COLORADO RIVER WATER RIGHTS

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

EIGHTIETH CONGRESS

SECOND SESSION

ON

S. J. Res. 145

A RESOLUTION AUTHORIZING COMMENCEMENT OF AN ACTION BY THE UNITED STATES TO DETERMINE INTERSTATE WATER RIGHTS IN THE COLORADO RIVER

MAY 10, 11, 12, 13, AND 14, 1948

Printed for the use of the Committee on Interior and Insular Affairs

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COLORADO RIVER WATER RIGHTS

MONDAY, MAY 10, 1948

UNITED STATES SENATE,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION OF
THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to notice, in room 224 of the Senate Office Building, Senator Eugene D. Millikin (chairman of the subcommittee) presiding.

Present: Senators Butler (chairman of the committee), Millikin (chairman of the subcommittee), Ecton, O'Mahoney, and McFarland.

Senator MILLIKIN. The hearing will please come to order.

This is a hearing on Senate Joint Resolution 145. I think the contents of the resolution are well known to everyone here. The reporter will enter the resolution in full in the record at this point.

(S. J. Res. 145 is as follows:)

[S. J. Res. 145, 80th Cong., 1st sess.]

JOINT RESOLUTION To authorize commencement of an action by the United States to determine interstate water rights in the Colorado River

Whereas the development of projects for the use of water in the Lower Colorado River Basin is being hampered by reason of long-standing controversies among the States in said basin as to the meaning and effect of the Colorado River compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act, the California Limitation Act (Stats. Cal. 1929, ch. 16), various contracts executed by the Secretary of the Interior with States, public agencies, and others in the Lower Basin of the Colorado River, and other documents and as to various engineering, economic, and other facts: Now, therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purpose of avoiding a multiplicity of actions and expediting the development of the Colorado River Basin, the Attorney General is hereby directed to commence in the Supreme Court of the United States of America, against the States of Arizona, California, Nevada, New Mexico, and Utah, and such other parties as may be necessary or proper to a determination, a suit or action in the nature of interpleader, and therein require the parties to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the Lower Colorado River Basin.

Senator MILLIKIN. The first witness is Senator Knowland.

STATEMENT OF HON. WILLIAM F. KNOWLAND, A UNITED STATES SENATOR FROM THE STATE OF CALIFORNIA

Senator KNOWLAND. I first wish to express my appreciation for the opportunity to be heard, and I want to say that following my testimony I must leave, as I am chairman of the subcommittee of the Committee on Appropriations starting hearings on an appropriations bill

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today, so my leaving in no sense shows a lack of interest. I am vitally interested in this project, and as soon as I can complete the other hearings I shall return.

Mr. Arvin B. Shaw, Jr., the assistant attorney general of California, will be in charge of the witnesses of the proponents here. The other witnesses will be Mr. Northcutt Ely, special counsel of the Colorado River Board, and Mr. James H. Howard, general counsel of the Metropolitan water district. They are accompanied by Mr. Rex Hardy, assistant city attorney of Los Angeles, Mr. Gilbert Nelson, deputy attorney general of California, Mr. M. J. Dowd, consulting engineer of the Imperial irrigation district, and Mr. G. E. Arnold, manager of the water department of the city of San Diego.

Mr. Chairman and gentlemen of the committee, I joined in the introduction of Senate Joint Resolution 145, because there appears to be no other way to determine the unfortunate controversy existing over the rights to use the waters of the lower basin of the Colorado River. That controversy has extended for some 25 years. I am advised that a great many conferences seeking to resolve their differences have been held between Arizona, California, and Nevada.

The trouble is that there is not enough water in the river, available to the lower basin, to satisfy the demands of each of the lower basin States, particularly the States of Arizona and California. Somehow, somewhere the issues must be settled. It is unfortunate that the economic situation in the States will not be likely to permit any negotiator for either State to give up a great enough portion of his State's demands to reach a compromise. The Secretary of the Interior has commented, again and again, on the necessity of a determination of the controversy, before that great river can be made to do its full job for each of the States. You gentlemen know full well that water is the life blood of the West.

Gov. Earl Warren sought to resolve the present controversy. On March 3, 1947, he wrote to the Governors of Arizona and Nevada commenting upon the necessity of a reconciliation of the interstate controversy and suggested a conference. He submitted three possibilities: (1) Negotiation of a compact, and failing this, (2) a submission to arbitration, and as a last resort, (3) cooperation in obtaining Congressional authorization for a suit in the United States Supreme Court.

At this time I wish to read into the record two letters from the Governor of California. The first one is dated May 8, and is as follows:

HON. WILLIAM F. KNOWLAND,
United States Senator, Senate Office Building, Washington, D. C.

MY DEAR SENATOR: As you know, I am tremendously interested in the adjustment of the differences between the Colorado River water claimants of Arizona and California. These claims aggregate more water than is available in the river for the two States. They are not new claims, but, on the contrary, have been the subject of controversy for many years. Many conferences have been held to adjust the differences, but without success. As a result, the orderly development of the river in keeping with the needs of both States is now being threatened. Essential projects are being delayed, and both States are being retarded in their plans for the future. This situation will continue until some adjustment of differences is made.

It seems to me that the adjustment should be made without delay. Over a year ago I proposed to the Governors of Nevada and Arizona that we undertake to accomplish the desired results either (1) by writing a compact, (2) by submitting the controversy to arbitration, or (3) by a judicial determina-

tion. I much prefer either of the first two procedures, but if they are impossible, the third is the only alternative. My proposal and the replies of the Governors which are self-explanatory are enclosed. In view of the improbability of a compact or adjustment by arbitration, I feel that we have no other alternative than to favor a judicial determination of the controversy.

I therefore urge the passage of Senate Joint Resolution 145, House Joint Resolutions 225, 226, 227, and 236, believing that it is the only method left open to the parties.

With best wishes, I am

Sincerely,

EARL WARREN, *Governor.*

Senator MILLIKIN. Are the House resolutions parallel to the Senate resolution?

Senator KNOWLAND. Identical.

Senator MILLIKIN. Are they exactly the same?

Senator KNOWLAND. I believe that they are all identical; yes.

I would ask at this time to have the Governor's letter, together with a copy of a letter which he has addressed to the chairman of this committee, a copy of the prior letter he had written to Governor Osborn of Arizona and Governor Pittman of Nevada, and a copy of the letter which he received from Governor Pittman and Governor Osborn, included in the record of these hearings.

Senator MILLIKIN. They will be so included.

Senator KNOWLAND. The Governor has requested that I present to the committee a copy of the letter he has addressed to the chairman of this committee, Senator Millikin, of Colorado. The Governor regretted very much that he could not be here in person, but asked that I present this to you [reading]:

MAY 8, 1948.

Hon. EUGENE D. MILLIKIN,

Chairman, Subcommittee on Irrigation and Reclamation,

Senate Committee on Public Lands, Washington, D. C.

MY DEAR SENATOR MILLIKIN: I had hoped to be able to appear before your subcommittee when, as you have wired me, it takes up Senate Joint Resolution 145, relating to the determination of water rights of the States of the lower basin of the Colorado River. I find that my obligations do not permit, and would be grateful if you would receive this letter as part of the record of your hearings.

During my service over the last 10 years as attorney general and Governor of California I have taken part in many conferences and discussions revolving about the controversy between Arizona and California over the waters of the Colorado River, and have formed certain impressions on the subject. There is not enough water available for the lower basin to serve all the needs of both States. Consequently, over a quarter of a century ago, dissension between the States commenced. It has persisted in various forms to the present time. In my judgment it is time that the controversy should be terminated, to the end that the two States may each progress expeditiously to the maximum permissible limit of development, and may hereafter live in harmony as neighbors should.

In its present form the controversy is essentially a dispute over the meaning of certain statutes and documents, including particularly those known as the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, and certain water-delivery contracts made by the Secretary of the Interior. The States have sharply conflicting interpretations of the meaning of particular provisions of these documents. They have attempted in scores of official and unofficial conferences, extending over 25 years, to iron out their differences for themselves and find a basis for a negotiated peace. They have not been able to persuade each other as to the true meaning of the disputed documents, nor, by reason of the gravity of the sacrifices which would be entailed, have they been able to reach a middle ground by way of compromise. Since neither can concede to the point of agreement, it seems to me necessary to resort to independent authority which can decide the issue for them, and let the chips fall where they may.

In this belief, about a year ago, I addressed an identical letter to the Governors of Arizon and Nevada, suggesting that we three meet and seek to agree upon a method of reconciliation of our differences, either by negotiation, arbitration, or judicial determination. These appear to me to be the only avenues by which such a dispute may be resolved. The Governor of Nevada replied, indicating his opinion that negotiation or arbitration would be fruitless, and that the three States should join in requesting the Congress to authorize a suit in the Supreme Court to determine the rights of the States. The Governor of Arizona replied, in substance, indicating the opinion that there was no controversy requiring solution, although expressing a courteous willingness to meet and discuss any matters of common interest. Copies of these letters are attached hereto as appendixes A, B, and C.

Under these circumstances I was obliged to conclude, as did the Governor of Nevada, that the only practicable means of terminating the controversy was to request authority for institution of an action in the Supreme Court. I reached this conclusion after mature deliberation and after consideration of official statements of the Secretary of the Interior, which indicate that in his opinion development of water projects in the lower basin cannot proceed until the rights of the States to the waters of the Colorado River are determined.

It may be urged to you that the objective of the resolutions pending before you is delay. In view of the Secretary's reports, the exact opposite is true.

The States of the lower basin of the Colorado River have, for several decades past, been one of the most rapidly developing areas in the United States. Their population has been multiplying decade by decade. Long-range plans for the facilities which are necessary to support this increase of population must be laid out far in advance of the actual presence of the increased population. Urban communities cannot wait until their water supply is exhausted to plan, finance and construct municipal water-supply projects. The building of irrigation projects must precede the farming of the land.

It therefore appears to me inescapable that, if we cannot negotiate an agreement or submit the differences to arbitration, much as we prefer to avoid litigation, the only orderly and sound way to advance the development of the States of the lower basin is to have the issues adjudicated as soon as possible. It must be done sometime. It should be done now.

I am convinced that the litigation can be conducted and concluded within a brief time, because the essential issues between the States are legal in character and do not involve interminable examination of factual evidence. I believe the case could be presented to the Court on an agreed statement of facts. To the end that there may be a speedy determination of the case, I am willing to undertake that in the event the Congress authorizes the suit, the proceedings on California's part will be carried on with all possible promptness.

Sincerely,

EARL WARREN, *Governor.*

Senator MILLIKIN. The attachments referred to will be entered of record at this point.

(The attachments to the letters read by Senator Knowland are as follows:)

APPENDIX A

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento 14, March 3, 1947.

Hon. SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz.
and
Hon. VAIL N. PITTMAN,
Governor of Nevada, Carson City, Nev.

MY DEAR GOVERNORS: We have just completed our review of the comprehensive plan for the Colorado River system as presented by the Bureau of Reclamation, and I am more than ever impressed by the staggering size and complexity of the proposal.

It is quite apparent, and it is admitted in the comprehensive plan, that the 134 projects inventoried will, if constructed, use more water than is available in the river system. This fact will undoubtedly emphasize the differences of

opinion concerning the water to be made available to each State. It is therefore of the utmost importance to the lower-basin States that we reconcile our differences as soon as possible.

The negotiations of the past have failed to bring about agreement between Arizona and California but I am of the opinion that there must be some fair basis upon which their respective rights can be determined. The only methods that occur to me are (1) negotiation of a compact, (2) arbitration, and (3) judicial determination.

I would therefore like to suggest that we three Governors of the affected States endeavor first to enter into a compact which will resolve our differences and finally determine our respective rights.

In the event you believe for any reason that this cannot be done, I suggest that we submit all our differences to arbitration, agreeing to be bound by the results thereof.

If this is not feasible, I propose that we join in requesting Congress to authorize a suit to determine our rights in the Supreme Court of the United States, which suit could, if agreeable to the States, be submitted on an agreed statement of facts.

I believe that either method could produce the desired results. If you agree with me, I suggest that the three of us meet at some time and place mutually agreeable for the purpose of further exploring the subject. If we can place our three States in a position to maintain a common front in urging the speedy and orderly development of the Colorado River system, we will have rendered a great service to our people.

Hoping that I may have your reaction to this proposal and with best wishes, I am.

Sincerely,

EARL WARREN, *Governor.*

APPENDIX B

STATE OF NEVADA,
EXECUTIVE CHAMBER,
Carson City, March 6, 1947.

Hon. EARL WARREN,
Governor of California, Sacramento, Calif.

DEAR GOVERNOR WARREN: Replying to your letter of March 3, 1947, will say that I fully agree with you as to the necessity of the three lower Colorado River Basin States reconciling their different views regarding division of the water allotted to them under the provision of the Colorado River compact, and for maintaining a strong unified front for the proper development of the great system. The report of the Bureau of Reclamation on the Colorado River is an inventory of all possible projects and, while of much value, it does not advocate the construction of projects beyond the limit of available water, but if the States do not reach an agreement, such a chaotic condition might develop.

All through the administration of Governor Carville in Nevada, sincere efforts were made by Nevada to bring California and Arizona to an agreement on the tri-State compact authorized under section 4 (a) of the Boulder Canyon Project Act, for division of the downstream water. Nevada's interest was to make secure her small allotment of 300,000 acre-feet, together with an appropriate share of the surplus water, however that surplus might be divided between California and Arizona. Neither Arizona nor California took exception to Nevada's position, so in effect we were only trying to bring Arizona and California to an agreement.

A great number of meetings were held, the three States being represented by the Colorado River Commission of Arizona, the Colorado River Board of California, and the Colorado River Commission of Nevada, with Governor Carville or his representative usually presiding. Nothing was accomplished by these conferences. At last Nevada discontinued negotiations and contracted directly with the Bureau of Reclamation for 300,000 acre-feet of water from Lake Mead storage, as water was urgently needed for the basic magnesium project.

