operate dams and diversion works from the Colorado River.

It has always been my thought that those provisions were inserted there for the protection of the development of the Imperial Valley and the Mexican lands then owned by California financiers.

Mr. Harry Chandler, of the Los Angeles Times, testified in 1924 before this committee that at that time he and his associates owned 833,000 acres of land in Mexico immediately below the border, of which some 600,000 acres were irrigable from the water of the Colorado River.

Now, keep that in mind, if you please. The canal right gave them the right, assuming continuous flow, to the use of 3,500,000 acre-feet in Mexico. This 600,000 acres of land had a diversion right, assuming 5 acrefeet per acre, which would make 3,000,000 acre-feet of water of the Colorado River going to Mexico, and the restrictions placed upon Arizona at the time of its admittance as a State and in the constitution assured those people, I assume, or, at least, they thought it did,

that Arizona could not divert water from the main stream of the Colorado River without the consent of Congress.

Well, Arizona became a State in 1912.

The next point I want to go to is the Colorado River compact that was signed at Santa Fe, N. Mex. in 1922. It was not ratified by Arizona, nor by the other States so as to make it effective until June, or approximately June 1929.

At that conference attempts were first made to divide the water between the States, and no agreement could be reached. Finally an agreement was reached dividing the water between the upper basin and the lower basin at Lee Ferry. They did not undertake to divide at that time all of the water of the stream because at that time it was calculated that the average annual flow was greatly in excess of the 15,000,000 acre-feet that was divided, 7,500,000 acre-feet to the Upper Basin, and 7,500,000 acre-feet to the lower basin.

Mr. Phillips. That was in 1929?

Mr. Carson. 1922 was when the compact was written.

At that conference, Arizona's representative, Mr. W. S. Norviel, was concerned because the over-all definition of the Colorado River system, as contained in the compact, did include and does now include the Gila River and its tributaries in Arizona which enter the river at Yuma below a point where they can ever be used again in the United States, and which were at that time wholly appropriated. So, Mr. Norviel refused to affix his signature to that compact until the provisions were written into the compact that are in article 3 (b) of the compact, which were added after this first draft had been completed and accepted by all the other States. I will read article 3 (b) for the record:

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 1,000,000 acre-feet per annum.

Which was then the estimated use then being made of the Gila River. He would not sign it then until there was an oral understanding, not binding but an oral understanding and agreement between the States of California, Arizona, and Nevada, and accepted by all of the people attending that conference, that when that conference adjourned they would undertake to write out a tri-State compact between Arizona, California, and Nevada apportioning the water allocated to the lower basin, and in that compact or contemplated tri-State compact, provide that the exclusive beneficial consumptive use of the water of the Gila River should go to Arizona.

At this point I would like to insert in the record a letter and a picture, a letter from Mr. Herbert Hoover, who was chairman of that conference to Mr. W. S. Norviel, and a picture of Mr. Hoover also sent to Mr. Norviel, the picture carrying this notation. "W. S. Norviel, from Herbert Hoover—in tribute to a million acre-feet and a fine associate." The letter reads:

DEPARTMENT OF COMMERCE
OFFICE OF THE SECRETARY
WASHINGTON
Los Angeles, Calif., November 26, 1922.

Mr. W. S. NORVIEL, State Engineer, Phoenix, Ariz.

My Dear Norviel: This is just by way of registering again my feelings of admiration for the best fighter on the commission. Arizona should erect a monument to you and entitle it "One million acre-feet."

I am sending you herewith a photograph which does not purport to be a likeness but it is a better-looking fellow than the one you have, and I send it as an excuse for writing this letter expressing my personal appreciation of this fine association which we have had.

Faithfully yours,

HERBERT HOOVER.

Mr. Rockwell. What is the date of that? Mr. Carson. November 26, 1922. The compact was signed in Santa Fe, N. Mex., November 24, 1922. Mr. Rockwell. I thought you said something about the fact that it was not signed until 1929?

Mr. Carson. The compact was signed at Santa Fe, N. Mex., November 22, 1922. It required ratification by the various States and the Congress before it could become effective, which was not brought about until 1929.

Then I should also like to put in the record the testimony of Gov. Thomas E. Campbell, who was then Governor of Arizona and in attendance upon this Santa Fe conference, given before the Colorado River Commission of Arizona in 1933 or 1934; I think it was 1933.

Mr. Phillips. What is the document from which you are reading?

Mr. Carson. I am reading from a brief that I prepared in 1934 for submission to the Secretary of the Interior, but which was not in fact filed with the Secretary.

Chairman Murdock. But this is testimony of Gov. Thomas Campbell.

Mr. Carson. Yes, sir; Gov. Thomas E. Campbell [reading]:

TESTIMONY OF GOV. THOMAS E. CAMPBELL GIVEN BEFORE
THE ARIZONA-COLORADO RIVER COMMISSION

- Q. Were you present at the time of the execution of the Colorado River compact, at Santa Fe, N. Mex., on November 24, 1922—A. Yes; I was present.
- Q. At that time what was your official position in the State of Arizona?—A. I was governor of the State of Arizona for the years 1919, 1920, 1921, and 1922; and was governor of the State of Arizona at the time of the conference at Santa Fe, and at the time the Colorado River compact was signed.
- Q. Were you present at Bishop's Lodge, near Santa Fe, N. Mex., during the negotiations and discussions leading up to the agreement that was signed at that time respecting the waters of the Colorado River?— A. Yes; I was.
- Q. Had you appointed Mr. W. S. Norviel as the representative of the State of Arizona at that conference?

- A. No; I did not appoint Mr. Norviel as the representative of the State of Arizona. That was taken care of by the fact that the Enabling Act, which provided for a meeting of the representatives of the several Colorado River Basin States, designated the water commissioners of the several States as representatives at the conference. I had appointed Mr. Norviel as the water commissioner of Arizona, and during that year—1922—he was the qualified water commissioner, so that when the act was passed by the United States Congress, providing for the meeting of the representatives of the several States, he automatically became the representative from Arizona.
- Q. Do you recall who were present at the time of the Colorado River conference at Santa Fe during the fall of 1922?—A. Yes; I recall many of the persons who were there. The United States was represented by Herbert Hoover, who acted as chairman. He had been previously selected at a meeting in Washington. California was represented by W. F. McClure, who has since died; Colorado was represented by Delph E. Carpenter; Nevada by J. G. Scrugham; New Mexico by Stephen B. Davis, Jr.; Utah by R. E. Caldwell; Wyoming by Frank C. Emerson, who afterward became governor of Wyoming and has since died; and Arizona was represented by W. S. Norviel. The Reclamation Service was represented by Arthur P. Davis, and several advisers. Judge Richard E. Sloan was present in a legal capacity on behalf of Arizona besides Mr. Norviel and myself. California had many representatives, from the Imperial Valley and other places.
- Q. How was the conference organized?—A. Mr. Hoover acted as chairman; he had tendered the services of Clarence C. Stetson, of Maine, as secretary of the conference, and Mr. Stetson acted as secretary. The proceedings were taken down in shorthand, and I presume were transcribed, although I have never seen a copy.
- Q. The Enabling Act directed that the water of the river be divided among the States. Why was this not done?—A. We found it would be impossible, because

every State at that time was claiming more water than was in the system, and early in the conference we came to the conclusion that it would not be possible to arrive at a compact which would definitely allot to each State any definite amount of water.

- Q. As the conference progressed, did you come to a solution of this question of division of the water?—A. Yes; we finally concluded a compact could be arrived at by dividing the water among the States represented by groups.
- Q. Then what was done?—A. It was the consensus of opinion, and agreed to, that the States be separated into two divisions, known as the upper basin and the lower basin. The upper basin was to include the States of Colorado, Utah, New Mexico, and Wyoming, and those comprising the lower basin were Arizona, California, and Nevada. It was further agreed that Lee Ferry would be a division point between the two basins and that would be the point considered for a division of the water-Lee Ferry and not at the so-called dam site. The division was to be 50-50 as to the amount of water, 71/2 million acre-feet to the upper basin and 71/2 million acre-feet to the lower basin. When the question of the system was presented to the Arizona delegates, composed of the State water commissioner, Judge Sloan and myself, we objected vigorously to the inclusion of the waters of the Gila River, inasmuch as that water had been placed to beneficial use and would be of no value for storage at any place in the river for the lower basin States. After 2 days of discussions, mainly informal, it was finally agreed by the other participants in the compact that there would be allowed an extra million acre-feet, which was approximately the amount run off in the Gila system, to be used by Arizona to its exhaustion.
- Q. What attitude did the commissioner or the representatives from Arizona take toward the compact as written, and before the arrangement was made as to the million acre-feet—did you refuse to sign the compact because of the inclusion of the waters of the Gila

River?—A. Absolutely we did. That was the reason why section 3B was put into the compact.