Our experience leads us to an opinion that California and Arizona will be unable to negotiate a compact, and may be unwilling to agree on terms of arbitration. Nevada has spent much time and money in efforts to bring the tri-State compact into being, completely without results.

I am in accord with your thought that the three States, in the absence of other agreement, should join in requesting Congress to authorize a suit in the Supreme Court of the United States to determine our respective rights, and suggest that a method of presentation before the Court be agreed upon between Arizona and California, with which agreement Nevada will concur.

My kindest personal regards.

Sincerely yours,

VAIL PITTMAN, *Governor.*

APPENDIX C

EXECUTIVE OFFICE, STATEHOUSE.
Phoenix, Ariz., March 12, 1947.

HON. EARL WARREN,
Governor, State of California,
Sacramento, Calif.

MY DEAR GOVERNOR WARREN: I have your letter of March 3, addressed to Gov. Vail Pittman and myself, concerning the report of the Bureau of Reclamation on the development of the water resources of the Colorado River Basin.

I presume from your letter that you have completed and sent to the Bureau your comments on the above-mentioned report. I, too, have furnished the Bureau with my comment and am enclosing a copy to you herewith. It will be appreciated if you will furnish me with a copy of your report.

Ever since I have been Governor of Arizona I have endeavored to cooperate with all other States in the Colorado River Basin in all matters of common interest. Arizona has at all times been represented on the Committees of Fourteen and Sixteen, whose name has now been changed to the Colorado River Basin States Committee. Arizona is now represented on the Colorado River Basin States Committee, which committee, as presently constituted and as heretofore constituted, has been very helpful in all matters affecting the interests of the respective States in the Colorado River. Arizona is now cooperating in plans for the utilization of Colorado River water in the respective States within the allocation of water available to them.

I will be pleased to meet you, or with you and Governor Pittman, or with the governors of other interested States, to discuss all matters of common interest to our respective States.

All seven of the Colorado River Basin States—Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming—five of which States are still represented on the Colorado River Basin States Committee, are parties to the Colorado River compact which apportions the water of the Colorado River System as between the upper basin and the lower basin and to Mexico. The compact contains provisions which make utilization of water over and above the apportionment made by the compact of interest to all of the States of the basin.

Portions of Utah and New Mexico are in the lower basin and are entitled to share in the apportionment made to the lower basin and in the use of any available water which is unapportioned by the Colorado River compact.

California, in consideration of the passage by the Congress of the Boulder Canyon Project Act and as a condition precedent to the taking effect of that act and the construction of Boulder Dam, Imperial Dam, and the All-American Canal, by chapter 16, California Statutes, 1929, entered into a statutory agreement with the United States and for the benefit of each of the Colorado River Basin States, irrevocably and unconditionally limiting California's claim to water of the Colorado River to 4,400,000 acre-feet per annum of the apportioned water, plus not more than half of the water unapportioned by the Colorado River compact. The quantity of surplus water, that is, water unapportioned by the compact, varies from year to year and is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona recognizes the right of California to use the quantity of water to which California, by the statutory agreement, is forever limited.

Arizona recognizes the right of Nevada to use 300,000 acre-feet of apportioned water per annum, plus one-twenty-fifth of available unapportioned water, subject to further apportionment of the unapportioned water by agreement between the compact States after 1963.

Arizona has a contract with the United States for delivery for use in Arizona from the main stream of the Colorado River, subject to its availability for use in

Arizona, under the Colorado River compact and the Boulder Canyon Project Act, of so much water as is necessary to permit the beneficial consumptive use in Arizona of main-stream water to a maximum of 2,800,000 acre-feet of the apportioned water, plus one-half of the available surplus, less such part of the one-twenty-fifth thereof as Nevada may use, the quantity of which surplus, of course, varies from year to year, and which surplus is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Nevada is entitled, and I am sure that Nevada does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Arizona is entitled.

It therefore appears that California and Nevada are now in a position to join Arizona in urging the speedy consideration and passage of S. 433 now pending in the United States Senate and H. R. 1598, its companion bill, now pending in the House of Representatives, which are authorization bills to authorize the construction of the central Arizona project, and H. R. 1597, which is an authorization bill to relocate the boundaries of the Gila project heretofore authorized.

I am certain that the passage of these bills and the construction of the works which they seek to authorize, will be of great and incalculable benefit, not only to Arizona, but to California and Nevada and to the United States as a whole.

They are vitally necessary to the welfare and to the economy of the whole Southwest region. They do not in any way interfere with the full use in California and in Nevada of the water to which California and Nevada are respectively entitled.

If either California or Nevada are interested in the promotion and construction of projects for the utilization of water to which they are respectively entitled, I would like to know it in order that I may render such aid as seems appropriate.

It is difficult for me to understand what, if anything further, need be done to place either California or Nevada or Arizona in position to support the utilization in our respective States of our respective shares of the water of the Colorado River, which shares have already been determined by the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, the water delivery contracts of the California agencies, the Nevada water delivery contracts, and the Arizona water delivery contract.

However, I will be glad to meet and discuss with you and the Governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences and if it should develop that anything further is necessary, we can consider the proper course to pursue.

During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other Governors of the basin States as you desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly.

With all good wishes, I am,

Sincerely,

SIDNEY P. OSBORN, *Governor.*

Senator KNOWLAND. Governor Pittman, of Nevada, replied that he agreed as to the necessity of a reconciliation of the different views of the States, and expressed the opinion that a compact could not be negotiated, and that a submission to arbitration was improbable, leaving a judicial determination as the only available means of settling the dispute. He was in accord with Governor Warren's suggestion that the States of Arizona, California, and Nevada join in requesting congressional authorization of a suit in the Supreme Court.

Governor Osborn, of Arizona, however, replied with an argument as to Arizona's position and, in substance, contended that no dispute existed and that California and Nevada should, therefore, join with Arizona in urging speedy consideration by the Congress and passage of the central Arizona project bill. As you know, California con-

tends that Arizona is not entitled to the water to serve this project, and that if it is authorized and placed in operation, it will use water to which California claims the legal right under existing contracts and law.

The existence of this controversy has held up the increased development of the Southwest which can be made possible through the resources of the Colorado River. Enough delay has occurred, enough damage has been done. The rights of the Government and those of the lower basin States are involved, and only by a definitive decision by the Supreme Court can the rights of the Government and of the States be clarified. Only by such a decision from the highest court of the Nation can the stifling influence of this controversy be lifted and the States of the lower basin fairly fulfill their destiny. The alternative is a long-drawn-out fight in the House and Senate which, I fear, will be harmful to over-all reclamation development.

My State seeks such a court decision, the State of Nevada seeks such a decision. The Government and the other States should not oppose it. The sooner the case gets to the Supreme Court, the sooner a decision will be made. We will cooperate in every way possible to expedite the proceedings.

I urge your approval of the resolution.

Senator MILLIKIN. Thank you very much, Senator.

The chairman of the subcommittee has a telegram from Governor Pittman, of Nevada, which I shall read into the record:

I am very sorry that the witnesses I have appointed to attend hearing on Senate Joint Resolution 145 are both unable to go to Washington at this time due to a great pressure of work requiring their presence here. I am preparing a statement, which I hope you will include in the record, favoring the bill, which will reach you before the end of the hearing and will contain the following:

Nevada is seriously concerned as to the effect of congressional action upon the promotion and development of projects in the other States in the lower basin, which may have undesirable repercussions upon Nevada's allotment.

In the absence of an effective allocation of water between the States of the lower basin these States may rely upon their respective water codes, and their rights as established by priority of beneficial use could result in depriving Nevada of a part of the water to which the State is entitled under the Colorado River compact and the Boulder Canyon Project Act. This danger to Nevada is accentuated by the necessity of supplying water to Mexico as required by the Mexican Water Treaty (1945).

Nevada has a contract executed by the Secretary of the Interior under the Project Act for 17.6259 percent of all firm hydroelectric power produced at Hoover Dam. The necessity of conserving all of this energy is of the greatest importance to Nevada. It is imperatively needed for development of natural resources in mining and irrigation which are expanding rapidly and for the operation of Basic Magnesium project recently acquired by Nevada from WAA, where industries of great benefit to the State and also the national welfare are in operation; and others are negotiating for space and electric power.

Arizona seeks enactment of a bill (S. 1175) that contains features adverse to the interests of Nevada, including operation of a power plant at Bridge Canyon Dam above Lake Mead in a manner that would reduce power now available from Hoover Dam and increase its cost. The bill contemplates diversion of considerably more than a million acre-feet of water above Hoover Dam, reducing the amount of water now available for Hoover Dam power plant.

Nevada's past experience conclusively leads us to believe that a compact cannot be negotiated and that further discussions will prove futile. Our State for many years has spent much time and money in efforts to bring the tri-State compact into being, completely without results. At last Nevada discontinued negotiations and contracted directly with the Bureau of Reclamation for 300,000 acre-feet of water

from Lake Mead storage, as water was urgently needed for the Basic Magnesium project.

With kindest regards,

VAIL PITTMAN, *Governor of Nevada.*

Senator KNOWLAND. Mr. Chairman, Senator McCarran, of Nevada, had hoped to be here, but he had to go out for a medical check-up at Bethesda Hospital, and his administrative assistant has just handed me the statement that he would have made were he present, and it is a short statement, and I would like permission to have it read in his behalf.

Senator MILLIKIN. You may do so.

STATEMENT OF HON. PAT McCARRAN, A UNITED STATES SENATOR FROM THE STATE OF NEVADA (STATEMENT READ BY ALFRED MERRITT SMITH, STATE ENGINEER OF NEVADA)

Mr. SMITH. Senator McCarran has submitted the following statement, which I would like to read:

The joint resolution now before you was introduced as a constructive effort to obtain a judicial determination of the unfortunate controversy over the use of the waters of the lower Colorado River, which has plagued the States of the lower basin for a quarter of a century. The divergent views of the States have been brought into sharp focus because of the failure of a water supply to satisfy all of the demands against it.

The vast quantities of water which are at stake are sufficient to provide about 5,000,000 people with domestic, industrial, and municipal water, or to provide something over one-half million acres of land with irrigation water, all so necessary in the semiarid Southwest. Millions of dollars have already been spent by the Government and in the various States in the utilization of the resources of the great Colorado River. Millions of dollars more must yet be expended if the full strength of the river is to be put to work. Upon the right to take and use this water is, therefore, dependent the existence in one place or another in the lower basin of civilization, productivity, and taxpaying ability, State and national, of inestimable significance.

Reduced to a simple statement, the States of Arizona and California contend for different interpretations of various documents and laws, which go to make up the "law of the river." The difference in these interpretations has caused unrest and uncertainty in each State, and the Department of the Interior has formally stated to the President and to this Congress, in the comprehensive report on the river, which is now House Document 419, that "existing circumstances tend to preclude the formulation of a comprehensive plan of development of the water resources of the Colorado River Basin at this time," and "that the authorization of any of the projects inventoried in the report should not be considered to be in accord with the program of the President until a determination is made of the rights of the individual States to utilize the waters of the Colorado River system." That comprehensive report inventories projects in each of the lower basin States, none of which can get beyond the planning board until the interstate controversy is determined. Thus is the development of the great Southwest stymied, thus is the civilization and the economy of the Nation and of the States retarded.

While the quantity of water for which Nevada has contracted, 300,000 acre-feet is less than that of California and Arizona, it is of great value to any State for domestic, industrial, and agricultural purposes. Nevada's share of the water uses has not been disputed by either Arizona or California, yet my State is seriously concerned as to the effect of political processes upon the stimulation—or lack of it—of projects and development in the other lower-basin States, with the consequent repercussions upon Nevada's allotment. Nevada considers that it is entitled to have its rights set at rest by the Supreme Court. Nevada considers that the Government and each of the lower-basin States should have their respective rights determined. Under our system of Government, the Supreme Court is the exclusive arbiter of interstate disputes, and no other agency has the

power to construe and interpret the various laws and documents, no other tribunal can resolve the interstate disputes. In no other manner can the barrier which now stops the development of the Southwest be removed.

I urge your favorable consideration of the resolution.

Thank you, Mr. Chairman.

Senator KNOWLAND. The first witness for the proponents will be Mr. Northcutt Ely.

Senator MILLIKIN. Chairman Butler, of the full committee has just received a letter from Peyton Ford, the assistant to the Attorney General, dated May 7, 1948, which I shall read into the record at this point:

MY DEAR SENATOR: This is in response to your request for the views of this Department concerning the joint resolution (S. J. Res. 145) to authorize commencement of an action by the United States to determine interstate water rights in the Colorado River.

The resolution would direct the Attorney General to commence a suit or action in the nature of interpleader, in the Supreme Court of the United States, against the States of Arizona, California, Nevada, New Mexico, and Utah, to require the parties to assert and have determined therein their rights to the use of the waters of the Colorado River system available for the lower Colorado River Basin.

An investigation of the situation discloses that at the present time there seem to be conflicting interests or claims, at least between the States of California and Arizona, with respect to rights to the use of the waters of the Colorado River in the lower basin of that stream. That conflict, among other things, would involve interpretation of the Colorado River compact, the Boulder Canyon Project Act, and related statutory enactments. What conflicts there may be among the other States mentioned in the joint resolution are obscure. It appears, however, that there are no present conflicts in need of judicial determination between the United States and the States in the Colorado River Basin. Here it may be noted that there has been no request by any agency of the Federal Government to this Department for the institution of an action for the purpose of determining the rights of the United States in the lower basin of the Colorado River. In the absence of such a request with adequate supporting data, it would not be in accord with the policy of the Department to institute such an action on its own initiative on the basis of the facts at hand.

Since it appears that, at the present time at least, there are no conflicts between the United States and the several States involved in the proposed legislation which are in need of adjudication, it is fair to assume that the legislation has been proposed for the purpose of affording at least some of the States an opportunity to present their differences and conflicting claims to the Supreme Court for settlement. *Arizona* v. *California* (298 U. S. 558, 1935) was instituted by Arizona to have adjudicated certain rights to the unappropriated waters of the Colorado River. In that action six other basin States were named as parties defendant. The Supreme Court dismissed that action on the grounds that since the United States was an indispensable party and had not consented to be sued, the suit could not be maintained.

The decision of the Supreme Court in *Arizona* v. *California* made it clear that the type of relief desired by the States in a suit between them cannot be had in the absence of legislation giving the required consent. It is to be noted that Senate Joint Resolution 145 would provide for the appearance of the United States as a party plaintiff in such litigation. However, since the principal and perhaps the only controversy exists among the States, it is suggested that Senate Joint Resolution 145 should be amended so as to waive the immunity of the United States to suit and permit the States to bring such actions as they may desire if the Congress feels that it is necessary that their differences with reference to the waters of the Colorado River in the lower basin thereof be composed. It is further suggested that such amendment require the bringing of such an action by any or all of the States involved within 1 year from the effective date of the legislation, and that in any such action the United States should have the right to defend and also to assert any affirmative claim which it may have or wish to assert in connection with the subject matter of any action which may be filed pursuant to the legislation.

It is noted that the bill, as presently drafted, contemplates the bringing of a suit or action "in the nature of interpleader." It is suggested that, regardless of the form in which the legislation may pass, any limitation on the discretion of the plaintiff, as to the character of the action or suit to be filed, should be eliminated. It is believed that the plaintiff, in litigation of this importance, should have complete discretion as to the nature of the action to be filed.

It has been suggested that there is some question as to the existence of a justiciable controversy. That question itself can be determined authoritatively only by the Supreme Court. Cogent arguments can be made in support of, and also against, the existence of a justiciable controversy. Presumably, all aspects of this question will be thoroughly presented and vigorously maintained by different States in case the question is presented to the Supreme Court.

In view of the foregoing considerations, the Department of Justice is unable to recommend enactment of the measure in its present form.

The Director of the Bureau of the Budget advises that there is no objection to the submission of the report.

Yours sincerely,

PEYTON FORD,
The Assistant to the Attorney General.

I assume that the parties in interest here have not seen this letter nor do they have copies, and therefore I shall ask that the staff make quick copies of this for distribution and then it can be put into the record.

Senator MCFARLAND. Mr. Chairman, if I may suggest, I have no questions of Senator Knowland, because his evidence was chiefly that of reading the letters of the governor, and contained conclusions.

I notice that Mr. Ely goes over somewhat the same territory, and I take it that the chairman would like to have this hearing conducted as nearly as it could be as an argument before the committee, and I will not ask questions or interrupt any more than I have to, and not question them in regard to documents, but we will meet them in chief.

I just wanted it understood that we do not admit the conclusions that are contained in letters which were written after we introduced legislation to authorize the central Arizona project, and which we contend were written solely to try to keep us from getting our bill passed.

Senator MILLIKIN. The plan of the hearing is that each side shall have 2 days, and the committee hopes very much that there will be a minimum of interruption so that each side may present its case as it conceives it to be to its best advantage, and there will be opportunity for a fifth day of rebuttal, which should eliminate the need for at least excessive interruption.

Senator MCFARLAND. I will abide by the decision of the Chair and conform to its wishes.

Senator MILLIKIN. The Chair does not wish to lay down any inflexible rules, but the procedure will give everybody an opportunity to answer anything that they wish to answer that develops during the hearing.

Mr. ARVIN B. SHAW, Jr. (assistant attorney general of California). Will it be in order to inquire whether the Department of the Interior has filed a report?

Senator MILLIKIN. I understand that we are in the process of trying to expedite that report. I have made the same inquiry and I am informed by Miss McSherry, assistant chief clerk, that the report is coming up by messenger this morning.

Our next witness will be Congressman Phillips.

STATEMENT OF HON. JOHN PHILLIPS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Representative PHILLIPS. Thank you very much, Mr. Chairman.

I appear this morning in favor of Senate Joint Resolution 145, the legislation now before this committee. I am one of the authors of the corresponding resolution in the House of Representatives, House Joint Resolution 226.

There has been a controversy for a long time over claims to the water of the Colorado River. This controversy is between the State of California and the State of Arizona. It is a tremendous and costly controversy to each of the States. Until it is settled neither State can know how much water each one owns, and therefore cannot know how much water each one may use. The water supply of the future cannot be determined. There may be adequate water at this moment, as will undoubtedly be brought out in the hearings, but when the full use of the water of the river, under the compact and development plans, has been completed, there will not be enough water. It is hardly necessary to point out that dependable water is the cornerstone upon which we build in the western area.

The basis of the controversy is the interpretation of the wording of the Colorado River compact. The people of California have always felt that they understood the wording. I suggest that evidence before your committee will indicate that the other States of the Colorado River Basin understood the wording as California understands it. Arizona claims another interpretation. There was a time when Arizona herself tried to take the matter into court. At that time Arizona had not yet signed the compact and therefore had no standing before the court in the controversy.

In the meantime courts have ruled that the United States is now a party to the controversy, as the Colorado River is the boundary between two States, and therefore, the United States must be brought into the controversy as an interested party. This makes it necessary to take the case to the Supreme Court. This is the object of the House and Senate resolutions. It is an old controversy. A settlement is needed very urgently. Through all the years California has sought to reach an agreement with Arizona, by discussion, by arbitration, or through legal measures. California has exhausted every method without success. There is only one course left, and that is to place these issues before the United States Supreme Court.

To give you one example of the urgency, Arizona is presently proposing an immense irrigation project, called the central Arizona project, which would cost a billion dollars. Arizona is seeking authorization for that project. Certainly there should be some assurance that water will be available if the project is built. I call the committee's attention to the report of the Interior Department on the central Arizona project. The report says, to quote Mr. Krug and Mr. Straus, that their recommendation of this project is "conditioned upon the settlement of the water rights conflict" so that a water supply for the project may be assured. I cannot conceive, and I do not believe the members of this committee can conceive, of private industry proposing any project on such precarious grounds. I cannot conceive of the Federal Government investing a billion dollars under such

dangerous conditions. Yet this, without the settlement of the controversy, would be what Arizona asks the Government to do.

The gift of water to Mexico, through the Mexican water agreement, adds another question mark to the water problem of the West. These are just a few comments, to introduce the subject and to suggest the urgency of placing this matter before the United States Supreme Court.

I hope the committee will act favorably upon Senate Joint Resolution 145.

Senator MILLIKIN. We are very glad you could appear, Mr. Congressman.

STATEMENT OF NORTHCUTT ELY, SPECIAL COUNSEL TO THE COLORADO RIVER BOARD OF CALIFORNIA, WASHINGTON, D. C.

Mr. ELY. Mr. Chairman, I am Northcutt Ely, with offices in the Tower Building, in Washington, and I am special counsel for the Colorado River Board of California. I am accompanied by Mr. Rex Hardy of the Los Angeles Department of Water and Power.

I. THE RESOLUTION

The State of California appears in support of Senate Joint Resolution 145. This resolution directs the Attorney General to commence an action in the nature of a bill of interpleader in the Supreme Court against the States of the lower basin of the Colorado River, and such other parties as may be necessary, requiring the parties to assert and have determined their claims to the waters of the Colorado River system available for use in the lower basin, under the Boulder Canyon Project Act, the Colorado River compact, and related documents.

California has at stake existing projects, built and operating, in which over $500,000,000 have been invested, serving several million people and hundreds of thousands of acres of land.

Arizona has at stake her hopes in the construction of the central Arizona aqueduct to carry water into central Arizona.

Over 2,000,000 acre-feet are involved in the controversy between Arizona and California. Efforts to settle the controversy between Arizona and California by negotiations have failed for 25 years for the basic reason that there is not enough water in the river to satisfy the legitimate aspirations of both States.

II. THE NECESSITY FOR AN EARLY DETERMINATION OF THE ISSUES AMONG THE STATES OF THE LOWER DIVISION

The necessity for an early determination of these issues has been very recently urged, four times by responsible executive officers, and once by a committee of the House.

(1) In "The Colorado River," House Document 419, Eightieth Congress, first session, the Commissioner of Reclamation, in his report dated July 17, 1947, said:

* * * That further development of the water resources of the Colorado River Basin, particularly large-scale development, is seriously handicapped, if not barred, by lack of determination of the rights of the individual States to utilize the waters of the Colorado River system. The water supplies for proj-

ects to accomplish such development might be assured as a result of compact among the States of the separate basins, appropriate court or congressional action, or otherwise.

(2) In the same document, the Director of the Bureau of the Budget, in a letter dated July 23, 1947, to the Secretary of the Interior, said:

* * * the authorization of any of the projects inventoried in your report should not be considered to be in accord with the program of the President until a determination is made of the rights of the individual States to utilize the waters of the Colorado River system.

(3) In the same document, the letter of the Secretary of the Interior to the Speaker of the House, dated July 24, 1947, said:

As stated in the interim report, existing circumstances tend to preclude the formation of a comprehensive plan of development of the water resources of the Colorado River Basin at this time. Accordingly, although I cannot recommend authorization of any project, I am transmitting the report to you in order that the Congress may be apprised of this comprehensive inventory of potential water-resource developments in the Colorado River Basin and of the present situation regarding water rights in that basin.

(4) The House Committee on Public Lands, in Report No. 910, July 14, 1947, on H. R. 1597, Reauthorizing the Gila Project, referring to the controversy between Arizona and California, said:

* * * The committee feels the dispute between these two States on the lower Colorado River Basin should be determined and settled by agreement between the two States or by court decision because the dispute between these two States jeopardizes and will delay the possibility of prompt development of any further projects for the diversion of water from the main stream of the Colorado River in the lower Colorado River Basin.

Therefore, the committee recommends that immediate settlement of this dispute by compact or arbitration be made, or that the Attorney General of the United States promptly institute an action in the United States Supreme Court against the States of the lower basin, and other necessary parties, requiring them to assert and have determined their claims and rights to the use of the waters of the Colorado River system available for use in the lower Colorado River Basin.

(5) The Commissioner of Reclamation, in a report on the proposed central Arizona project, dated January 26, 1948, approved by the Secretary of the Interior February 5, 1948, which is now before the States for comment, said:

Assurance of a water supply is an extremely important element of the plan yet to be resolved. The showing in the report of the availability of a substantial quantity of Colorado River water for diversion to central Arizona for irrigation and other purposes is based upon the assumption that claims of the State of Arizona to this water are valid. It should be noted, however, as the regional director points out, that the State of California challenges the validity of Arizona's claims. If the contentions of California are correct, there will be no dependable water supply available from the Colorado River for this diversion. While water is physically available in the Colorado River at the present time, and is wasting to the sea, the importance of the questions raised by the divergent views and claims of the States is apparent. The Bureau of Reclamation and the Department of the Interior cannot authoritatively resolve this conflict. It can be resolved only by agreement among the States, court action, or any agency having proper jurisdiction.

There have been literally scores of meetings in efforts to negotiate an agreement.

In the summer of 1925 a conference was held at Phoenix between the Arizona and Nevada Colorado River Commissions and a committee of the Legislature of California.

In December 1925 water-allocation proposals were submitted to Arizona by California and by Arizona to California.

In December 1926 further conferences were held at Los Angeles.

In January 1927 the conferences were resumed.

From August to October 1927 a conference of the Governors and water commissioners of the seven basin States was held intermittently at Denver. Suggestions were exchanged between Arizona and California and were advanced by the Governors of the upper basin States.

In January 1928 further negotiations were held at Washington, D. C.

In January 1930 the lower basin States' representatives met at Reno and in February at Phoenix.

In January 1935 a new discussion was held at Phoenix prompted by the decision of Secretary Ickes in December 1934 that he could not sign the first water contract requested by Arizona.

Under the auspices of Governor Carville of Nevada the Colorado River Commissioners of the three States held a series of joint sessions from March to October 1940, at Las Vegas, Nev., Los Angeles, Grand Canyon, San Diego, and again at Los Angeles. This series of meetings was devoted specifically to the negotiation of a lower-basin compact. It may be said that the engineering facts as to water supply and water requirements were closely agreed to by the engineers advising the three States; that there appeared to be an earnest and sincere desire on the part of all three States to reach an agreement; but that the rock upon which the negotiations split was the insufficiency of the available water supply to satisfy the water requirements, particularly those of Arizona and California. Neither of these States considered that it could voluntarily concede the abandonment of projects which it had long cherished and planned, such as would have been required to reach a middle ground by negotiation.

In an effort to "resolve this conflict," Governor Warren of California wrote the Governors of Arizona and Nevada March 3, 1947, saying, in part:

> The negotiations of the past have failed to bring about agreement between Arizona and California, but I am of the opinion that there must be some fair basis upon which their respective rights can be determined. The only methods that occur to me are (1) negotiation of a compact; (2) arbitration; and (3) judicial determination.
>
> I would therefore like to suggest that we three Governors of the affected States endeavor first to enter into a compact which will resolve our differences and finally determine our respective rights.
>
> In the event you believe for any reason that this cannot be done, I suggest that we submit all our differences to arbitration, agreeing to be bound by the results thereof.
>
> If this is not feasible, I propose that we join in requesting Congress to authorize a suit to determine our rights in the Supreme Court of the United States, which suit could, if agreeable to the States, be submitted on an agreed statement of facts.

Governor Pittman of Nevada replied, March 6, 1947, in part:

> Our experience leads us to an opinion that California and Arizona will be unable to negotiate a compact, and may be unwilling to agree on terms of arbitration. Nevada has spent much time and money in efforts to bring the tri-State compact into being, completely without results.
>
> I am in accordance with your thought that the three States, in the absence of other agreement, should join in requesting Congress to authorize a suit in the Supreme Court of the United States to determine our respective rights, and suggest that a method of presentation before the Court be agreed upon between Arizona and California, with which agreement Nevada will concur.

Governor Osborn of Arizona replied, March 12, 1947, in part:

> It is difficult for me to understand what, if anything further, need be done to place either California or Nevada or Arizona in position to support the utilization in our respective States of our respective shares of the water of the Colorado River, which shares have already been determined by the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, the water-delivery contracts of the California agencies, the Nevada water-delivery contracts, and the Arizona water-delivery contract.