- Q. Was anything said about designating this million acre-feet for Arizona?—A. Yes, that was discussed, and it was concluded that we could not tag that as belonging to Arizona because the plan on which we proceeded was that the waters be divided among the basins and no particular water would be allowed to any one State. If we attempted to tag it, then every other State would demand that it get a certain amount of water.
- Q. Was there any agreement between the Arizona representative and the representatives of the other lower basin States as to setting aside to Arizona the water described in paragraph 3B of the proposed compact?—A. Yes, there was a definite understanding that after the seven-State compact was ratified, so far as the three States in the lower basin were concerned, they would enter into a compact in which it would be agreed that all of the water of the Gila River would go to Arizona.
- Q. Who were present at the discussions which resulted in that understanding?—A. Mr. McClure, of California; Mr. Scrugham and Mr. Squires, of Nevada; and Mr. Norviel and myself, of Arizona.
- Q. Did these discussions take place before the execution of the compact on November 24, 1922?—A. That understanding was arrived at before the compact was ratified and signed.
- Q. For what purpose was the water of the Gila River to go to the State of Arizona?—A. For the benefit of Arizona and for use in irrigation.
- Q. At the time the discussions were had with reference to putting this paragraph 3B into the compact, did all of the delegates to the conference know that Arizona had objected to the compact without such a provision?—A. Absolutely; they all knew that was the fact; it was the lock upon which we had stuck for a couple of days, and discussions were had by all of the delegates and commissioners. I assume these discussions would appear in a transcript of the minutes; the fact was well

known and discussed by everybody present. Without that provision of 3B, by which Arizona was awarded an extra million acre-feet of water for the inclusion of the water of the Gila River, the compact would never have been signed by Arizona.

- Q. Then after the arrangement was made for the inclusion of paragraph 3B in the compact, it met with the approval of Arizona, and Mr. Norviel signed the compact for Arizona?—A. He did.
- Q. Why was it that this understanding for the tri-State compact between California, Nevada, and Arizona, was not carried out?—A. The new administration in the State of Arizona was opposed to any compact and never went ahead.
- Q. Who was the Governor-elect of Arizona?—A. Gov. George W. P. Hunt defeated me in the November election of 1922, and with my going out of office, the continuity of the negotiations with respect to the carrying out of the compact were blocked and no progress was thereafter made.
- Q. Have you ever discussed this question of the Colorado River compact and the provision of this paragraph 3B since that time?—A. No, I have never been in court, or before any official body to present my knowledge of the understanding that was arrived at at that time. I have always been anxious to tell what took place at the conference and why the compact was drawn in the way that it was.

(End of testimony.)

I also have the testimony of Mr. W. S. Norviel and of Mr. C. C. Lewis, who attended that conference, to the same effect, but I think it unnecessary at this time to encumber the record with it.

Chairman Murdock. May we see the picture in that little pamphlet? You had a picture there that I am interested in.

Mr. Carson. I will be glad if you will tear the picture out of this book and put it in the record, and also the letter and the other statements by the other men also.*

^{*} The picture of Mr. Herbert Hoover is omitted from this appendix and is used as a separate appendix.

Chairman Murdock. I will pass this picture along to the committee. Some of you will recognize quite a change in Mr. Herbert Hoover of 1922—this picture may have been taken before 1922—and the elder statesman of today. I think this is material evidence that goes to show just what took place.

Without objection, we will include the testimony of Mr. Norviel and Mr. Lewis.

Mr. Carson. The testimony is in this brief, and it is to the same effect as that of Governor Campbell.

Chairman Murdock. It was testimony given before the same board as Governor Campbell's testimony?

Mr. Carson. Yes.

(The matter referred to is as follows:)

TESTIMONY OF MR. W. S. NORVIEL GIVEN BEFORE THE ARIZONA-COLORADO RIVER COMMISSION

- Q. State your name, residence, and profession.—A. W. S. Norviel, Phoenix, Ariz., attorney at law.
- Q. How long have you been a practicing lawyer in Arizona?—A. Since 1916, except two short periods.
 - Q. Are you still active in the practice?—A. Yes.
- Q. In 1922, what, if any, was your official position in Arizona?—A. State water commissioner.
- Q. By reason of your being water commissioner, were you designated as a commissioner under the Federal enabling act respecting the division of the waters of the Colorado River?—A. Yes.
- Q. Did the State water commissioners of the State of Arizona, California, Nevada, New Mexico, Wyoming, Utah, and Colorado meet pursuant to the provisions of the enabling act?—A. Yes. That is, those having charge of public waters, mostly called State engineers, met.
 - Q. Where did you first meet?—A. Washington.
- Q. Who was elected chairman?—A. Herbert Hoover, then Secretary of Commerce.
- Q. Was Mr. Hoover designated by the Federal authorities as the United States representative?—A. Yes.

- Q. Who was the secretary of the conference?—A. Clarence C. Stetson was made executive secretary.
- Q. How long did the meeting at Washington last?

 —A. Four or five days.
- Q. What matters were discussed at Washington?—A. It was the first coming together of the commissioners. After the organization, the representatives were called upon to express ideas as to the proper procedure to accomplish the purpose of the congressional act and the acts of the several State legislatures. I presented a written proposed compact, and discussion then followed upon it.
- Q. Did the question first come up at the Washington conference of dividing the waters, not among the States, but between two groups of States, namely, the upper basin and the lower basin?—A. At the Washington meeting we discussed the division of the waters among the several States, but it immediately was apparent that there never could be an accord as to the proper allocation to each State.
- Q. Before the conference broke up at Washington in January 1922 did you accomplish anything definite with respect to an agreement on the division of the waters?—A. No. The commissioners were without sufficient information and were unwilling to be bound to anything definite, save procedure.
- Q. After the Washington meeting in January 1922, when did you next meet?—A. Public hearings were held in various cities of the interested States.
- Q. Did the conference convene in Santa Fe, N. Mex., in November 1922?—A. Yes.
- Q. Was the meeting in Santa Fe, N. Mex., in November 1922, a continuation of the Washington meeting, with the same persons present and the same States represented?—A. Yes.
 - Q. Was Mr. Hoover present?—A. Yes.
- Q. Did Mr. Hoover preside as chairman and did Mr. Stetson serve as secretary?—A. Yes. At all the meetings.

- Q. Were the minutes of that meeting taken down stenographically?—A. Yes.
 - Q. Have you a copy of those minutes?—A. No.
- Q. Have you ever seen a transcript of the stenographic record?—A. No.
- Q. Did you at that meeting agree to divide the waters of the Colorado River between two groups of States, designated as the upper and lower basins?—A. Yes.
- Q. Why was that done, rather than divide the waters among the several States, allocating to each State a definite amount?—A. It was agreed that insurmountable difficulties would block any effort to allocate to the several States a definite portion of the water. The general consensus being often expressed that nothing should be granted to a single State, no State or stream particularly or otherwise favored or hindered.
- Q. In the compact that was finally signed, in paragraph (a), article II, the Colorado River system is defined, and in paragraph (b), article II, the Colorado River Basin is defined, which terms include the Gila River and its tributaries. Why was the Gila River included in the Colorado River compact?—A. The terms "Colorado River system" and "Colorado River Basin" were defined to include all the streams tributary to the Colorado River and it was deemed advisable to make no exceptions of any particular tributary. Arizona objected vigorously to the inclusion of the Gila River, but our objections were overruled.
- Q. Is it true that in November 1922 the Gila River was then in use, or had been appropriated completely?

 —A. Yes.
- Q. Is it not a fact that the Gila River enters the Colorado River below the point where all interested parties contemplated the dam would be built?—A. Yes.
- Q. At the November 1922 conference, what was the consensus of opinion as to where the first dam would be built in the River?—A. It was the general opinion that such dam would be located in Boulder Canyon.

- Q. Was this point not above the point where the Gila River enters the Colorado River?—A. Yes.
- Q. Could any States benefit by the fact that the Gila was included in the Colorado River system?—A. No. Its waters enter the main stream of the Colorado at a point which prevents the use of the Gila waters within the United States.
- Q. Were those matters discussed at this meeting?—A. Yes. It was my contention that only Arizona could use or had a right to Gila waters.
- Q. Did you point out that the definition "Colorado River system" included the Gila River system in the division of the waters?—A. I raised the question and demanded the Gila be specifically excluded.
- Q. What position did you take on the inclusion of the Gila River in the compact?—A. That it be excluded entirely from the discussion. Later we compromised when the conference granted an extra million acre-feet to Arizona. This extra million acre-feet was intended for the sole use of Arizona to compensate for the inclusion of the Gila River as part of the Colorado River system. Following the predetermined plan of allocating no water to any particular State, but to groups or basins only, the provision for this extra million acrefeet was couched in language as used elsewhere in the compact; that is, it read to the lower basin, rather than to Arizona, but it was definitely understood that this additional water was for the exclusive use of Arizona.
- Q. Was the draft of the compact prepared and submitted to the conference before it was finally signed up?—A. Yes.
- Q. After the compact was submitted, how many days elapsed before it was actually signed?—A. Some 4 or 5 days elapsed, during which time we were attempting to dispose of this Gila River matter.
- Q. At the time the draft was submitted, and you testify that it was several days before it was signed, did that draft include paragraph (b) of article III, of the Colorado River compact?—A. No. The draft merely included the Gila as part of the Colorado River system. It did not contain the provision now known as