In short, Arizona believes there is nothing to decide before new projects are built in the lower basin, whereas the Commissioner of Reclamation, the Secretary of the Interior, the Director of the Bureau of the Budget, the House Committee on Public Lands, and the Governors of California and Nevada believe that important issues exist, that they block further development of the lower basin, and that they ought to be speedily resolved.

We propose to examine these issues, measure their effects, and say why we think that litigation in the form we recommend is the only remaining solution.

The question before the committee is not whether California or Arizona is right, but whether their differences should be submitted to the Supreme Court.

III. THE DOCUMENTS INVOLVED

The questions we seek to have presented to the Court arise out of the following documents, collectively constituting the "Law of the River":

(1) The Colorado River compact: This agreement among the seven States of the Colorado River Basin was signed November 24, 1922. Without going into detail at this moment, the basic plan of the compact is the division of the area draining into, or capable of service from, the Colorado River System, into two basins, the upper and the lower, the "system" being defined as including the tributaries (art. II). Article III apportions to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum from the Colorado River system. Article III (b) provides that, in addition to the apportionment made in paragraph (a), the lower basin is given the right to increase its beneficial consumptive use of such waters by 1,000,000 acre-feet per annum. Article III (c) provides that in the event the United States recognizes any right in Mexico to the waters of the Colorado River system, such waters shall be supplied first from the surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b). If such surplus shall prove insufficient, then the burden of the deficiency shall be equally borne by the upper basin and the lower basin.

Article III (d) provides that the States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years, but this is subject to increase under article III (c) by a provision in that paragraph that whenever necessary the States of the upper division shall deliver at Lee Ferry water to supply one-half of the deficiency occasioned by the Mexican burden in addition to the 75,000,000 acre-feet. Article II (f) provides for a further equitable apportionment of the beneficial uses of the waters of the Colorado

River system unapportioned by paragraphs (a), (b), and (c) at any time after October 1, 1963, if and when either basin shall have reached the full beneficial consumptive use set out in paragraphs (a) and (b). Article III (g) specifies the manner of such a further apportionment, subject to legislative ratification by all the signatory States and the Congress.

(2) The Boulder Canyon Project Act: This statute, the act of December 21, 1928 (45 Stat. 1057), authorized the construction of Hoover Dam and the sale of power generated at that dam in order to make the project self-liquidating; authorized the storage and delivery of water under contracts with the United States, specifying that no person should have the right to use the stored water without such a contract; authorized the construction of the All-American Canal; gave the consent of Congress to the Colorado River compact; made the effectiveness of the act conditional upon various events, including either the ratification of the compact by seven States, or in the alternative ratification by six States and passage by California of an act limiting the use of water by California to certain specified quantities. It also authorized a subsidiary compact among the States of the lower basin, which has not been entered into.

These last three provisions, the conditional ratification of the compact, the requirement of a limitation act, and the authorization of a lower-basin compact, appear in section 4 (a) of the statute, and the questions now in front of us arise in part from that section of the act, in part from the compact. Proclamation by the President was provided for. On June 25, 1929, President Hoover proclaimed that seven States had not ratified the compact within the 6 months' time prescribed; but that six of them had, and that California had enacted the required limitation act. He accordingly proclaimed the Project Act in effect, placing the compact in operation as a six-State document. The six States which had ratified were California, Nevada, Utah, Colorado, Wyoming, and New Mexico. Arizona had declined. In 1944 Arizona undertook to ratify the compact as a seven-State document.

(3) California Limitation Act: This act is in the precise words prescribed by section 4 (a) of the Boulder Canyon Project Act. The limitation is as follows:

> * * * that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this act and all water necessary for the supply of any rights which may now exist, shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower-basin States by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus water unapportioned by said compact, such uses always to be subject to the terms of said compact.

(4) Supreme Court cases: Four cases involving the Colorado River have gone to the United States Supreme Court:

(*a*) *Arizona* v. *California et al.* (283 U. S. 423, 1931), in which Arizona sought to enjoin construction of Hoover Dam, and to have the Boulder Canyon Project Act and the Colorado River compact declared invalid. Had Arizona's onslaught succeeded, there would have been no compact, no project act, no stored waters to quarrel about. The Court dismissed the bill on motion of the United States and the other six States of the basin, held the Project Act valid, but did not

pass on the compact, saying that Arizona was not a party to it. In 1944, Arizona undertook to ratify the compact.

(*b*) *Arizona* v. *California et al.* (292 U. S. 341, 1934), in which Arizona sought to perpetuate the testimony of the negotiators of the Colorado River compact. Leave to file the bill was denied by the Court, on the ground that the testimony, if taken, would be inadmissible. Some observations, which will be referred to later, were made on the compact and Project Act.

(*c*) *United States* v. *Arizona* (295 U. S. 174, 1935), in which the United States sought to enjoin military interference by Arizona with the construction of Parker Dam. Injunction was denied, the difficulty was overcome by legislation, and construction proceeded. The compact was not construed.

(*d*) *Arizona* v. *California et al.* (298 U. S. 558, 1936), in which Arizona sued for an equitable apportionment of the waters of the Colorado River. Leave to file the bill was denied on the ground that the United States was a necessary party. Some comments appear as to the compact, and several on the project act.

None of these cases—save the Parker Dam case—went to answer. The opinions cast light on certain phases of the compact and Project Act, but make it clear that the issues now before us cannot be judicially determined until a case is brought in which the United States is a party.

(5) The water contracts made by the United States under the Project Act: In 1930, 1931, 1932, 1933, and 1934, the Secretary of the Interior entered into contracts under section 5 of the Project Act with five public agencies of California, providing for the storage and delivery of water at points on the river and the All-American Canal, subject to its availability under the terms of the Boulder Canyon Project Act and the Colorado River compact, in the amount of 5,362,000 acre-feet per year. In 1942 and 1944, the Secretary entered into contracts with the State of Nevada, providing for the storage and delivery to Nevada, subject to availability under the Boulder Canyon Project Act and the Colorado River compact, of 300,000 acre-feet. On February 9, 1944, the Secretary entered into a contract with Arizona for the storage and delivery of water to Arizona, subject to availability under the Boulder Canyon Project Act and the Colorado River compact, and subject to California's rights under the limitation act, in the amount of 2,800,000 acre-feet.

(6) Mexican water treaty: On February 3, 1944, the United States executed a treaty with Mexico (Treaty Series 994), to which the Senate gave consent on April 18, 1945, subject to 11 reservations, and a protocol. Following ratification by Mexico, the President proclaimed this treaty in force as of November 8, 1945. It allots to Mexico a guaranteed quantity of 1,500,000 acre-feet per year (art. 10 (a)), plus additional quantities under certain circumstances.

Because of the familiarity of this committee with these documents, reference to their terms has been made as brief as possible. Certain additional provisions will be referred to as we go along with the argument.

Here, let us make it plain that California insists upon the full performance by all parties to these documents: The Colorado River compact, the Boulder Canyon Project Act, our own limitation act, which constitutes a statutory compact with the United States, the

water contracts of the three States, and the treaty with Mexico as explained to the Senate by the men who negotiated it.

Further, let it be plainly understood that California, on its part, expects to abide by, and be bound by, and perform, these disputed documents according to their true intent and meaning, and, in particular, seeks to gain nothing that does not belong to California under them.

IV. THE ISSUES BETWEEN ARIZONA AND CALIFORNIA

Three basic differences stand in the way of an agreement between Arizona and California. They represent in the aggregate over 2,000,000 acre-feet of water. These issues all arise out of article III of the Colorado River compact and section 4 (a) of the Boulder Canyon Project Act, both of which will be offered in full text for the record.

(1) "*Consumptive use*" *versus* "*depletion.*" The first issue is whether the uses on the Gila River system chargeable to the lower basin and to Arizona shall be measured by the actual beneficial consumptive use of such waters, as California contends, or only by the amount by which those uses would have depleted the flow of the Gila into the Colorado River. The difference in result between California's "consumptive use" theory and Arizona's present "depletion" theory, is about 1,100,000 acre-feet. It is the difference between the figure of about 2,375,000 acre-feet, which is the amount that flows into the Phoenix area from the various tributaries, and is diverted, used, and reused in Arizona until substantially all that inflow is actually consumed, and the amount of 1,275,000 acre-feet, which is what Arizona's engineers now estimate as the average quantity which once flowed out of the Gila into the Colorado in a state of nature. We are prepared to show that the consumptive use theory was that which the negotiators of the compact reported that they had proceeded upon; that the Boulder Canyon Project Act and the California Limitation Act expressly followed that theory; that our water contracts and that of Arizona are written on that basis; that Arizona herself represented her uses to the Supreme Court in those terms; that the treaty with Mexico defines "consumptive use" as we do, and so did the official witnesses who supported the treaty; and that the Supreme Court has defined consumptive uses as California does. In short, we think that the same rule applies to Arizona as to California, and if California is charged with the actual amount of water consumed, Arizona should be.

(2) *The waters referred to in article III (b) of the Colorado River compact.*—The second issue is whether California is precluded by the terms of section 4 (a) of the Boulder Canyon Project Act, and by our limitation act, which is a piece of reciprocal legislation in the exact terms of a designated part of section 4 (a), from using any part of the waters referred to in article III (b) of the Colorado River compact. The project act and the limitation act restrict California to 4,400,000 acre-feet of the waters apportioned by article III (a) of the compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact. California says that the 1,000,000 acre-feet referred to in article III (b) of the compact is a part of the "excess or surplus waters" within the intent of section 4 (a) of the project act, and that California may share half of the whole surplus, including that million acre-feet. Arizona

says we may not. We are prepared to show that our contention is in exact accord with the legislative history of the Boulder Canyon Project Act, with the assumptions of both States in their negotiations, and with the representations made by Arizona in Supreme Court cases. A quantity not less than 500,000 acre-feet is at stake on this matter.

(3) *Reservoir losses.*—The third issue is whether the Project Act and the California Limitation Act, which impose limits on 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," intended that California might divert and use the full specified quantities, or whether it intended that these were subject to reduction on account of evaporation losses on reservoirs upstream. We say "no"; Arizona says "yes." Something over 600,000 acre-feet is involved here.

In short, considerably over 2,000,000 acre-feet is at issue on these three controversies. If Arizona should lose on any one of them there would not be water for the central Arizona project as now proposed.

We shall next trace the development and growth of these issues to their present irreconcilable status, taking up, in more or less chronological order, the six groups of documents constituting the "law of the river."

V. THE COLORADO RIVER COMPACT

Arizona's original legal interpretation of this document did not differ greatly from California's.

Judge Richard E. Sloan, who was legal adviser to the Arizona Colorado River Commissioner and chairman of the drafting committee which prepared the compact, writing in January 1923 (Arizona Mining Journal, January 15, 1923), less than 2 months after the compact was signed, said, in the course of a long and careful discussion:

> It may be of interest to know why the figures of 7,500,000 acre-feet for the upper basin and 8,500,000 acre-feet for the lower basin were reached. It grew out of the proposition made by the upper basin that that there should be a 50–50 division of rights to the use of the water of the river between the upper and lower basin which should include the flow of the Gila, and the insistence of Mr. Norviel, commissioner from Arizona, that no 50–50 basis of division would be equitable unless the measurement should be at Lees Ferry. As a compromise the known requirements of the two basins were to be taken as the basis of allotment with a definite quantity added as a margin of safety. The known requirements of the upper basin being placed at 6,500,000 acre-feet, a million acre-feet of margin gave the upper basin an allotment of 7,500,000 acre-feet. The known future requirements of the lower basin from the Colorado River proper were estimated at 5,100,000 acre-feet. To this, when the total possible consumptive use of 2,350,000 acre-feet from the Gila and its tributaries are added, gives a total of 7,450,000 acre-feet. In addition to this upon the insistence of Mr. Norveil, 1,000,000 acre-feet was added as a margin of safety, bringing the total allotment for the lower basin up to 8,500,000 acre-feet. This compromise agreement is justified when we consider that the flow of the river will not be affected by any artificial division, but will continue uninterrupted, to be used for any beneficial purpose recognized, including power, as freely as though no such apportionment had been attempted.
>
> In clause (D) of article III of the compact there is a provision which in effect guarantees that the States of the upper division will not cause the flow of the river at Lees Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years, reckoned in continuing progressive

series. Manifestly, the only purpose of this provision is to safeguard the lower basin during periods of prolonged drought.

There is no suggestion here that consumptive uses on the Gila River were to be artificially written down to 1,275,000 acre-feet: the "total possible consumptive use of 2,350,000 acre-feet," which he uses, corresponds almost exactly with California's contention. Nor does he indicate any intent to exclude California from the million acre-feet of III (b) water. He says it was a "margin of safety." Note also Judge Sloan's reference to the status of the 75,000,000 acre-feet guaranteed by the upper basin under article III (d). This point will be referred to again, as the bearing of Arizona's depletion theory on that guaranty is developed.

Judge Sloan's views were in exact accord with the report of Delph E. Carpenter, the Colorado Commissioner. Mr. Carpenter, who is credited with having had more to do with writing the compact than any one man, rendered a report to his Governor December 15, 1922, some 3 weeks after the compact was signed, in which he was explicit both as to the meaning of "consumptive use" and the status of the million acre-feet referred to in article III (b). He said, as to apportionments:

Seven million five hundred thousand acre-feet exclusive annual beneficial consumptive use is set apart and apportioned in perpetuity to the upper basin and a like amount to the lower basin.

And at a later point he stated:

By reason of development upon the Gila River and the probably 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 surplus waters of the river.

It was further stated:

The repayment of the cost of the construction of necessary flood-control reservoirs for the protection of the lower river country, probably will result in a forced development in the lower basin. For this reason a permissible additional development in the lower basin to the extent of a beneficial consumptive use of 1,000,000 acre-feet, was recognized in order that any further apportionment of surplus waters might be altogether avoided or at least delayed to a very remote period. This right of additional development is not a final apportionment. This clause does not interfere with the apportionment to the upper basin or with the right of the States of the upper basin to ask for further apportionment by a subsequent commission.

Senator O'MAHONEY. Do you agree, Mr. Ely, with that statement of Mr. Delph Carpenter, the second one which you read which appears at the bottom of page 18 of your text?