- III (b) which made provision for the allocation of the extra million acre-feet to the lower basin.
- Q. Do you have the copy of the proposed contract which did not contain the provision with reference to the million acre-feet, to which you have referred?—A. Yes.
- Q. Is this the original copy that you had at the meeting in Santa Fe?—A. Yes; except that there are some notes that I made in this copy at or during the meeting November 22, or in the succeeding days.
- Q. I hand you a document and ask you if that is the original.—A. Yes. It is.
- Q. It shows the date of November 18, 1922. Is that the date that you first received it.—A. It would indicate that it was first handed in at that time, and we then began the discussion.
- Q. You refused to sign that draft of the compact?—A. Yes.
- Q. Why?—A. Because it included the Gila River and made no provision for compensation to Arizona.
- Q. You had that draft before you, and you declared Arizona's position before the Conference?—A. Yes.
- Q. After that a new compact was prepared which did contain a provision for compensation to Arizona, known as paragraph (b) of article III?—A. Yes.
- Q. That compact was consented to by you and executed on November 24, 1922?—A. Yes.
- Q. Who prepared paragraph (b) of article III of the Colorado River compact as signed?—A. Judge Sloan and Stephen B. Davis, and one other whom I do not recall.
- Q. What discussion was had relating to the said paragraph (b) of article III and its meaning and purpose?—A. I had steadfastly refused to agree to the original draft that merely included the Gila River and after several days of discussion and argument, during which the conference refused to exclude the Gila and I refused to accept the draft which included the Gila, a compromise was reached in the form of article III (b) which provided the extra million acre-feet to compen-

sate Arizona for the inclusion of the Gila River in the Colorado River system. It was fully understood by all that this million acre-feet was for the sole and exclusive use of Arizona, although the language used provided for its use by the lower basin. I have explained why such wording was used.

- Q. Was the answer that you have given of the meaning and purpose discussed at the full meeting of all the delegates at this conference, including California and Nevada?—A. Yes. All the delegates, including California and Nevada, understood and agreed that this additional water was for Arizona's use.
- Q. Will you state if you made any statement to the Colorado River Commission with reference to the definition given to the Colorado River system and the Colorado River Basin, and the meaning of paragraph (b), article III?—A. Yes. I did make a statement. I asked the conference if it was the understanding of the Commission that the million acre-feet of water set out in article III (b) was for the sole and exclusive use of Arizona and stated that if that was the understanding I would sign the compact, if it was not the understanding I would refuse to sign. The unanimous reply was that this million acre-feet was for Arizona alone. With that understanding I signed the compact for Arizona.
- Q. Were these statements which you made stated to the open conference?—A. All delegates and representatives were present. We were having a final meeting preparatory to the signing of the compact.
- Q. What response did delegates from the other States, including California and Nevada, make in regard to your statements?—A. They agreed in the understanding which I have just stated. Mr. McClure, of California, stated to me and to the conference that he, as the California representative at the conference agreed to the understanding that this water of article III (b) was for the exclusive use of Arizona.
- Q. What response did Mr. Hoover make?—A. Mr. Hoover did not take part in the discussion, did not state his views on any part, as I remember. He urged us to

agree, and sometimes referred us to a former agreement, or purported agreement.

- Q. Was there any statement made at that time contrary to the explanations that had been given as to the meaning and intent of paragraph (b) article III of the compact?—A. None whatever; there was a full accord and agreement by all delegates.
- Q. At that time, what, if anything, was said in reference to a tri-State agreement between the representatives of California and Nevada and Arizona and Mr. Hoover?—A. It was several times suggested that there should be no difficulty for the three lower States to agree to a division of the waters allocated to the lower basin.
- Q. Were these statements, with reference to a tri-State agreement, made prior to the time the compact was actually signed?—A. Yes, and Mr. Squires made some statements afterward. Mr. McClure, Mr. Scrugham, and Mr. Squires expressed their willingness to enter into such a compact. It seemed very feasible.
- Q. Did each and every one signing the Colorado River Compact know of the discussion with reference to the supplemental tri-State compact to be executed by California, Nevada, and Arizona?—A. Yes. It had been discussed in the open conference and Mr. Hoover made several suggestions regarding such a tri-State compact.
- Q. Was there ever any statement made by anyone at the conference that the waters of the Gila River were to go to anybody except the State of Arizona?—A. None whatever.
- Q. Was any claim ever made at that time that any other State had any interest in the waters of the Gila River?—A. No.
- Q. Was there a universal agreement by each and every one of the delegates that the Gila River belonged to the State of Arizona?—A. That was the agreement upon which I consented to sign the compact for Arizona.

- Q. In addition to the waters of the Gila River, was Arizona to participate in the division of the waters in the main stream of the Colorado River?—A. Yes. Arizona was to share in the main stream waters.
- Q. Were these matters discussed at the time of the conference?—A. Yes. To the extent that Arizona, Nevada, and California were to all share in the main stream waters and Arizona was to have the exclusive use of the waters of the Gila.
- Q. Did you make any statement that if the Colorado River had any different meaning from what you have testified, you would not sign the compact ?—A. I stated that I would absolutely refuse to sign the compact if it had any other meaning.
- Q. Did the representatives of the other States and the chairman agree to your statement?—A. Yes. All, including California and Nevada, agreed.

TESTIMONY OF MR. C. C. LEWIS GIVEN BEFORE THE ARIZONA-COLORADO RIVER COMMISSION

- Q. State your name, residence, and profession.—A. C. C. Lewis, Phoenix, Ariz., statistician.
- Q. How long have you been in Arizona?—A. Twenty-four years.
- Q. In 1922, what, if any, was your official position in Arizona?—A. Assistant State water commission. (sic)
- Q. By reason of your being deputy water commissioner, did you attend the meetings held under the Federal Enabling Act, respecting the division of the waters of the Colorado River?—A. Yes; except the first meeting held at Washington, D. C.
- Q. Did the conference convene in Santa Fe, N. Mex., in November 1922?—A. Yes.
- Q. Was the meeting in Santa Fe, N. Mex., in November 1922 a continuation of the Washington meeting, with the same persons present and the same States represented?—A. Yes; as I recall it, the same persons were representatives.
 - Q. Was Mr. Hoover present?—A. Yes.

- Q. Did Mr. Hoover preside as chairman and did Mr. Stassen (sic) serve as secretary?—A. Yes.
- Q. Were the minutes of that meeting taken down stenographically?—A. Yes.
 - Q. Have you a copy of those minutes ?—A. No.
- Q. Have you ever seen a transcript of the stenographic record?—A. No.
- Q. Did you at that meeting agree to divide the waters of the Colorado River between two groups of States, designated as the upper and lower basins?—A. Mr. Norviel, Arizona State water commissioner, did.
- Q. Why was that done, rather than divide the waters among the several States, allocating to each State a definite amount?—A. Because of the impossibility of ever agreeing on an apportionment among the seven States. It was not practical. Further, there was a point provided by nature for the division line between the upper and lower basins.
- Q. In the compact that was finally signed, in paragraph (a), article II, the Colorado River system is defined, and in paragraph (b), article II, the Colorado River Basin is defined, which terms include the Gila River and its tributaries. Why was the Gila River included in the Colorado River compact?—A. The Gila River was included, because it was determined that the drainage area should include all tributaries of the Colorado River in all of the seven States, and that it was inadvisable to make any exceptions. Arizona objected to the inclusion of the Gila River because of the fact the waters could be applied to beneficial use only by Arizona.
- Q. Is it true that in November 1922 the Gila River was then in use, or had been appropriated completely?—A. Yes. That which was not being used had been appropriated.
- Q. Is it not a fact that the Gila River enters the Colorado River below the point where all interested parties contemplated the (dam) would be built?—A. Yes.
- Q. At the November 1922 conference, what was the consensus of opinion as to where the first dam would be built in the river?—A. Boulder Canyon.

- Q. Was this point not above the point where the Gila River enters the Colorado River?—A. Yes.
- Q. Could any States benefit by the fact that the Gila was included in the Colorado River system?—A. Not by the use of the Gila waters because the Gila enters at a point that would prevent the use of same in the United States.
- Q. Were those matters discussed at this meeting?—A. Yes. It was contended that Arizona only could use the Gila waters, and it being entirely appropriated, it should be excluded.
- Q. Did Mr. Norviel point out that the definition "Colorado River system" included the Gila River system in the division of the waters?—A. Yes. On this point he was firm.
- Q. What position did Mr. Norviel and the Arizona delegation take on the inclusion of the Gila River in the compact?—A. That it should be excluded and did not yield until a million acre-feet additional was granted the lower basin States with a definite understanding by all that this additional million acre-feet was for Arizona's use and not to be considered in the final apportionment of the Colorado River water.
- Q. Was the draft of the compact prepared and submitted to the conference before it was finally signed up?—A. Yes.
- Q. After the compact was submitted, how many days elapsed before it was actually signed?—A. I do not remember, but a few days on account of Gila River matters.
- Q. At the time the draft was submitted, and you testify that it was several days before it was signed, did that draft include paragraph (b) of article III, of the Colorado River compact?—A. No.
- Q. Did you see the copy of the proposed contract which did not contain the provision with reference to the million acre-feet, to which you have referred?—A. Yes.
- Q. This instrument which I hand you. Is this the original copy which you and Mr. Norviel had at the meeting at Santa Fe?—A. Yes.