Would you read it again?

Mr. ELY (reading):

By reason of development upon the Gila River and the probably 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 surplus waters of the river.

Senator O'MAHONEY. Does that, in your opinion, explain the allowance of that additional 1,000,000 acre-feet?

Mr. ELY. It does, sir.

Senator O'MAHONEY. Completely?

Mr. ELY. Yes. We think Mr. Carpenter is also correct in his statement that "this right of additional development is not a final apportionment."

I would like to interpolate that Arizona, of course, disagrees with us. They treat the "right to increase use" as an apportionment.

Senator MCFARLAND. I would like to ask one question here: You do not place any significance, then, in the words "future apportionment"?

Mr. ELY. I am coming to that, if I may, Senator McFarland. To answer you at this point, it refers to the apportionment which may be made by unanimous consent at a later time. The effect upon that future apportionment of the use during the interim of that 1,000,000 acre-feet is explained quite fully in the Supreme Court cases to which I am coming, by Arizona counsel, Mr. Acheson and Mr. Mathews.

Mr. Carpenter's report defined "beneficial consumptive use" as follows:

> The term "beneficial consumptive use" is to be distinguished from the amounts diverted from the river. It does not mean headgate diversions. It means the amount of water consumed and lost to the river during uses of water diverted. Generally speaking, it is the difference between the aggregate diverted and the aggregate return flow. It is the net loss occurring through beneficial uses.

In a supplemental report dated March 20, 1923, he was even more explicit about "consumptive use," saying:

> The measure of the apportionment is the amount of water lost to the river. The "beneficial consumptive use" refers to the amount of water exhausted or lost to the stream in the process of making all beneficial uses. As recently defined by Director Davis, of the United States Reclamation Service, it is the "diversion minus the return flow" (Congressional Record, January 31, 1923, p. 2815).

Mr. Carpenter also telegraphed the two California negotiators, R. T. McKisick and W. F. McClure, to ask their interpretation of article III (b)—some question having been raised in Colorado whether this permission to increase use by 1,000,000 acre-feet per annum meant that the lower basin could compound its increase at that rate. McKisick, in his reply (February 13, 1923, quoted by Mr. Carpenter in his supplemental report, p. 39) not only answered that but made clear the distinction between III (b) water and apportioned water, saying:

> Am of opinion that paragraph B of article 3 permits increase of annual beneficial consumption use of water by lower basin to 8,500,000 acre-feet total or 1,000,000 in excess quantity apportioned each basin in perpetuity by paragraph A, article 3, and no more. When both paragraphs are read together no other construction tenable. "Per annum" not synonymous with "annually."

Mr. McClure replied, February 15, 1923:

> My interpretation of articles 3 and 8 well expressed in McKisick's wire of the 13th.

Mr. Carpenter's report was placed in the Congressional Record during the debate on the project act in the Senate (Congressional Record, Senate, 70th Cong. 2d sess., December 14, 1928, pp. 577–579, pp. 584–585).

The report of the Wyoming negotiator, Mr. Frank C. Emerson, later governor, to his State, January 18, 1923, is in general accord. While

not drawing the careful line that Mr. Carpenter did between article III (a) and III (b) with respect to their "apportioning" waters, he did say on 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 the 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.

Mr. Emerson plainly thought the million acre-feet was for the benefit of "the probably rapid development generally upon the lower river," as well as "possible developments upon the Gila River." There is no intent here to earmark that million acre-feet for Arizona.

Senator O'MAHONEY. May I ask you whether you also agree with that statment of former Governor Emerson?

Mr. ELY. Yes.

Senator O'MAHONEY. And you believe that that statement is the same as the statement of Mr. Carpenter to which I alluded a few moments ago?

Mr. ELY. Mr. Carpenter goes into more detail and in other portions of Mr. Emerson's report he does not draw the distinction that Mr. Carpenter does between the character of III (a) water as apportioned and III (b) as unapportioned.

Senator O'MAHONEY. Governor Emerson had this statement in his sentence which was not in Mr. Carpenter's statement:

> This additional development is at the peril of the lower division, as no provisions are made for delivery of water at Lee Ferry for this additional amount.

Mr. ELY. Yes, sir.

Senator O'MAHONEY. In other words, this additional 1,000,000 acre-feet provided for in III (b) does not constitute in the mind of either Governor Emerson or Mr. Carpenter an additional draft upon the upper basin.

Mr. ELY. Senator, the 75,000,000 acre-feet which you guarantee under article III (d), constitutes your entire guaranty except for the case that the surplus may be inadequate to meet the requirments of the rights which the United States may recognize in Mexico. In such event, you are required to add one-half of the deficiency. In our view, the 75,000,000 acre-feet which you guarantee under article III (d) consequently includes waters of every category, whether III (a) or III (b), or other surplus. It is not identified with the 7,500,000 acre-feet apportioned in article III (a) to the lower basin. I shall come to that in more detail as I develop the Supreme Court cases.

Senator O'MAHONEY. Thank you.

Mr. ELY. Your 75,000,000 acre-feet may, and in our opinion does, include some III (b) water.

These views which I have quoted from Judge Sloan, Mr. Carpenter, and Mr. Emerson, prevailed up to the date of the Boulder Canyon Project Act. Six States ratified the compact. Arizona did not. She refused because of the very interpretations she now denies, as will be subsequently shown.

VI. THE BOULDER CANYON PROJECT ACT

The fourth Swing-Johnson bill (H. R. 5773, S. 728, 70th Cong.) became the Boulder Canyon Project Act. It was beaten by an Arizona filibuster at the end of the first session and was passed with substantial amendments at the end of the second session, including section 4 (a), now in controversy. During the debates the idea of measuring the uses of the Gila River by the depletion theory was never mentioned; the Arizona and California, Senators who discussed the matter seemed to agree that the consumptive uses of the Gila chargeable under the compact were not less than 3,500,000 acre-feet (Congressional Record, Dec. 12, 1928, p. 467). Indeed, as shown in the subsequent litigation, this was one of the chief complaints Arizona had about the compact: that the consumptive uses with which she was chargeable on the Gila were so high that there would be nothing left for her on the main stream, or at least a quantity which would be unsatisfactory to her.

As to reservoir losses there was virtually no discussion.

As to the intent and meaning of the California Limitation Act, there is, of course, a great deal of discussion as part of the legislative history of the project act, because section 4 (a) was hammered out in debate on the Senate floor. In examining this history the problem at this time is not to decide whether Arizona is right in saying that the legislative intent was to treat the million acre-feet of III (b) water as apportioned like the 7,500,000 acre-feet of III (a) water, and to limit California to 4,400,000 acre-feet of the total; or whether California is right in saying that the legislative intent was to treat the III (b) water as part of the excess or surplus, of which California was to have one-half; the present question is simply whether the matter is in sufficient doubt as to demonstrate the existence of a real controversy. While we are prepared to discuss the 17 successive stages through which section 4 (a) passed in the Senate, it is enough to say that not one Senator nor one draft of amendment expressed the specific intent to exclude California from participation in the million acre-feet of III (b) water, and every Senator who specifically faced that question expressed the intent that California should participate in that million acre-feet.

The various forms of amendments which were considered, and the explanations given by their authors, make it clear that the question before them was whether California should have 4,600,000 or 4,200,000 acre-feet of the waters apportioned by article III (a) of the compact, plus half the remaining water, whatever it was, and that they were endeavoring to compromise those points.

Following the enactment of the project act, a series of efforts were made to negotiate a lower-basin compact. They failed. The records of proposals and counterproposals make it reasonably clear that both Arizona and California were slow to recognize the importance of reservoir losses, or their accounting under the compact. But these records also make clear (1) that both States recognized that under the Limitation Act, California was entitled to half the million acre-feet of III (b) water, and (2) that Arizona should be accountable for actual consumptive uses of the Gila, which were assumed by both sides at that time to be about 2,500,000 acre-feet. Arizona had never thought of the depletion theory. The negotiations broke down, not on these issues, but on the hard fact that the uses on the Gila being

perfected rights and hence entitled to apportioned water in perpetuity, were chargeable against the III (a) apportionment to the lower basin, and were so large that they left only about 5,000,000 acre-feet of III (a) water to be divided on the main stream. That was not enough to accommodate both States.

Arizona thereupon went into the Supreme Court three times, as outlined below. There was no doubt in her counsel's mind of the existence of a controversy at that time.

VII. THE COLORADO RIVER SUPREME COURT CASES

1. *The "injunction" case.—In Arizona* v. *California* (283 U .S. 423), Arizona retained eminent counsel, Hon. Dean Acheson, later Under Secretary of the Treasury and Under Secretary of State, and Hon. Clifton Mathews, now a judge of the Ninth Circuit Court of Appeals, and launched a frontal assault on the Boulder Canyon Project Act and the Colorado River compact, alleging that both were invalid. Here Arizona took careful aim at the issues of (1) the quantities of the uses with which she was chargeable on the Gila River under the compact, (2) the question of whether these uses were accountable under article III (a) or III (b), (3) whether the million acre-feet of water referred to in article III (b) was apportioned or surplus, and (4) whether the 75,000,000 acre-feet of water guaranteed by the upper basin in article III (d) is identical with the water apportioned to the lower basin in article III (a).

(*a*) As to the quantity of consumptive uses on the Gila River with which Arizona is chargeable: Arizona's bill of complaint in *Arizona* v. *California* (283 U. S. 423 (1930)), (art. VII), alleged (p. 7):

*** * * Of the appropriated water so diverted, used and consumed in Arizona, 2,900,000 acre-feet are diverted from the Gila River and its tributaries * * *.**

Arizona's brief, in *Arizona* v. *California* (283 U. S. 423), said at page 16:

In order that there might be no confusion as to the meaning of the term "to appropriate water," as used in the bill of complaint, it was defined therein as follows: "To appropriate water means to take and divert a specified quantity thereof and put it to beneficial use in accordance with the laws of the State where such water is found, and, by so doing, to acquire, under said laws, a vested right to take and divert from the same source, and to use and consume, the same quantity of water annually forever, subject only to the rights of prior appropriators."

Used in this sense, the bill alleges (bill, 7–8) that prior to June 25, 1929, there had been appropriated in Arizona 3,500,000 acre-feet of water from the Colorado River and its tributaries below Lee Ferry, of which 2,900,000 acre-feet had been appropriated from the Gila River.

(*b*) As to whether the uses on the Gila are accountable under article III (a) or article III (b) of the compact: In the first Colorado River case, *Arizona* v. *California* (283 U. S. 423), Arizona specifically alleged and argued that the uses on the Gila River, being perfected rights, were accountable under article III (a) and hence reduced by that amount the quantity of III (a) water which Arizona might claim out of the main stream if she ratified the compact. Thus the bill, article VII, page 8, alleged:

All of the water of the Gila River and its tributaries was appropriated and put to beneficial use in Arizona and New Mexico prior to June 25, 1929. There

was not on said date, nor has there since been, nor is there now, any unappropriated water in the Gila River or any of its tributaries.

Article XIV of the bill of complaint alleged at page 17:

(3) Said compact defines the term "Colorado River system" so as to include therein the Gila River and its tributaries, of which the total flow, aggregating 3,000,000 acre-feet of water annually, was appropriated and put to beneficial use prior to June 25, 1929. The State of New Mexico has but a slight interest, and the States of California, Nevada, Utah, Colorado, and Wyoming have no interest whatever in said water. Since said compact provides that the water apportioned thereby shall include all water necessary to supply existing rights, the effect of including the Gila River and its tributaries as a part of said system would be to reduce by 3,000,000 acre-feet annually the quantity of water now subject to appropriation in Arizona.

Article XIX of the bill of complaint, referring to the tri-State compast authorized by section 4 (a) of the Boulder Canyon Project Act, alleged on page 221:

Said proposed apportionment of 2,800,000 acre-feet of water is less than the quantity of water already appropriated in Arizona, and would provide no water for future appropriation in said State.

Arizona's brief stated on page 381:

All existing uses must be satisfied from the 7,500,000 acre-feet apportioned by article III (a). Arizona has existing uses totaling 3,500,000 acre-feet.

(*c*) As to whether the waters referred to in article III (b) of the compact are "apportioned" or "surplus": In the first Colorado River case, *Arizona* v. *California* (283 U. S. 423), Arizona's bill of complaint (art. XIV) alleged:

(2) Said compact does not apportion or attempt to apportion all of the water of said Colorado River system, but attempts to apportion only 15,000,000 acre-feet thereof, and leaves unapportioned the remaining water of said system, aggregating 3,000,000 acre-feet annually.

Arizona's brief, in 283 United States 423, stated on page 41:

To each basin is apportioned the annual beneficial consumptive use in perpetuity of 7,500,000 acre-feet of water, which must satisfy all existing appropriations as well as all future appropriations. There are existing appropriations totaling 6,500,000 acre-feet annually in the lower basin and 2,500,000 acre-feet annually in the upper basin. The upper basin States agree not to deplete the flow of the main stream at Lee Ferry below 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series. The flow of the system in excess of 15,000,000 acre-feet annually is not apportioned.

Arizona's brief further stated on page 331:

Under the compact, then, the only water of which the right to exclusive beneficial use in perpetuity may be acquired in the lower basin is the water apportioned to that basin. Such apportionment is limited to 7,500,000 acre-feet of water per annum by article III (a). The Colorado brief, page 40, contends that paragraph (b) of article III operates to increase this apportionment to 8,500,000 for the lower basin. This, we submit, is not the case. If it had been intended to apportion the larger amount, the compact could easily have said so. The difference in language between paragraphs (a) and (b) is plain, and the difference in meaning is clear. Paragraph (b) does not apportion in perpetuity, as does paragraph (a), any beneficial use of water. It is very careful not to do this. It is to be read with paragraph (c) and relates solely to the method of sharing between the basins any future Mexican burden which this Government might recognize. This burden is to be satisfied first out of "surplus" waters, and surplus waters are defined, not as surplus over quantities "apportioned," but as surplus over quantities "specified in paragraphs (a) and (b)." Any deficiency remaining is to be borne equally by the two basins. Thus the lower basin, which without paragraph (b) might use water in excess of its apportionment without acquiring any exclusive right in perpetuity thereto, is enabled to retain such uses to the extent of 1,000,000 acre-feet per annum against the first incidence of the

Mexican burden. Thereafter it is entitled to require the upper basin to share from its apportionment equally in the satisfaction of any deficiency. In other words, all that paragraphs (b) and (c) accomplish is to require the upper basin to reduce its apportionment in favor of Mexico before the lower basin is required to do so, the lower basin being entitled to contribute first, to the extent of 1,000,000 acre-feet, water which it may have used but to which it has no exclusive right in perpetuity—that is, water not apportioned to it. The water apportioned is that to which exclusive beneficial use in perpetuity is given in paragraph (a), less any deductions which may have to be recognized as provided in paragraphs (b) and (c).