- Q. It shows the date of November 18, 1922. Is that the date that you first received it?—A. I could not say, but it seems the date thereon would so indicate.
- Q. Mr. Norviel refused to sign that draft of the compact?—A. Yes.
- Q. Why?—A. Because of the inclusion of the Gila River.
- Q. This draft was before the Arizona delegation and Arizona's position was made known to the conference?—A. Yes. It was contended that the Gila River water was not only all appropriated, but if it were never appropriated no other State could possibly use it because of the physical situation obtaining.
- Q. After that a new compact was prepared which did contain a provision for compensation to Arizona known as paragraph (b) of article III?—A. Yes.
- Q. That compact was consented to by Mr. Norviel and the Arizona delegation and executed on November 24, 1922?—A. Yes.
- Q. Who prepared paragraph (b) of article III of the Colorado River compact as signed?—A. Judge Sloan, Judge S. B. Davis, and Frank C. Emerson.
- Q. What discussion was had relating to the said paragraph (b) of article III and its meaning and purpose?—A. Due to Mr. Norviel's firm refusal to sign the compact with the Gila River included there were several days' delay and the final result was paragraph (b) of article III, with the definite understanding that this million acre-feet belonged to Arizona in compensation for inclusion of the Gila River in the Colorado River system.
- Q. Was the answer that you have given of the meaning and purpose discussed at the full meeting of all the delegates at this conference, including California and Nevada?—A. Yes.
- Q. Will you state if Mr. Norviel and the Arizona delegation made any statement to the Colorado River Commission with reference to the definition given to the Colorado River system and the Colorado River Basin, and the meaning of paragraph (b), article III?—A. Yes. Mr. Norviel made it very clear that he

would sign the final draft of the compact only on the full and complete understanding by all that the additional million acre-feet was for the use of Arizona alone. To this Mr. McClure, representing California, agreed and all others joined in and agreed to this understanding.

- Q. Were these statements made to the open conference?—A. Yes.
- Q. What response did delegates from the other States, including California and Nevada, make in regard to these statements?—A. They all agreed, Mr. McClure making a statement to this effect, all others agreeing, including Nevada.

APPENDIX No. 3

EXCERPT FROM "HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON PUBLIC LANDS, UNITED STATES SENATE, EIGHTIETH CONGRESS, FIRST SESSION, ON S. 1175, A BILL AUTHORIZING THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF A DAM AND INCIDENTAL WORKS IN THE MAIN STREAM OF THE COLORADO RIVER AT BRIDGE CANYON, TOGETHER WITH CERTAIN APPURTENANT DAMS AND CANALS AND FOR OTHER PURPOSES, JUNE 23, 24, 25, 26, 27, 28, 30, AND JULY 1, 2, AND 3, 1947."



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APPENDIX No. 4

EXCERPTS FROM "HEARINGS BEFORE A SUBCOMMITTEE OF THE COMMITTEE OF PUBLIC LANDS, UNITED STATES SENATE, EIGHTIETH CONGRESS, FIRST SESSION, ON S. 1175, A BILL AUTHORIZING THE CONSTRUCTION, OPERATION, AND MAIN-TENANCE OF A DAM AND INCIDENTAL WORKS IN THE MAIN STREAM OF THE COLORADO RIVER AT BRIDGE CANYON TOGETHER WITH CERTAIN APPURTE-NANT DAMS AND CANALS AND FOR OTHER PURPOSES, JUNE 23, 24, 25, 26, 27, 28, 30, AND JULY 1, 2, AND 3, 1947."

STATEMENT OF RALPH I. MEEKER, IRRIGATION ENGINEER

Senator McFarland. Mr. Meeker, will you come forward?

Senator MILLIKIN. Mr. Meeker, will you state your full name, your residence, and your business.

Mr. Meeker. My name is Ralph I. Meeker, irrigation engineer, Phoenix, Ariz.

Employment by the State of Arizona on cooperative investigations with the United States Bureau of Reclamation water resources of Arizona, Phoenix office, 1945 to 1947.

Senator McFarland. Mr. Meeker, would you mind stating your qualifications? I mean as an engineer, in particular your experience as an engineer. I believe you have that in your statement, though.

Mr. MEEKER. Yes. That follows immediately.

Prior to the Arizona work, was located in Denver, 1903 to 1945. Specialty, interstate river problems. Scope of work, engineering investigations of the Laramie, Rio Grande, La Plata, Colorado, North Platte, and Arkansas Rivers. Employed by the State of Colorado

on interstate river compacts, 1919 to 1929. In private practice as consulting engineer in Denver, 1930 to 1942. Served as chairman of the irrigation division of the American Society of Civil Engineers in 1926.

Colorado River compact: During the negotiations of the Colorado River compact at Santa Fe in November 1922, was engineering adviser for the State of Colorado; participated in the compact sessions and familiar with the background of the compact. At the request of Chairman Hoover, I assisted Mr. A. P. Davis—that was Arthur P. Davis, the director of the Reclamation Service and adviser to the Federal representative—in "reconstructing" the Colorado River flow at Lee Ferry to natural or virgin run-off conditions. It was necessary to know the total water fund to be divided.

Senator Downey. Mr. Chairman, could I secure one bit of information from Mr. Meeker?

Senator MILLIKIN. Yes.

Senator Downey. At that time that these figures were issued, was it expected that there would be 22,000,000 acre-feet of water available in the Colorado River?

Mr. Meeker. No. About 20,000,000.

Senator Downey. And that figure has presently been reduced to about 17,000,000?

Mr. Meeker. Yes; nearer 18,000,000; 17,700,000.

"Consumptive use" is an engineering term, first used in the Laramie River interstate suit, 1912-14, to deplete and "reconstruct" river flows. I served as engineer to Wyoming in the Laramie River controversy. During 1918-19 I acted as engineer for Wyoming in a cooperative investigation and report with the Bureau of Reclamation on the North Platte River, where extensive use was made of "consumptive use" to deplete and "reconstruct" the flows of the North Platte River in Colorado, Wyoming, and Nebraska. The "consumptive use" values for irrigated land were based on "valley consumptive use" (inflow minus outflow) of the Little Laramie and the Cache La Pondre (sic) Rivers in Wyoming and Colorado, respectively; also other engineering data.

During the negotiations of the Colorado River compact, the above engineering terms were used and applied to Colorado River water. The river flow at Lee Ferry was "reconstructed" to virgin conditions and depleted to 1920 conditions of irrigation development in the upper basin.

Senator MILLIKIN. Just a moment. Give me a little more enlightenment on that phrase "valley consumptive use."

Mr. Meeker. Well, we have "farm consumptive use," "project consumptive use," and "valley consumptive use." The method whereby "consumptive use" was determined, "valley consumptive use," taking the valley, the inflow up at the canyon where the river emerges from the mountain and the outflow discharging into the river, and the difference between the two representing the consumptive use.

Senator MILLIKIN. The valley consumptive use does not contemplate the separate evaluation of all the contributing streams?

Mr. Meeker. Those occur automatically.

Senator MILLIKIN. Those occur automatically.

Mr. Meeker. Any tributaries that come in below.

Senator MILLIKIN. In other words, you look to the end result in the main stream.

Mr. Meeker. Yes. There are practically no tributaries in here, they are very minor.

Senator MILLIKIN. But, if there were tributaries in a stream basin or stream valley, in the use of the term which you have mentioned you would look to the net result on the main stream. Is that the point?

Mr. Meeker. Yes. But they would be accounted for. There would be an allowance for those tributaries if there were such.

Senator MILLIKIN. Yes.

Proceed.

Mr. Meeker. The Compact Commission had in mind a depletion by the upper basin of 7,500,000 acre-feet,

and a depletion of 8,500,000 acre-feet by the lower basin of the flow of the Colorado River.

I took to the Colorado River compact meeting 10 years of knowledge on "consumptive use" values and experience on river depletion by irrigated lands.

Delivery of upper basin water to lower basin:

Under the terms of the compact, the point of delivery for upper basin water is set at Lee Ferry, 1 mile below the mouth of the Paria River (art. II (e)). Lee Ferry is therefore the point on the Colorado River where the aggregate beneficial consumptive use or depletion by irrigation uses of the upper basin is applied to river flow.

In a similar manner the depletion of the lower basin is properly measured at the United States-Mexican boundary, where delivery is made to the Republic of Mexico. Likewise, the depletion of the Gila River is properly measured at its mouth where its contribution reaches the Colorado River.

By the above procedure, the natural channel losses along the main stream of the Colorado and along the Gila are eliminated from river flow arriving at the usable water fund of the lower basin. Such channel losses—large in volume—were common to the two designated river channels prior to man-made depletion by irrigation uses.

Lower basin apportionment of 1,000,000 acre-feet per annum: Under the terms of the compact, 1,000,000 acrefeet of additional water (from the lower basin run-off) is apportioned to the lower basin, designated III (b) water. Of my own knowledge this apportionment was made as the result of demands by Arizona for water to cover irrigation consumption in the Gila River Basin, estimated as rapidly approaching 1,000,000 acre-feet per annum in 1922. This allotment for Arizona was well understood by those present during the compact negotiations. In support thereof, the following citations are offered.

I am now reading from the report and supplemental report of Delph E. Carpenter, commissioner for Colorado in Colorado River matters to the Governor of Colorado, page 4:

By reason of development upon the Gila River and the probable rapid future development incident to the necessary construction of flood works on the lower river, the lower basin is permitted to increase its development to the extent of an additional 1,000,000 acre-feet annual beneficial consumptive use before being authorized to call for a further apportionment of any of the surplus waters of the river.

I shall now read from the report of Frank C. Emerson, commissioner for the State of Wyoming in re Colorado River compact, to William B. Ross, Governor of Wyoming, January 18, 1923, page 15.

The lower basin is allowed to increase its use of water 1,000,000 acre-feet per annum in addition to the 7,500,000 acre-feet apportioned for its use by reason of possible developments upon the Gila River, and the probable rapid development generally upon the lower river. This additional development is at the peril of the lower division as no provision is made for delivery of water at Lee Ferry for this additional amount.

Senator MILLIKIN. Now, the words "and the probable development generally upon the river," does that refer to the Colorado River or the Gila Riyer?

Mr. Meeker. The Colorado River, the lower basin.

I am going to read from a citation from the Colorado River compact by Reuel Leslie Olson, September 1926, (see footnote 73, p. 39). Now, I have that here in the building bat I do not have it with me, so I will read from the text:

Mr. Bannister erroneously asserts that this paragraph was inserted because the Commissioner from Arizona "was so persistently obstinate."

You may wonder why the three Southern States have received in this compact a million more acre-feet of water than has been received by the Northern States. I have wondered about it myself but the explanation is that the Commissioner of Arizona was so persistently

obstinate, and, in the opinion of the upper States, so unreasonably obstinate, that he would not sign the compact unless he obtained an extra pound of flesh. Hence, the bonus of 1,000,000 acre-feet to the three States of the south.

I might say that L. Ward Bannister was a special representative for Colorado at compact negotiations.

The 1,000,000 acre-feet apportionment is reflected in the Boulder Canyon Project Act of December 21, 1928 (sec. 4), where the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State, undiminished (except for return flow) by any treaty that may hereafter be made with Mexico.

Senator MILLIKIN. Any questions?

Senator McFarland. Mr. Meeker, was there quite a bit of discussion about this 1,000,000 acre-feet at the compact negotiations?

Mr. Meeker. Yes. The draft compact was made without that originally and then later, after objection by Mr. Norviel, the Arizona Commissioner, it was inserted.

His position first was that the Gila River should be omitted from the compact, but that was denied on the grounds that it was a part of the Colorado River system. And then, after he felt that he couldn't get it cut out, he demanded a million acre-feet for the Gila.

Senator McFarland. Well, during this discussion was the discussion to the effect that this water was to be allotted to Arizona? Was that the effect of the discussion?

Mr. Meeker. Absolutely; to cover the water that was then being consumed in the Gila River Basin.

Senator McFarland. Was that understood by all of those present?

Mr. Meeker. Yes, sir.

Senator McFarland. Now, in your discussions what water were you talking about? Was it the surface water which reached the streams?

Mr. Meeker. Surface water only.

Senator McFarland. Surface water only.

I believe that is all, Mr. Chairman.

Senator Downey. I have a few questions, Mr. Chairman.

Mr. Meeker, you read in this statement the paragraph about which the chairman inquired:

By reason of the development upon the Gila River and the probable rapid future development incident to the necessary construction of flood works on the lower river, the lower basin is permitted to increase its development to the extent of an additional 1,000,000 acrefeet annual beneficial consumptive use before being authorized to call for a further apportionment of any surplus waters of the river.

That is a quotation from Mr. Carpenter?

Mr. Meeker. That is correct.

Senator Downey. Did you read this short paragraph that appears in his report before that paragraph, follows:

7,500,000 acre-feet, exclusive annual beneficial consumptive use in perpetuity to the upper basin and a like amount to the lower basin.

Mr. Meeker. I know there is much more material that I didn't read. I only read that which is pertinent to the Gila River.

Senator Downey. This last paragraph is in the Carpenter report antedating the part you read?

Mr. MEEKER. Certainly.

Senator Downey. Do I understand that in these two paragraphs you interpret "annual beneficial consumptive use" as not to mean the amount of beneficial use that the landowners actually have in acre-feet but the amount they deplete the river?

Mr. Meeker. Yes. It is the aggregate beneficial consumptive use or water that is "burned up," as Mr. Carpenter used to use the term, at the point on the river where the delivery is to be made. And in that sense "consumptive use" is stream depletion. You have to determine your consumptive use and apply it to the irrigated areas in the upper basin and arrive at the total and apply that as depletion.

Senator Downey. Well, as I understand you, you say it is measured at the point where the water is taken from and then when it returns to the stream.

Mr. Meeker. No. In this sense, the consumptive use values have been derived that way but the consumptive use so derived are then applied to the irrigated lands in the basin and from that the depletion fund built up and then applied at the point of delivery.

Senator Downey. Again, Mr. Meeker, I am somewhat at a loss. I have known you for a number of years by reputation. I originally came from Wyoming.

Mr. MEEKER. So I understand.

Senator Downey. I still don't clearly understand you. You gave your method of determining consumptive use in a prior answer to me which, as I understand it, I agree with. But, apparently, you would not apply that measure to diversions and returns on the Gila River.

Mr. MEEKER. No; for the reason that you have got a million acre-feet of lost water that never reached the river.

Senator Downey. Then, you don't apply that definition of consumptive use that you gave me to the Gila water.

Mr. Meeker. Oh, yes, absolutely. No preferential treatment for any stream. They are all on the same basis.

Senator Downey. Well, Mr. Meeker, you said you would measure the water at the point of diversion and then take the amount where the water returned to the stream and deducting one from the other you would have the beneficial consumptive use.

Mr. Meeker. Yes. That is the engineering procedure for determining consumptive use in various areas, say 1 acre-foot per annum or 3 acre-feet per annum, or whatever it may be.

Then, having determined that—maybe not from the area in question, maybe some nearby area, some adjacent area, then the consumptive use values are applied to the irrigated land so much water per acre-foot.

Senator Downey. Do you agree with the definition of "consumptive use" as used in the treaty with Mexico?

Mr. Meeker. Why, yes. There is no discrepancy there. There is a good deal of confusion that has gone out on this because perhaps everybody does not understand the engineering procedure in arriving at these results.

Senator Downey. Let me read the definition of "consumptive use."

Mr. Meeker. I know what it is.

Senator Downey. May I read it, please?

"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.

Do you accept that definition given in the treaty with Mexico as applicable to the lands in the Colorado River Basin in the United States?

Mr Meeker. Certainly, when you are applying that to the river flow by irrigation uses.

Senator Downey. This definition isn't applied to the main stream of the Colorado River, is it?

Mr. Meeker. Why, the definition is applied to all over the basin.

Senator Downey. Are you familiar with Mr. Tipton's explanation of the expression "consumptive use"?

Mr. Meeker. I have read it.

Senator Downey. Do you agree with that? [Reading]:

The extraordinary drought provisions of this treaty will be invoked, as I say, when these areas up in here begin to suffer deficiencies. We indicated to the Mexican negotiators that the entire basin must be considered—

I emphasize "the entire basin must be considered"—

and we put the words "consumptive use" in because it would be more practical to use it as a measure than the thousands of diversions. It is very practical to use as a measure the consumptive use, because many gaging stations are installed throughout the irrigated areas, and many more will be installed, for the purpose of determining for compact administration what the various States are consuming.

And later Mr. Tipton says it is consumptive uses, the plural—

Because we have a consumptive use on this little tributary, a consumptive use on this tributary, a consumptive use on this stream, and so forth. So we have a series of consumptive uses, and that is what we are talking about in the treaty. The amount of these consumptive uses is readily acertainable (sic) by measuring the inflow to the areas and the outflow from the areas; and when those begin to reduce, this provision can be invoked, and that is long before there can be any material depletion of storage in these various main-stream reservoirs.

Do you agree with that statement, Mr. Meeker? Mr. Meeker. I concur with that, absolutely. Senator Downey. That is all I have to ask. Mr. Meeker. Just a moment.

Senator Downey. First, you would apply that same language and that same rule set up by Mr. Tipton in his explanation of the definition of "consumptive use" in the treaty to the lands in the United States?

Mr. Meeker. Yes. And that is the reason Mr. Carpenter had selected Lee Ferry, where all the depletions would accumulate and could be measured at the point of delivery.

But I think the point that you haven't clearly in mind is that it isn't practical to measure every tributary and find out the consumptive use on every one, or every small tract of land. Therefore, the engineers have evolved the procedure of determining the consumptive use for selected areas, for thereon the inflow and outflow can be measured and a valid result secured. And that's for different climates, that is, for meadowlands—the meadowlands of Wyoming, for instance.

In the meadowlands the consumptive use is around nine-tenths to 1 acre-foot per acre per annum. That is in high altitudes where you have a short growing season and low temperatures.

You come down into the western part of Colorado, and your consumptive use may be around 1½ or 1.6 acre-feet.

You come down here into—or, rather, come down into Arizona; your consumptive use is over 3, and when you get down to Imperial Valley, it is almost 4 acrefeet per acre per annum.

So, applying your consumptive-use values to the irrigated lands, all the irrigated lands being used, different variations in acres with the different climatic conditions, you arrive at a total fund of depletion, which is then applied at the point of delivery on the river.

Senator Downey. Mr. Meeker, you use the expression "consumptive use" as being applicable to the amount of water delivered at Lees Ferry by the upper basin for the benefit of the lower basin. That is the 75,000,000 acre-feet delivered over a 10-year consecutive period?