(*d*) As to the status of the 75,000,000 acre-feet guaranteed by the upper basin under article III (d) of the compact: In *Arizona* v. *California* (283 U. S. 423), Arizona's brief on page 32 stated:

The provision in paragraph (a) of article III that the upper basin States will not cause the flow of the river to be depleted below 75,000,000 acre-feet over 10-year periods, has, as the Colorado brief, page 41, correctly states, no bearing on the amount of the apportionment to the lower basin. This 75,000,000 acre-feet is not apportioned to the lower basin. It may not be appropriated in the lower basin. Only so much of it may be appropriated as together with existing and future appropriations of water in or from tributaries entering the river below Lee Ferry will total 7,500,000 acre-feet per year. The 75,000,000 acre-feet includes all surplus waters which under paragraph (c) must first bear any Mexican burden which may not be appropriated, and which are subject to apportionment after 1963. It is fundamental to an understanding of the compact that the annual beneficial consumptive use in perpetuity of 7,500,000 acre-feet of water apportioned by it to the lower basin includes all beneficial consumptive use in perpetuity which may be made from the whole river system, and is not merely an apportionment of such uses in main-stream water flowing at Lee Ferry. The agreement not to deplete the flow at Lee Ferry below the specified amount does not mean, and cannot under the plain words of the compact be construed to mean, that the guaranteed flow is apportioned to the lower basin or may be appropriated there. As to this, at least, there can be no shadow of doubt.

The statement referred to by Arizona, in the brief of Colorado, New Mexico, and Nevada, was, on page 41:

The balance of water supply between the two basins is preserved by a guaranty by the upper basin States that they will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series. This guaranty has no direct relation to the aggregate allocation of 8,500,000 acre-feet per annum to the lower basin which is to be supplied out of that part of the whole Colorado River system within the lower basin.

The Court refused the injunction, holding that Congress had power to authorize the construction of Hoover Dam, but did not construe the compact, saying that Arizona was not a party to it.

As to all four of these questions discussed by Messrs. Acheson and Mathews in 283 U. S. 423, note the close correspondence with the views expressed by Judge Sloan in 1923, and for that matter with our own. There was controversy over water but not over the meaning of the basic documents. Now let us turn to Arizona's second case.

Senator MILLIKIN. Let me suggest that we have a 5-minute recess.

(Brief recess.)

Senator MILLIKIN. The hearing will come to order, please.

Mr. ELY. I come now to the second case, the perpetuation of testimony case.

2. *The "perpetuation of testimony" case.*—In the second Colorado River case, *Arizona* v. *California* (292 U. S. 341), Arizona retained eminent counsel, Mr. Charles A. Carson, and sought to perpetuate the testimony of the negotiators of the Colorado River compact.

I shall compare Arizona's position on these same four issues that Mr. Acheson and Mr. Mathews took up.

(*a*) As to the quantities with which Arizona is chargeable on the Gila, the pleadings are silent, but the brief at page 11 seems to imply that they amount to only 1,000,000 acre-feet. Nothing at all is said about the depletion theory; it had not been born.

(*b*) As to whether the uses on the Gila are accountable under article III (a) or III (b) of the compact, Mr. Carson completely reversed the field on Mr. Acheson, arguing in his brief at page 11:

> * * * the framers of the compact intended that the 1,000,000 acre-feet per annum permitted to the lower basin by article III (b) was not in the main stream at all, but was in the tributaries existing in the lower basin.

The same contention has been made by counsel for Arizona in recent congressional hearings. In short, to be able to claim for new main stream projects the water which was apportioned in perpetuity to the lower basin, the promoters of these new projects are now willing to relegate Arizona's old and long-perfected uses on the Gila River to the secondary and vulnerable status of III (b) water, reversing the position of her counsel in the first Colorado River case. There is no evidence that the water users on the Gila subscribe to that new theory.

(*c*) As to whether the waters referred to in article III (b) are "apportioned" or "surplus," however, Mr. Carson apparently found himself in full accord with Mr. Acheson. His bill of complaint was silent on that, but his brief meticulously and repeatedly, 17 times, used the phrase "permitted" to the lower basin by article III (b), as contrasted with "apportioned" to the lower basin by article III (a).

Indeed, Arizona did not suggest her present argument in this second case; instead, according to the Supreme Court:

> Arizona claims that this paragraph, which declares:
> "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," means that the waters apportioned by article III (b) of said compact are for the sole and exclusive use and benefit of the State of Arizona.

The Court rejected that construction, after considering what it called Arizona's "elaborate argument." The Court did say, however, in a dictum, that "both Arizona and California apparently consider the waters under article III (b) as apportioned." There is no indication of the source of this assumption; both briefs were explicit in the other direction. But Arizona derives comfort from that remark, just as we derive comfort from the remark that article III (b) intended "to apportion the 1,000,000 acre-feet to the States of the lower basin and not specifically to Arizona alone."

That is a quotation from the Court's opinion.

(*d*) As to the status of the 75,000,000 acre-feet guaranteed by the upper basin under article III (d) of the compact, again Mr. Carson departed from the true faith as announced by Mr. Acheson, saying in his brief on page 10:

> The compact, therefore, in article III (a) apportions 7,500,000 acre-feet per annum to the upper basin and 7,500,000 acre-feet per annum to the lower basin in perpetuity and in order to assure delivery to the lower basin of the 7,500,000 acre-feet per annum, apportioned to it, provided further in article III (d) as follows:
> "(d) The States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series beginning with the 1st day of October next succeeding the ratification of this compact."

It is very apparent that the foregoing provision was arrived at by multiplying the 7,500,000 acre-feet per annum apportioned to the lower basin, by article III (a), by 10, thus dividing between the upper and lower basins the benefit of floodwaters.

We shall comment later on the consequences of this change of position to the upper basin. To dispose of the second Colorado River case, it may be said that the actual holding was only that (292 U. S. 341, 360):

As Arizona has failed to show that the testimony which she seeks to have perpetuated could conceivably be material or competent evidence bearing upon the construction to be given article III, paragraph (b), in any action which may hereafter be brought, the motion for leave to file the bill should be denied. We have no occasion to determine whether leave to file the bill should be denied also because the United States was not made a party and has not consented to be sued.

Senator O'MAHONEY. May I ask with respect to the language on page 31, that the Court did say there, however, in a dictum that both Arizona and California apparently consider the waters under article III (b) as apportioned. Then you go on and state that there is no indication of the source of this assumption. Both briefs were explicit in the other direction.

Do you still maintain the position that was maintained in the California brief at that time?

Mr. ELY. That the III (b) waters are not apportioned; yes, sir.

Senator O'MAHONEY. Thank you.

Senator MCFARLAND. The Supreme Court had no foundation for its statement, is that your position?

Mr. ELY. We say that the Court did not intend to adjudicate that point.

Senator MCFARLAND. You still contend that the Court had no foundation for that statement?

Mr. ELY. None in the briefs; no, sir. The Arizona brief is explicit, and ours, too.

Senator MCFARLAND. The Supreme Court made a mistake?

Mr. ELY. As to how it came about, I cannot say, but there is nothing in either brief that says that the waters were apportioned.

Senator MCFARLAND. Either there was foundation or, according to your contention, the Supreme Court made a mistake.

Mr. ELY. There is no foundation for the assertion.

Senator MCFARLAND. Then you contend the Court made a mistake?

Mr. ELY. We contend the Court did not intend to adjudicate.

Senator MCFARLAND. If you will not answer it, all right.

Mr. ELY. As in many cases of dicta, this case did not go to answer and there was no oral argument, and——

Senator MILLIKIN. Arizona will have the opportunity to bring her own interpretation of the case and it is not necessary to go into it now.

Mr. ELY. Surely.

This brings us to the third case, in which the Court did pass on the necessity of the United States as a party.

3. *The "equitable apportionment" case.*—In the third Colorado River case, *Arizona* v. *California* (298 U. S. 558), Arizona, being thoroughly dissatisfied with the results of the second case, decided to revert to Mr. Acheson's original position. She retained eminent counsel, Mr. James R. Moore, and sued the six States of the basin for an equitable apportionment, on the premise, in general, that the project act and the compact meant what they said and she wanted none of them.

The depletion theory, and the idea that the limitation act excludes California from III (b) water, were not suggested. Instead:

(*a*) As to the quantity of consumptive use on the Gila River with which Arizona is chargeable, the bill of complaint and brief were just as candid as Mr. Acheson's. The bill of complaint (art. VI) alleged at page 12:

> The average annual virgin flow of the Gila River into the Phoenix, Ariz., area is 2,359,000 acre-feet. Irrigation development has reduced the escape of such flow to approximately 644,000 acre-feet annually and has reduced the annual average discharge of the Gila into the Colorado River near Yuma to about 350,000 acre-feet. Further development on the Gila in the neighborhood of Phoenix now under construction will reduce the escape from that area to an average of about 300,000 acre-feet and the discharge into the Colorado at Yuma to about 100,000 acre-feet annually, which will occur as the peaks of extraordinary floods which cannot practicably be conserved.

Senator MILLIKIN. What is the present discharge into the Colorado from the Gila?

Mr. ELY. It varies greatly from year to year. In recent years there has been none, I am told.

Article VII alleged on page 13:

> * * * Of the virgin flow of the Gila in the Phoenix area, 2,885,000 acre-feet per year have been used and appropriated in Arizona and 15,000 in New Mexico. A large quantity of the waters of the Gila used for irrigation in and above the Phoenix area returns to the stream and is again diverted and used, with the result that the diversions exceed its virgin flow.

Article X alleged on page 15:

> The average quantity of water per acre required annually for the purpose of irrigation (exclusive of canal losses) is as follows: In Arizona and California, 4 acre-feet; in Nevada, 3 acre-feet; in Utah, New Mexico, Colorado, and Wyoming, 1.5 acre-feet.

Article XI alleged on page 16:

> Approximately 525,000 acres of land in the Gila River Basin are irrigated from the waters of the Gila and its tributaries, 520,000 acres of which are located in the State of Arizona and the remaining 5,000 acres in the State of New Mexico.

As to the other questions relating to the limitation act and the compact, Arizona made the following allegations (pp. 25–27):

> * * * the maximum quantity of Colorado River water which California may legally divert and consumptively use is:
>
> | | |
> |---|---|
> | Of water apportioned by par. (a), art. III, compact | 4,400,000 |
> | One-half waters unapportioned | 1,085,500 |
> | California's maximum legal rights | 5,485,500 |
>
> The foregoing quantities are in acre-feet per year and are based upon average annual discharges of the Colorado and Gila for the last 37 years for which records are available.

XIX

WATER CONTRACTS BETWEEN SECRETARY OF THE INTERIOR AND CALIFORNIA CORPORATIONS

The Secretary of the Interior, pursuant to the provisions of Section 5 of the Boulder Canyon Project Act, during the years 1931 and 1933 entered into contracts with the California corporations named below for the storage in Boulder Reservoir and the delivery of Colorado River water for domestic and irrigation purposes in California, in acre-feet per year, as follows:

Metropolitan water district	1,100,000
Imperial Valley and others	3,850,000
City of San Diego	112,000
Palo Verde	300,000
Total	5,362,000

Plaintiff alleges that the total of the waters for the storage and delivery of which it was so contracted is substantially the entire amount which may legally be diverted from said river and consumptively used in the State of California under the terms of said statutory contract between the State of California and the United States, and is far in excess of California's equitable share of said waters.

For herself, Arizona claimed (bill, art. XXXIV, p. 43):

Arizona alleges that her equitable share of the waters flowing in the Colorado River and its tributaries, exclusive of the Gila, and subject to appropriation and use under her jurisdiction, is not less than 7,500,000 acre-feet per year and that, in addition, she is equitably entitled to use all the waters flowing in the Gila River, less such equitable share thereof as the State of New Mexico may be entitled to appropriate and use.

The Court's opinion, using the figures furnished by the bill of complaint, stated, in *Arizona* v. *California* (298 U. S. 558), page 564:

The compact was duly ratified by the six defendant States, and the limitation upon the use of the water by California was duly enacted into law by the California Legislature by act of March 4, 1929, supra. By its provisions the use of the water by California is restricted to 5,484,500 acre-feet annually.[5]

In a footnote, page 564, note 5, the Court said:

The surplus water of the river in the lower basin, unapportioned by the compact, is 2,171,000 acre-feet, one-half of which, or 1,085,500 acre-feet, California is entitled, under the Boulder Canyon Project Act, and her own statute, to add to the 4,400,000 acre-feet which they specifically allot to her, making a total allotment of 5,485,500 acre-feet annually.

Those figures are derived from the bill of complaint, as I stated, Mr. Chairman.

But the actual holding of the case was (p. 570):

Without more detailed statement of the facts disclosed, it is evident that the United States, by congressional legislation and by acts of its officers which that legislation authorizes, has undertaken, in the asserted exercise of its authority to control navigation, to impound, and control the disposition of, the surplus water in the river not already appropriated.

On page 571 it was stated:

Every right which Arizona asserts is so subordinate to and dependent upon the rights and the exercise of an authority asserted by the United States that no final determination of the one can be made without a determination of the extent of the other.