Mr. Meeker. That is right. That is the water burned up, instead of using the headgate diversion and then finding out what the return—

Senator Downey. Mr. Meeker, haven't we an entirely different measure there? Doesn't the compact recognize it in this language—the obligation of the upper basin is to deliver physically in the river at Lees Ferry, not any amount of consumptive use or depletion or anything else, but 75,000,000 acre-feet of water physically in the river?

Mr. Meeker. Yes. But that is beneficial consumptive use. You have the beneficial consumptive use of $7\frac{1}{2}$ million acre-feet.

Senator Downey. Oh, I am not talking about that, Mr. Meeker. The compact calls for the delivery of 75,-000,000 acre-feet of water physically in the river?

Mr. Meeker. Oh, yes. Certainly.

Senator Downey. That has nothing to do with consumptive use.

Mr. Meeker. Well, pardon me; I think I was in error there in that particular statement.

Senator Downey. Well, Mr. Meeker, that was your principal reason for your interpretation. You said that Lees Ferry had been set aside because it was in the main stream to measure this 75,000,000 acre-feet in terms of consumptive use.

Mr. Meeker. That is where the depletion of the upper basin is measured, your one-half acre-feet depletion of the upper basin.

Senator Downey. Well, so far as the obligation of the upper basin is concerned, there isn't any question of depletion or of consumptive use involved. Theirs is the obligation to deliver physically in the river at Lees Ferry a physical volume of 75,000,000 acre-feet.

Mr. Meeker. Oh, yes. I assented to that. I was wrong.

Senator Downey. All right. That is all.

Senator MILLIKIN. Mr. Meeker, let us consider an abstract problem. Let us pass the rights of States to water of the main stream. Let us pass basic questions. Let us assume that the sole engineering problem were to determine the consumptive use occurring on a main stream—any main stream.

Am I correct in this—that under your theory of the proper use of the words "consumptive use" you would measure the virgin outflow of that stream at its mouth, and you would put that against the actual outflow, and the difference would represent the consumptive use on that main stream? Is that correct?

Mr. Meeker. Well, that is, in substance, what it amounts to. Yes.

Senator MILLIKIN. With that problem.

Now, if the problem were to measure the consumptive use of a tributary to that main stream, would not the procedure be exactly the same as to that tributary?

Mr. Meeker. Yes; and at the point of delivery to the parent stream.

Senator MILLIKIN. Now, then, if you take that main stream and chop it up into upper and lower-basin obligations in terms of consumptive use, is it your theory that you apply exactly the same formula under that particular problem?

Mr. Meeker. Yes, sir.

Senator Millikin. And if the problem cut itself down further into figuring out the allocations to States of consumptive use, you would allocate the results achieved in that way to the States according to whatever contract obligations might be. Is that correct?

Mr. Meeker. Yes, sir; the same procedure.

Senator MILLIKIN. Thank you.

Senator McFarland. As I understand it, then, Mr. Meeker, what would be charged, for instance, on the Green River in Wyoming, would be what Wyoming depletes the Green River at the point it empties into the Colorado River?

Mr. Meeker. Yes; if you are now speaking of the beneficial consumptive use of the upper basin at Lee Ferry.

Senator McFarland. Yes. Would that be true with the tributaries in New Mexico, the Gunnison in Colorado, and the San Juan in New Mexico?

Mr. Meeker. That is correct.

Senator McFarland. And, of course, that same rule would apply in the lower basin?

Mr. MEEKER. Yes, sir.

Senator McFarland. That is all.

Senator Downey. That is all.

Senator MILLIKIN. Thank you very much, Mr. Meeker.



Explanatory legend with map immediately following.

- Springerville
 - St. Johns
- 3. Concho & Hay Hollow
 - Silver Creek
- Woodruff 5.
- 6. Black Creek
- 7. Holbrook 8.
- Hopi, Ganado & Leupp Moenkopi 9.
- Kanab Ćreek 10.
- Havasu Creek 11. ī2.
- Hualpai & Meriwitica Grand Wash Short Creek 13.
- 14.
- 15. Littlefield
- 16. Davis Dam to Topock, including Mohave Indian Lands
- 17. Big Sandy River
- 18. Santa Maria River
- 19. Colorado River Indian Reservation
- 20. Bouse Valley & Vicinity
- North & South Gila Valleys Yuma Valley Yuma Mesa Duncan Valley 21.
- 22.
- 23.
- 24.
- 25. Alpine
- 26. San Francisco River
- 27. Eagle Creek
- 28. Portal
- 29. San Simon Creek
- 30. Safford Valley
- San Carlos Indian Reservation 31.
- 32. Hereford Valley
- 33. Middle San Pedro River
- 34. Lower San Pedro River
- 35. Coolidge Dam to Kelvin
- San Rafael Ranch 36,
- 37. Santa Cruz County
- Pima County 38.
- 39. Pinal County
- 40. Black River
- 41. Fort Apache Indian Reservation
- 42.
- Cherry Creek Salt River Canyon to Roosevelt 43.
- 44. Tonto Creek
- 45. Verde River upstream from
- 46.
- Camp Verde Middle Verde River Ft. McDowell Indian Reservation 47.
- 48. Upper Agua Fria River
- 49. Maricopa County upstream from Gillespie Dam
- 50. Gillespie Dam to Dome

APPENDIX No. 6

EXCERPTS FROM TESTIMONY OF THE HON-ORABLE CARL HAYDEN, UNITED STATES SENATOR FROM ARIZONA, AS APPEARING IN "HEARINGS BEFORE THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, UNITED STATES SENATE, EIGHTY-FIRST CONGRESS, FIRST SESSION, ON S. 75, A BILL AUTHORIZING THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF A DAM AND INCIDENTAL WORKS IN THE MAIN STREAM OF THE COLORADO RIVER AT BRIDGE CANYON, TOGETHER WITH CERTAIN APPURTENANT DAMS AND CANALS, AND OTHER PURPOSES, AND S. J. RES. 4, A JOINT RESOLUTION GRANT-THE CONSENT OF CONGRESS JOINDER OF THE UNITED STATES SUIT IN THE U.S. SUPREME COURT FOR ADJUDICATION OF CLAIMS TO WATERS OF THE COLORADO RIVER SYSTEM, MARCH 21, 22, 23, 24, 26, 28, 29, 30, AND 31, APRIL 2, 9, 11, 12, 13, 14, 26, 27, 28, AND 30, AND MAY 2, 1949."

Senator Hayden. My contention is, and I think it is as clear as a bell from the record, that Arizona is entitled to 2,800,000 acre-feet of water out of the main stream of the Colorado River, out of the 7,500,000 acre-feet apportioned to the lower basin. I know how those figures came about. I was here in Congress at the time.

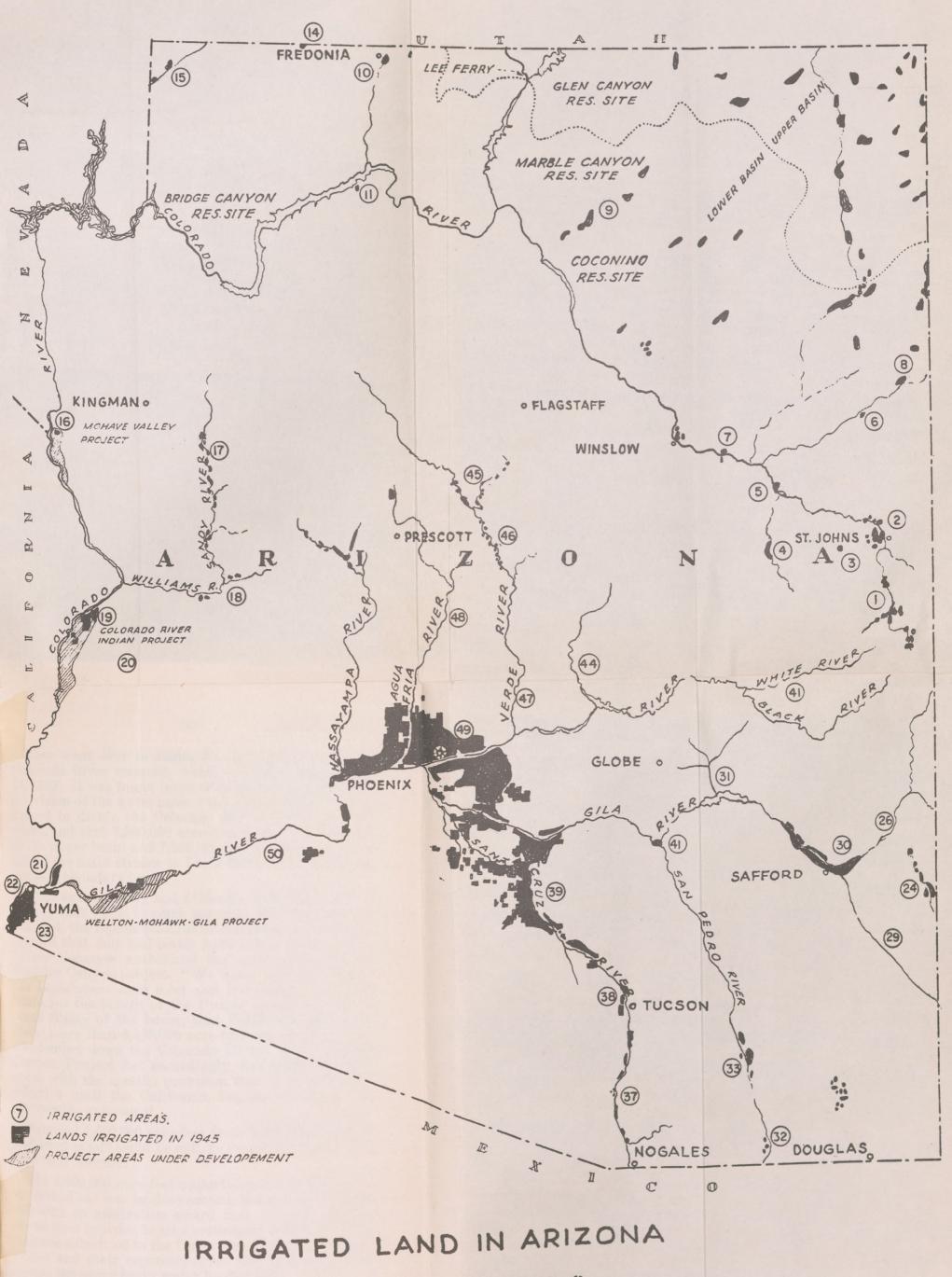
What happened historically was that the Colorado River, combined with floods from the Gila, broke over into the Imperial Valley and drowned out a lot of valuable agricultural land. All of the river ran into the Salton Sea for a while. To adequately protect people of the Imperial Valley it was necessary to go up

somewhere along the river and build a great dam to control the floods, and the Boulder Canyon site was selected.

To build the Boulder Canyon Dam required an authorizing act by Congress. The states of the upper basin looking the situation over, said, "Before any dam is built on the Colorado River we must have an understanding about how the waters of that river are going to be divided. We want to know what water will be left for us, because California is lower down, has lands that are level and more susceptible of irrigation, and if nothing is done about dividing the water, they will put it to beneficial use; and once land is irrigated in California we never could take the water away from them. Whatever the future situation may be, it will not be possible to turn existing irrigated farms back into the desert."

It was the upper basin States which insisted that there should be a Colorado River compact. It was at their request that Congress, in the act of August 19, 1921, authorized the making of a compact among the basin States for the apportionment of the water of the Colorado River. The act was conditioned upon the appointment of, and participation in the compact sessions by, a representative of the Federal Government. Herbert Hoover, who was then Secretary of Commerce, was persuaded to be the Federal representative because everyone wanted an engineer of standing and national reputation to be at the head of the Commission.

The commissioners from the seven States negotiated all summer and did not get anywhere. I remember talking to Mr. Hoover one day about it, and he said they just could not agree on anything at all. I said, "What you say is due to your political inexperience; there is an election coming on this fall, and it does not make any difference what a State official should now agree, because his opponent is going to say that he has traded away the heritage of his people. But if you will just wait until after the election and then get the State commissioners together, they will write a compact." And that is exactly what they did.



9 19 30 80 40 50 SCALE OF MILES They went over to Santa Fe and agreed upon the Colorado River compact, which was signed November 24, 1922. It was found impossible at that time to make a division of the water among the seven States; so they agreed to divide the Colorado River Basin into two parts, and that 7,500,000 acre-feet should be allocated to the upper basin and 7,500,000 feet to the lower basin out of the main stream at Lee's Ferry near the Utah-Arizona boundary line.

Then again, having had difficulty with California in getting that State to come together with them on the compact, the representatives of the upper basin States decided that they had better have a further assurance before Congress authorized the construction of the Boulder Canyon project. "We insist that the California Legislature shall meet and irrevocably bind that State for the benefit of the United States and all the other States of the basin; that California will never claim more than 4,400,000 acre-feet out of that 7,500,000 coming down the Colorado River." The Boulder Canyon Project Act accordingly was passed by Congress with the specific provision that it would not be effective until the California Legislature made that irrevocable agreement.

Subtract 4,400,000 acre-feet from 7,500,000 acre-feet, and what is left could go only to two other States, Arizona and Nevada.

The 4,400,000 acre-feet apportionment to California as worked out was in close accord, but not quite identical, with an arbitration award that Arizona accepted at one time in order to get a settlement with California. Arizona submitted to the Governors of the upper basin States and their representatives this question: How should the lower basin water be divided?

The governors came back with a finding that Arizona should get 3,000,000 acre-feet, California 4,200,000, and Nevada 300,000. When the time came to write the Boulder Canyon Project Act, California took another 200,000 acre-feet. That is how it gets up to 4,400,000. I remember the argument made to us during consideration of that act: "Arizona has been allocated under

the governors' arbitration 3,000,000 acre-feet; your State is losing less than 10 percent of that amount of water and you had better go along," and that is the way it was done.

Unfortunately, the State of Arizona failed promptly to ratify the Colorado River compact. We then had a group of folks in Arizona who were perfect fanatics about Colorado River water. They would look at a map of the State, see a level place on it somewhere, figure up the number of irrigable acres, and insist that there were millions of acres of desert land in Arizona that could be irrigated. We had one gentleman, Mr. George H. Maxwell, who even argued that, based upon the doctrine of riparian rights, the State of Arizona had the right to have the Colorado River come down its northern border with an undiminished flow.

Approval of the Colorado River compact got mixed up into politics because the defeated Governor of Arizona went over to Santa Fe when the compact was signed, and came back saying that it was a wonderful document. The Governor who had defeated him a few weeks before in the State election, of course, did not like that. So when it came to the ratification of the compact much trouble developed in the Arizona Legislature.

In an effort to straighten out that situation, I addressed a long series of questions to Mr. Hoover as to what the compact meant. All of the questions were asked in order to satisfy people in Arizona who were alleging that somehow or other our State was going to suffer great injury if we ratified the Colorado River compact. The questions were not based upon any fear that California would not do the right thing, or that the other States in the basin would not do right by us, but just simply to satisfy local sentiment at home.

But we did not succeed in that effort, and my recollection is that the Colorado River compact failed of ratification in one house of the Arizona Legislature by about two votes and by one vote in the other. So Arizona was not in the compact when the time came for Congress to pass the Boulder Canyon Project Act. And

because Arizona had not approved it, the other six States said, "We are going to fix it so that Arizona cannot get any water out of the Boulder Canyon Reservoir until Arizona joins the compact." If Senators will read through the Boulder Canyon Project Act they will find one place after another where it is in effect provided that unless a State had approved the compact it did not get any water out of the Colorado River.

The bill to authorize the construction of the Boulder Canyon project was reported in the Senate in the spring of 1928. Senator Ashurst and I were there to represent our State. Here was a bill which absolutely deprived Arizona of any benefits whatsoever from the construction of that project. We concluded that our only recourse was to fight the bill. So we tied it up for over a month, toward the close of the summer session of Congress, which was not difficult because the appropriation bills and other business frequently caused it to be set aside. The bill finally was made the exclusive unfinished business of the Senate, when Congress reconvened on the first Monday in December 1928. Then we started talking again. There were just the two of us—

Senator Kerr. Not a filibuster, Senator.

Senator HAYDEN. We did filibuster; there was no fooling about it at all. [Laughter].

We did it all day long and then when the Senate ran into night sessions we kept on—insisting that there must be some indication in the bill that Arizona had some right to water in the Colorado River.

Finally—I very well remember the last night; I talked until about 11 o'clock when a quorum did not develop; so I went to sleep on a couch. The last of the Senators to make a quorum straggled in just as the sun was coming up. I told all the Senators to go home, get a bath, get breakfast, and take their time, because I was not going to yield the floor until at least half past 10. I knew there were then in progress negotiations to work out something in the bill that would help Arizona.

Senator Pittman of Nevada was the principal negotiator who was trying to get our trouble straightened

out. He thoroughly understood our attitude with regard to the legislation.

He had told me the evening before, and then again that morning—I remember I yielded the floor to my colleague and talked to Senator Pittman in the Democratic cloakroom. He said, "We have fixed up an amendment which clearly indicates what water in the Colorado River Arizona is entitled to." That is the provision in the Boulder Canyon Project Act by which Congress authorized in advance the approval of a supplemental compact between the three States of the lower basin for a division of Colorado River water. It gave advance congressional approval. Ordinarily an interstate compact is approved after the States have negotiated it, but this was another way of getting at it.

It is provided in the Boulder Canyon Project Act that:

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 onehalf of the excess or surplus waters 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. * * *

One of the allegations made by some of the fanatics in Arizona was that if Arizona should ratify the Colorado River compact and a shortage of water occurred in Mexico, we would have to open up the Roosevelt Dam and all the other Arizona reservoirs, turn the water down the Gila River, and let it run to Mexico; that we would have to open up the floodgate and turn the water down, even though it would never get to Mexico, but would be soaked up in the sands.

But that is what some people in Arizona construed the compact to mean. Those words last quoted were used in the act, not for fear of California or the other basin States, but to answer the fears of the fanatics in Arizona. That is also why the following language is in the Boulder Canyon Project Act:

If 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 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 that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact. * * *

Senator Pittman brought us this solution. I remember very well that Senator Kendrick came to talk to me in the cloakroom and said, "Now, this is what you have been talking about: You want a clear definition of Arizona's rights to water out of the Colorado River. We have given it to you and you ought to abandon this filibuster." We could have kept it up. We were not afraid of cloture. That had been tried once before and failed to get the necessary votes. We could have tied the bill up for good. And I can assure you that I would have been right there talking yet if we had not made this agreement.