Page 572:

The petition to file the proposed bill of complaint is denied. We leave undecided the question whether an equitable division of the unappropriated water of the river can be decreed in a suit in which the United States and the interested States are parties. Arizona will be free to assert such rights as she may have acquired, whether under the Boulder Canyon Project Act and California's undertaking to restrict her own use of the water or otherwise, and to challenge, in any appropriate judicial proceeding, any act of the Secretary of the Interior or others, either States or individuals, injurious to it and in excess of their lawful authority.

Petition denied.

If we may pause here, at the end of this review of the three Colorado River cases in the Supreme Court, it seems perfectly evident that the existence of a deep and serious controversy over the meaning and intent of the documents constituting the "Law of the river" had been developed by the diametrically opposite positions taken by Arizona herself.

We come now to item 8, "The water contracts."

VIII. THE WATER CONTRACTS

As mentioned in the case last cited, the Secretary of the Interior, during the period 1930–34, had entered into contracts with five public bodies of California, which the Court summarized as follows, at page 564:

> The Secretary of the Interior, acting under authority of section 5 of the Boulder Canyon Project Act, has entered into contracts with California corporations for the storage in the Boulder Dam Reservoir and the delivery, for use in California [6] of 5,362,000 acre-feet of water annually, * * *.

On page 570 the Court said:

> * * * Section 5 provides that "no person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated." Section 5 also provides that the Secretary of the Interior may contract for the storage of water and for delivery thereof upon charges which will provide revenue, and section 5 (c) directs that "Contracts for the use of water * * * shall be made with responsible applicants therefor who will pay the price fixed by the Secretary with a view to meeting the revenue requirements herein provided for." Acting under this authority the Secretary of the Interior has substantially completed the project and has entered into contracts, so the bill of complaint alleges, for the delivery of 5,362,000 acre-feet of stored water to California corporations, and for the financing and construction of Parker and Imperial Dams and the All-American Canal to facilitate the use of this water in California.

On page 570 the Court said:

> The "equitable share" of Arizona in the unappropriated water impounded above Boulder Dam could not be determined without ascertaining the rights of the United States to dispose of that water in aid and support of its project to control navigation, and without challenging the dispositions already agreed to by the Secretary's contracts with the California corporations, and the provision as well of section 5 of the Boulder Canyon Project Act that no person shall be entitled to the stored water except by contract with the Secretary.

All of these California contracts were written subject to availability of water under the Boulder Canyon Project Act and the Colorado River compact, and none purported to interpret those documents. They were all written, however, in terms of beneficial consumptive use, not depletion.

In 1942 and 1944 the Secretary entered into water contracts with the State of Nevada, aggregating 300,000 acre-feet.

On February 9, 1944, the Secretary entered into a contract with the State of Arizona for the storage and delivery of water to the State of Arizona in the maximum amount of 2,800,000 acre-feet.

Article 7 (h) of that contract reads:

> Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an act of its legislature (ch. 16, Statutes of California of 1929) upon which limitation the State of Arizona expressly relies.

Article 10 reads:

---

[6] The table is as follows:

	Acre-feet
Metropolitan water district	1,100,000
Imperial Valley and others	3,850,000
City of San Diego	112,000
Palo Verde	300,000
Total	5,362,000

RESERVATIONS

10. Neither article 7 nor any other provision of this contract shall impair the right of Arizona and other States and the users of water therein to maintain, prosecute, or defend any action respecting, and is without prejudice to, any of the respective contentions of said States and water users as to (1) the intent, the effect, meaning, and interpretation of said compact and said act; (2) what part, if any, of the water used or contracted for by any of them falls within article III (a) of the Colorado River compact; (3) what part, if any, is within article III (b) thereof; (4) what part, if any, is excess or surplus waters unapportioned by said compact; and (5) what limitations on use, right of use, and relative priorities exist as to the waters of the Colorado River system; provided, however, that by these reservations there is no intent to disturb the apportionment made by article III (a) of the Colorado River compact between the upper basin and the lower basin.

If any more complete disclaimer was needed, it was afforded by the memorandum decision of the Secretary of the Interior in approving the contract (Feb. 10, 1944):

I have carefully considered the objections made by California in its printed brief and at the hearing before me on February 2. California is fearful that subdivisions (a) and (b) of article 7 construed together create an inference that the maximum of 2,800,000 acre-feet which the United States agrees to deliver under subdivision (a) is water apportioned to the lower basin under article III (a) of the compact and that Arizona could contend, to California's prejudice, that this constituted an administrative determination that Arizona was entitled by this contract to 2,800,000 acre-feet of III (a) water. I am convinced that California's fears in this respect are unfounded for at least two reasons. First, I wish to make it clear, and to emphasize, that the delivery of water under both subdivision (a) and subdivision (b) of article 7 is expressly "subject to its availability under the Colorado River compact and the Boulder Canyon Project Act." The proposed contract does not attempt to obligate the United States to deliver any water to Arizona which is not available to Arizona under the terms of the compact and act. Secondly, article 10 was purposely designed to prevent Arizona, or any other State, from contending that the proposed contract, or any provision of the proposed contract, resolves any issue on the amounts of waters which are apportioned or unapportioned by the compact and the amounts of apportioned or unapportioned water available to the respective states under the compact and the act. It expressly reserves for future *judicial* determination any issue involving the intent, effect, meaning, and interpretation of the compact and act. The language of article 10 is plain and unequivocal and adequately reserves all questions of interpretation of the compact and the act. [The italic is supplied.]

It seems clear that the controversy which has three times flared into the Supreme Court has not been quenched by the Arizona water contract.

IX. THE MEXICAN WATER TREATY

On February 3, 1944, a week before the Arizona water contract was signed, the Mexican water treaty was made public. It allocates to Mexico a guaranteed quantity of 1,500,000 acre-feet annually, measured at the boundary, plus added quantities under specified conditions, but provides:

Article 10 (b):

In the event of extraordinary drought or serious accident to the irrigation system in the United States, thereby making it difficult for the United States to deliver the guaranteed quantity of 1,500,000 acre-feet (1,850,234,000 cubic meters) a year, the water allotted to Mexico under subparagraph (a) of this article will be reduced in the same proportion as consumptive uses in the United States are reduced.

Article 1 of the treaty defines "consumptive use" as follows:

(j) "Consumptive use" means the use of water by evaporation, plant transpiration or other manner whereby the water is consumed and does not return to its

source of supply. In general it is measured by the amount of water diverted less the part thereof which returns to the stream.

This was explained by R. J. Tipton, one of the negotiators of the treaty, as follows (hearings, pp. 1224, 1225, 1226):

Water is measured at the head of the irrigated area for administrative purposes in Colorado. The water commissioner of a given water district every single day during the irrigation season phones the proper official of each canal system and tells him how much water he can take from the stream in the order of the priority of the water rights of his system. So we have good stream-gaging stations to measure the inflow to the area. We know how much water comes in: we know how much water goes out. It is simply a matter of deducting one from the other to determine the consumptive use. * * *

At a later point in the proceedings it was stated:

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, and we put the words "consumptive use" in, because it will 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. [Italic supplied.]

At a later point, Senator Downey asked:

Senator DOWNEY. "Consumptive uses"?

Mr. TIPTON. The plural, because we have a consumptive use of this little 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 ascertainable by measuring the inflow to the areas and the outflow from the areas; * * *

The treaty, in short, adds no comfort to Arizona. It confirms the consumptive-use definition, adds a considerable quantity to the burden on the water supply, and throws into sharp relief the effect on the upper basin States of the burden under Arizona's depletion theory.

Continuing in chronological order, the most important definition of all is that given June 11, 1945, by the United States Supreme Court decision in *Nebraska* v. *Wyoming* (325 U. S. 589, 600):

Consumptive use represents the difference between water diverted and water which returns to the stream after use for irrigation.

Senator O'MAHONEY. May I ask you to define a little more clearly your interpretation of the effect upon the upper basin States of the so-called depletion theory?

Mr. ELY. May I come to that later on, Senator O'Mahoney?

Senator O'MAHONEY. Yes; you may.

Mr. ELY. Thank you.

X. CONCLUSION

An irreconcilable controversy exists between Arizona and California, arising out of the interpretations of the Colorado River compact and the Boulder Canyon Project Act, involving in excess of 2,000,000 acre-feet of water. The executive branches of the Government charged with the development of the Colorado River have said that further construction by the Federal Government in the lower basin is "handicapped, if not barred," until this controversy is resolved.

California desires an early solution to it. There are three possible methods: By negotiation, or by arbitration, or by an original action in the United States Supreme Court.

For a quarter century negotiation has been ineffective because there is simply not enough water in the river to satisfy the legitimate aspirations of both States. Governor Warren has proposed arbitration, and Arizona has rejected it. We still feel that arbitration by an impartial judicial tribunal is the most expeditious way of determining the three issues in which this 2,000,000 acre-feet of water is bound up. As that is unacceptable to Arizona, we have proposed litigation as the only remaining avenue to a solution. To that end, we have proposed that the United States institute an action in the Supreme Court.

As far as California is concerned, the issues which must necessarily be litigated are the three which are directly translatable into large quantities of water: The issue of consumptive use versus depletion, the status of the waters referred to in article III (b) of the compact, and the issue of the accountability for reservoir losses. All of these are matters of statutory construction or of contract law insofar as the California Limitation Act constitutes a contract between the Congress and the Legislature of California. None of them present issues of fact or require the taking of testimony. California pledges her energies to an expeditious conclusion of the case.

We ask the committee's favorable action on Senate Joint Resolution 145, to authorize this suit.

Mr. Chairman, may I offer some exhibits which I think you may wish to have in the record. We should like to offer the full text of the Colorado River compact; the text of relevant portions of the Boulder Canyon Project Act; the text of the California Limitation Act; the proclamation of the President which placed the project act and the compact in operation; the metropolitan water district contract, as illustrative of the California water contracts; the Arizona water contract in full; the Secretary's decision on the Arizona water contract; certain letters of transmittal from the executive agencies and "comprehensive report," or extracts from it. The same with respect to the central Arizona project, and a copy of our printed brief, of which a copy has come to you, I believe, and certain extracts from cases and other material to which I have referred.

Senator MILLIKIN. You wish the brief entered in full?

Mr. ELY. We prefer to, if you will indulge us in that respect.

Senator MILLIKIN. All of the documents mentioned by Mr. Ely will be inserted in the record, in full, immediately after his remarks.

(The documents referred to follow:)

COLORADO RIVER COMPACT, SIGNED AT SANTA FE, N. MEX., NOVEMBER 24, 1922

(Federal Reclamation Laws, Annotated (1943), p. 363)

The States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, having resolved to enter into a compact under the act of the Congress of the United States of America approved August 19, 1921 (42 Stat. L., p. 171), and the acts of the legislatures of the said States, have through their Governors appointed as their commissioners: W. S. Norviel for the State of Arizona, W. F. McClure for the State of California, Delph E. Carpenter for the State of Colorado, J. G. Scrugham for the State of Nevada, Stephen B. Davis, Jr., for the State of New Mexico, R. E. Caldwell for the State of Utah, Frank C. Emerson for

the State of Wyoming, who, after negotiations participated in by Herbert Hoover, appointed by the President as the representative of the United States of America, have agreed upon the following articles:

ARTICLE I

The major purposes of this compact are to provide for the equitable division and apportionment of the use of the waters of the Colorado River system; to establish the relative importance of different beneficial uses of water; to promote interstate comity; to remove causes of present and future controversies and to secure the expeditious agricultural and industrial development of the Colorado River Basin, the storage of its waters, and the protection of life and property from floods. To these ends the Colorado River Basin is divided into two basins, and an apportionment of the use of part of the water of the Colorado River system is made to each of them with the provision that further equitable apportionment may be made.

ARTICLE II

As used in this compact:

(a) The term "Colorado River System" means that portion of the Colorado River and its tributaries within the United States of America.

(b) The term "Colorado River Basin" means all of the drainage area of the Colorado River system and all other territory within the United States of America to which the waters of the Colorado River system shall be beneficially applied.

(c) The term "States of the upper division" means the States of Colorado, New Mexico, Utah, and Wyoming.

(d) The term "States of the lower division" means the States of Arizona, California, and Nevada.

(e) The term "Lee Ferry" means a point in the main stream of the Colorado River 1 mile below the mouth of the Paria River.

(f) The term "Upper Basin" means those parts of the States of Arizona, Colorado, New Mexico, Utah, and Wyoming within and from which waters naturally drain into the Colorado River system above Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River system which are now or shall hereafter be beneficially served by waters diverted from the system above Lee Ferry.

(g) The term "Lower Basin" means those parts of the States of Arizona, California, Nevada, New Mexico, and Utah within and from which waters naturally drain into the Colorado River system below Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River system which are now or shall hereafter be beneficially served by waters diverted from the system below Lee Ferry.

(h) The term "domestic use" shall include the use of water for household stock, municipal, mining, milling, industrial, and other like purposes, but shall exclude the generation of electrical power.

ARTICLE III

(a) There is hereby apportioned from the Colorado River system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.

(b) In addition to the apportionment in paragraph (a), the lower basin is hereby given the right to increase its beneficial consumptive use of such waters by 1,000,000 acre-feet per annum.

(c) If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River system, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraph (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be equally borne by the upper basin and the lower basin, and whenever necessary the States of the upper division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provided in paragraph (d).

(d) The States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any

period of 10 consecutive years reckoned in continuing progressive series beginning with the 1st day of October next succeeding the ratification of this compact.

(e) The States of the upper division shall not withhold water, and the States of the lower division shall not require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses.

(f) Further equitable apportionment of the beneficial uses of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October 1, 1963, if and when either basin shall have reached its total beneficial consumptime use as set out in paragraphs (a) and (b).

(g) In the event of a desire for further apportionment as provided in paragraph (f) any two signatory States, acting through their governors, may give joint notice of such desire to the governors of the other signatory States and to the President of the United States of America, and it shall be the duty of the governors of the signatory States and of the President of the United States of America forthwith to appoint representatives, whose duty it shall be to divide and apportion equitably between the upper basin and lower basin the beneficial use of the unapportioned water of the Colorado River system as mentioned in paragraph (f), subject to the legislative ratification of the signatory States and the Congress of the United States of America.