Senator McFarland. Senator, pardon me just a minute. Did you read the earlier portion of that section of the Project Act which provided for the appor-

tionment of 2,800,000 acre-feet of III (a) water to Arizona, plus the waters of the Gila?

Senator KERR. Yes; he read that.

Senator McFarland. Pardon me; I did not hear that.

Senator HAYDEN. There is another provision in the act about an additional million acre-feet allocated to the lower basin.

Senator Kerr. That is III (b).

Senator Hayden. III (b). Everybody knew that was Arizona water. The California Senators knew it better than anybody else because if you will look at that map the Gila River runs into the Colorado River below any point where California could divert it into that State. It could not be used by any other State. The old Laguna Dam and the present Imperial Dam are above the mouth of the Gila River. So everybody agreed that no other State could have any claim to any water that could be physically used in one State alone. That was the Gila River situation.

But we had to put all that language in the act in order to satisfy a lot of our people that Arizona would not be required to deliver any Gila River water to Mexico and that no one else had any claim to it. That is why it was written.

The language was not adopted, as I say, because any representation had been made at any time by any Senator from any State that Gila River water did not belong to Arizona.

That was thoroughly understood by Senator Johnson and Senator Shortridge, the then Senators from California.

If the representations made with respect to the Gila River in later years, on behalf of the State of California, had been so much as whispered at that time, the Boulder Canyon Project Act would never have been passed. I know that positively, because these later representations are so different from the concept that was in the minds of all the Senators who had to do with the

passage of that act, that such later representations just would not fit the true original situation.

Since that time the intent of that act has been twisted and squirmed and distorted. Sometimes I think the way some people in California, and particularly the groups over in the Imperial Valley, try to twist the meaning of words and to distort the record of history, and to welch on the solemn agreements that the State of California made—the best group I can compare them with is the Politburo in Moscow. That is about as close a comparison as I can summon as to anyone acting to twist and distort the meaning of words and the distinct understanding that we had at the time.

Senator Downey. Mr. Chairman, in view of that very bitter statement that I think is totally uncalled for and that I very much resent, on which specific act does the Senator base that statement? What specific act?

Senator Hayden. The assertion, for example, that the State of California could count in the waters of the Gila River as a part of the lower basin waters to which they might lay claim. That is perfectly idiotic. There is not a thing like it in the record. It never was in the mind of Senator Hiram Johnson. It never was in the mind of Sam Shortridge. It never was in the mind of any Senator that any such cockeyed idea could ever be advanced, and yet it has since been seriously advanced by California over and over again.

Senator Downey. Mr. Chairman, I want to say we will certainly endeavor to present very persuasive evidence that the statement just made by the Senator from Arizona is not correct.

Senator HAYDEN. All I can say to the Senator is that no such idea had been advanced at that time by any Senator or Congressman from California, nor were any of these extravagant claims that are now being made, whether based upon a subsequent contract with the Secretary of the Interior for nearly a million additional acre-feet of water out of the surplus or otherwise. That idea was not dreamed of at the time of adoption of the Boulder Canyon Project Act. Nobody even thought it or ever mentioned that California could firm up a con-

tract above the 4,400,000 acre-feet of water by taking water away from Arizona. If that proposal had ever been before the Congress there would not have been a Boulder Canyon Project Act and you could not have gotten a Senator from any State to support it.

Senator Johnson and Senator Shortridge never advocated anything of the kind. I know what I am talking about because I was there.

That is the situation the way I see it, and that is why I have recited this history to the committee.

APPENDIX No. 7

Session Laws of Arizona, 1933 Chapter 33, Sec. 75-1601, 2 & 3 Arizona Code Annotated 1939.

COLORADO RIVER COMPACT

75-1601. TRI-STATE COMPACT.—The State of Arizona, desiring to enter into a compact with the States of California and Nevada under the authority of and in accordance with the provisions of the act of Congress of the United States of America approved December 21, 1928 (45 Stat. 1057 "Boulder Canyon Project Act"), proposes the following compact or agreement between the States of Arizona, California and Nevada:

COMPACT BETWEEN THE STATES OF ARIZONA, CALIFORNIA AND NEVADA

The states of Arizona, California and Nevada, desiring to enter into a compact or agreement under the Act of Congress of the United States of America approved December 21, 1928 (45 Statutes at Large, page 1057, "Boulder Canyon Project Act"), 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 waters of the Colorado River System apportioned to the Lower Basin under the Colorado River Compact; to establish the relative importance of different beneficial uses of such water; to promote interstate comity; to remove causes of present and future controversies; and to secure the expeditious agricultural and industrial development of the Lower Basin, the storage of its waters, and the protection of life and property from floods.

ARTICLE II

As used in this compact:

"Colorado River System" means that portion of the Colorado River and its tributaries within the United States of America;

"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;

"States of the Upper Division" means the states of Colorado, New Mexico, Utah, and Wyoming;

"States of the Lower Division" means the states of Arizona, California and Nevada;

"Lee's Ferry" means a point in the main stream of the Colorado River one mile below the mouth of the Paria River;

"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's Ferry, 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's Ferry;

"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's 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 the waters diverted from the system below Lee's Ferry;

"Domestic use" includes the use of water for household, stock, municipal, mining, milling, industrial, and other like purposes, but excludes the generation of electrical power.

ARTICLE III

(a) 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 the Boulder Canyon Project Act and all waters necessary for the supply of any rights which may now exist, shall not exceed four million, four hun-

dred thousand 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 Colorado River Compact, such uses always to be subject to the terms of said compact.

- (b) Of the seven million, five hundred thousand acre-feet annually apportioned to the Lower Basin by paragraph (a) of Article III of the Colorado River Compact, there is hereby apportioned annually to the state of Nevada three hundred thousand acre-feet and annually to the state of Arizona two million, eight hundred thousand acre-feet for the exclusive beneficial consumptive use by said states of Nevada and Arizona, respectively, in perpetuity.
- (c) The state of Arizona may annually use one-half of the excess or surplus waters unapportioned by the Colorado River Compact.
- (d) In addition to the water covered by paragraphs (b) and (c) hereof, the state of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of the state of Arizona in perpetuity.
- (e) 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 Colorado River Compact, then the state of California shall and does 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.
- (f) Neither the states of Arizona, California nor Nevada will withhold water nor require the delivery of water which can not reasonably be applied to domestic and agricultural uses.

(g) All the provisions of this compact or agreement shall be subject in all particulars to the provisions of the Colorado River Compact.

ARTICLE IV

This compact or agreement shall take effect and become binding and obligatory when it shall have been approved by the Congress of the United States of America, by the legislatures of each of the states of Arizona, California and Nevada and when the states of Arizona, California and Nevada shall have ratified the Colorado River Compact. When approved by the legislature of a signatory state the original and four copies of this compact or agreement shall be signed by the governor of such state and notice of such approval and signing shall be given by such governor to the governors of the other signatory states and to the President of the United States of America. The governor last signing shall forward the original copy for deposit in the archives of the Department of State of the United States of America and one copy to the governor of each of the other signatory states.

IN WITNESS WHEREOF this compact or agreement is executed.

STATE OF ARIZONA	
ByGovernor, at Phoenix, Arizona	19
STATE OF CALIFORNIA	
Governor, at Sacramento, Cal.	19
STATE OF NEVADA By	
Governor, at Carson City, Nev.	

75-1602. ACCEPTANCE BY ARIZONA.—The proposed agreement between the states of Arizona, California and Nevada, as set forth in section 1 [75-1601] of this act, is approved and accepted for the state

of Arizona. The governor of the state of Arizona is authorized and directed to sign said agreement for the state of Arizona, and to give notice of its approval as in said agreement provided.

75-1603. CONDITIONAL APPROVAL OF COL-ORADO RIVER COMPACT.—If the agreement set forth in section 1 [75-1601], of this act, be approved by the Congress of the United States, and the states of California and Nevada within one [1] year after the effective date of this act, or within a period of one [1] additional year thereafter provided the governor of the state of Arizona shall by proclamation so extend the period for such approval, the Colorado River Compact shall thereupon be and become by the terms of this act ratified for and on behalf of the state of Arizona.

APPENDIX No. 8

1944 LEGISLATION RATIFYING THE SEVEN-STATE COMPACT ARIZONA

(Act approved February 24, 1944; Ch. 5, 17th Legislature; Session Laws of Arizona, 1944, pp. 427-428)

CHAPTER 5 (Senate Bill No. 1)

An Act ratifying the Colorado River Compact, and declaring an emergency.

Be it enacted by the Legislature of the State of Arizona:

SECTION 1. RATIFICATION. The Colorado River Compact executed at Santa Fe, New Mexico, November 24, 1922, by representatives of the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming is unconditionally ratified, approved and confirmed.

SEC. 2. EMERGENCY. To preserve the public peace, health and safety it is necessary that this Act become immediately operative. It is therefore declared to be an emergency measure, to take effect as provided by law.

Approved by the Governor February 24, 1944.

Filed in the Office of the Secretary of State February 24, 1944.