ARTICLE IV

(a) Inasmuch as the Colorado River has ceased to be navigable for commerce and the reservation of its waters for navigation would seriously limit the development of its basin, the use of its waters for purposes of navigation shall be subservient to the uses of such waters for domestic, agricultural, and power purposes. If the Congress shall not consent to this paragraph, the other provisions of this compact shall nevertheless remain binding.

(b) Subject to the provisions of this compact, water of the Colorado River system may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes.

(c) The provisions of this article shall not apply to or interfere with the regulation and control by any State within its boundaries of the appropriation, use, and distribution of water.

ARTICLE V

The chief official of each signatory State charged with the administration of water rights, together with the Director of the United States Reclamation Service and the Director of the United States Geological Survey, shall cooperate, ex officio—

(a) To promote the systematic determination and coordination of the facts as to flow, appropriation, consumption, and use of water in the Colorado River Basin, and the interchange of available information in such matters.

(b) To secure the ascertainment and publication of the annual flow of the Colorado River at Lee Ferry.

(c) To perform such other duties as may be assigned by mutual consent of the signatories from time to time.

ARTICLE VI

Should any claim or controversy arise between any two or more of the signatory States: (a) With respect to the waters of the Colorado River system not covered by the terms of this compact; (b) over the meaning or performance of any of the terms of this compact; (c) as to the allocation of the burdens incident to the performance of any article of this compact or the delivery of waters as herein provided; (d) as to the construction or operation of works within the Colorado River Basin to be situated in two or more States, or to be constructed in one State for the benefit of another State; or (e) as to the diversion of water in one State for the benefit of another State, the governors of the States affected upon the request of one of them, shall forthwith appoint commissioners with power to consider and adjust such claim or controversy, subject to ratification by the legislatures of the States so affected.

Nothing herein contained shall prevent the adjustment of any such claim or controversy by any present method or by direct future legislative action of the interested States.

ARTICLE VII

Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes.

ARTICLE VIII

Present perfected rights to the beneficial use of waters of the Colorado River system are unimpaired by this contract. Whenever storage capacity of 5,000,000 acre-feet shall have been provided on the main Colorado River within or for the benefit of the lower basin, then claims of such rights, if any, by appropriators or users of water in the lower basin against appropriators or users of water in the upper basin shall attach to and be satisfied from water that may be stored not in conflict with Article III.

All other rights to beneficial use of waters of the Colorado River system shall be satisfied solely from the water apportioned to that basin in which they are situate.

ARTICLE IX

Nothing in this compact shall be construed to limit or prevent any State from instituting or maintaining any action or proceeding, legal or equitable, for the protection of any right under this compact or the enforcement of any of its provisions.

ARTICLE X

This compact may be terminated at any time by the unanimous agreement of the signatory States. In the event of such termination, all rights established under it shall continue unimpaired.

ARTICLE XI

This compact shall become binding and obligatory when it shall have been approved by the legislatures of each of the signatory States and by the Congress of the United States. Notice of approval by the legislatures shall be given by the governor of each signatory State to the governors of the other signatory States and to the President of the United States, and the President of the United States is requested to give notice to the governors of the signatory States of approval by the Congress of the United States.

In witness whereof the commissioners have signed this compact in a single original, which shall be deposited in the archives of the Department of State of the United States of America and of which a duly certified copy shall be forwarded to the governor of each of the signatory States.

Done at the city of Santa Fe, N. Mex., this 24th day of November, A. D. 1922.

W. S. Norviel.
W. F. McClure.
Delph E. Carpenter.
J. G. Scrugham.
Stephen B. Davis, Jr.
R. E. Caldwell.
Frank C. Emerson.

Approved:

Herbert Hoover.

Excerpt From Boulder Canyon Project Act, Approved December 21, 1928 (Ch. 42, 45 Stat. 1057)

SECTION 4 (A)

(Federal Reclamation Laws, Annotated (1943), p. 346)

Sec. 4. (a) This Act shall not take effect and no authority shall be exercised hereunder and no work shall be begun and no moneys expended on or in connection with the works or structures provided for in this Act, and no water rights shall be claimed or initiated hereunder, and no steps shall be taken by the United States or by others to initiate or perfect any claims to the use of water pertinent to such works or structures unless and until (1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact, mentioned in section 13 hereof, and the President by public

proclamation shall have so declared, or (2) if said States fail to ratify the said compact within six months from the date of the passage of this Act then, until six of said States, including the State of California, shall ratify said compact and shall consent to waive the provisions of the first paragraph of Article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and shall have approved said compact without conditions, save that of such six-State approval, and the President by public proclamation shall have so declared, and further, until the State of California, by act of its legislature, shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of this Act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed four million four hundred 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 compact, such uses always to be subject to the terms of said compact.

The States of Arizona, California, and Nevada are authorized to enter into an agreement which shall provide (1) that of the 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 shall be apportioned to the State of Nevada three hundred thousand acre-feet and to the State of Arizona two million eight hundred thousand acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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, but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico by the lower basin, and (5) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses, and (6) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact, and (7) said agreement to take effect upon the ratification of the Colorado River compact by Arizona, California, and Nevada.

California Limitation Act

Act 1492. *Limitation of Use of Waters of Colorado River* (Stats. 1929, ch. 16, p. 38):

"§1. *Agreement as to use of water of Colorado river.*—In the event the Colorado river compact signed at Santa Fe, New Mexico, November 24, 1922, and approved by and set out at length in that certain act entitled "An act to ratify and approve the Colorado river compact, signed at Santa Fe, New Mexico, November 24, 1922, to repeal conflicting acts and resolutions and directing that notice be given by the governor of such ratifications and approval," approved January 10, 1929 (Statutes 1929, chapter 1), is not approved within six months from the date of the passage of that certain act of the congress of the United States known as the "Boulder canyon project act," approved December 21, 1928, by the legislatures of each of the seven states signatory thereto, as provided by article eleven of the said Colorado river compact, then when six of said states, including California shall have ratified and approved said compact, and shall have consented to waive the provisions of the first paragraph of article eleven of said compact which makes the same binding and obligatory when approved by each of the states signatory thereto, and shall have approved said compact without conditions save that of

such six states approve and the President by public proclamation shall have so declared, as provided by the said "Boulder canyon project act," the state of California as of the date of such proclamation agrees irrevocably and unconditionally with the United States and for the benefit of the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming as an express covenant and in consideration of the passage of the said "Boulder canyon project act" that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado river for use in the state of California including all uses under contracts made under the provisions of said "Boulder canyon project act," and all water necessary for the supply of any rights which may now exist, shall not exceed four million four hundred thousand acre-feet of the waters apportioned to the lower basin states by paragraph "a" of article three of the said Colorado river compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact.

"§ 2. *Construction.*—By this act the state of California intends to comply with the conditions respecting limitation on the use of water as specified in subdivision 2 of section 4 (a) of the said "Boulder canyon project act" and this act shall be so construed."

(Excerpt from The Hoover Dam Contracts, Wilbur and Ely, 1933, p. 429:)

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA—PUBLIC PROCLAMATION

Pursuant to the provisions of section 4 (a) of the Boulder Canyon Project Act, approved December 21, 1928 (45 Stat. 1057), it is hereby declared by public proclamation:

(a) That the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming have not ratified the Colorado River compact mentioned in section 13 (a) of said act of December 21, 1928, within 6 months from the date of the passage and approval of said act.

(b) That the States of California, Colorado, Nevada, New Mexico, Utah, and Wyoming have ratified said compact and have consented to waive the provisions of the first paragraph of article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and that each of the States last named has approved said compact without condition, except that of six-State approval as prescribed in section 13 (a) of said act of December 21, 1928.

(c) That the State of California has in all things met the requirements set out in the first paragraph of section 4 (a) of said act of December 21, 1928, necessary to render said act effective on six-State approval of said compact.

(d) All prescribed conditions having been fulfilled, the said Boulder Canyon Project Act, approved December 21, 1928, is hereby declared to be effective this date.

In testimony whereof I have hereunto set my hand and caused the seal of the United States of America to be affixed.

Done at the city of Washington this 25th day of June, in the year of our Lord one thousand nine hundred and twenty-nine, and of the independence of the United States of America, the one hundred and fifty-third.

HERBERT HOOVER.

By the President:
[SEAL]

HENRY L. STIMSON,
Secretary of State.

[No. 1882]

[State of Arizona, House of Representatives, Sixteenth Legislature, First Special Session]

CHAPTER 4, HOUSE BILL NO. 2

AN ACT Ratifying the contract between the United States and the State of Arizona for storage and delivery of water from Lake Mead, and declaring an emergency

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

SECTION 1. *Ratification.*—There is hereby unconditionally ratified, approved, and confirmed that certain contract for the storage and delivery of water from

Lake Mead executed on behalf of the United States by the Honorable Harold L. Ickes, Secretary of the Interior, and on behalf of the State of Arizona by its Colorado river commission, bearing date the 9th day of February 1944, as follows:

UNITED STATES DEPARTMENT OF THE INTERIOR—BUREAU OF RECLAMATION

BOULDER CANYON PROJECT—ARIZONA-CALIFORNIA-NEVADA

CONTRACT FOR DELIVERY OF WATER

THIS CONTRACT made this 9th day of February 1944, pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplemental thereto, all of which acts are commonly known and referred to as the Reclamation Law, and particularly pursuant to the Act of Congress approved December 21, 1928 (45 Stat. 1057), designated the Boulder Canyon Project Act, and acts amendatory thereof or supplementary thereto, between THE UNITED STATES OF AMERICA, hereinafter referred to as "United States," acting for this purpose by Harold L. Ickes, Secretary of the Interior, hereinafter referred to as the "Secretary," and the STATE OF ARIZONA, hereinafter referred to as "Arizona," acting for this purpose by the Colorado River Commission of Arizona, pursuant to Chapter 46 of the 1939 Session Laws of Arizona,

WITNESSETH THAT:

EXPLANATORY RECITALS

2. WHEREAS for the purpose of controlling floods, improving navigation, regulating the flow of the Colorado River, providing for storage and for the delivery of stored waters for the reclamation of public lands and other beneficial uses exclusively within the United States, the Secretary acting under and in pursuance of the provisions of the Colorado River Compact and Boulder Canyon Project Act, and acts amendatory thereof or supplementary thereto, has constructed and is now operating and maintaining in the main stream of the Colorado River at Black Canyon that certain structure known as and designated Boulder Dam and incidental works, creating thereby a reservoir designated Lake Mead of a capacity of about thirty-two million (32,000,000) acre-feet; and

3. WHEREAS said Boulder Canyon Project Act provides that the Secretary under such general rules and regulations, as he may prescribe, may contract for the storage of water in the reservoir created by Boulder Dam, and for the delivery of such water at such points on the river as may be agreed upon, for irrigation and domestic uses, and provides further that no person shall have or be entitled to have the use for any purpose of the water stored, as aforesaid, except by contract made as stated in said Act; and

4. WHEREAS it is the desire of the parties to this contract to contract for the storage of water and the delivery thereof for irrigation of lands and domestic uses within Arizona; and

5. WHEREAS nothing in this contract shall be construed as affecting the obligations of the United States to Indian tribes;

6. NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows, to wit:

DELIVERY OF WATER

7. (a) Subject to the availability thereof for use in Arizona under the provisions of the Colorado River Compact and the Boulder Canyon Project Act, the United States shall deliver and Arizona, or agencies or water users therein, will accept under this contract each calendar year from storage in Lake Mead, at a point or points of diversion on the Colorado River approved by the Secretary, so much water as may be necessary for the beneficial consumptive use for irrigation and domestic uses in Arizona of a maximum of 2,800,000 acre-feet.

(b) The United States also shall deliver from storage in Lake Mead for use in Arizona, at a point or points of diversion on the Colorado River approved by the Secretary, for the uses set forth in subdivision (a) of this Article, one-half of any excess or surplus waters unapportioned by the Colorado River Compact to the extent such water is available for use in Arizona under said compact and said act, less such excess or surplus water unapportioned by said compact as may be used in Nevada, New Mexico, and Utah in accordance with the rights of said states as stated in subdivisions (f) and (g) of this Article.

(c) This contract is subject to the condition that Boulder Dam and Lake Mead shall be used: First, for river regulation, improvement of navigation, and

flood control; second, for irrigation and domestic uses and satisfaction of perfected rights in pursuance of Article VIII of the Colorado River Compact; and third, for power. This contract is made upon the express condition and with the express covenant that the United States and Arizona, and agencies and water users therein, shall observe and be subject to and controlled by said Colorado River Compact and the Boulder Canyon Project Act in the construction, management, and operation of Boulder Dam, Lake Mead, canals and other works, and the storage, diversion, delivery and use of water for the generation of power, irrigation and other uses.

(d) The obligation to deliver water at or below Boulder Dam shall be diminished to the extent that consumptive uses now or hereafter existing in Arizona above Lake Mead diminish the flow into Lake Mead, and such obligation shall be subject to such reduction on account of evaporation, reservoir and river losses, as may be required to render this contract in conformity with said compact and said act.

(e) This contract is for permanent service, subject to the conditions stated in subdivision (c) of this Article, but as to the one-half of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c) of Article III of the Colorado River Compact, such water is subject to further equitable apportionment at any time after October 1, 1963, as provided in Article III (f) and Article III (g) of the Colorado River Compact.

(f) Arizona recognizes the right of the United States and the State of Nevada to contract for the delivery from storage in Lake Mead for annual beneficial consumptive use within Nevada for agricultural and domestic uses of 300,000 acre-feet of the water apportioned to the Lower Basin by the Colorado River Compact, and in addition thereto to make contract for like use of 1/25 (one-twenty-fifth) of any excess or surplus water available in the Lower Basin and unapportioned by the Colorado River Compact, which waters are subject to further equitable apportionment after October 1, 1963 as provided in Article III (f) and Article III (g) of the Colorado River Compact.

(g) Arizona recognizes the rights of New Mexico and Utah to equitable shares of the water apportioned by the Colorado River Compact to the Lower Basin and also water unapportioned by such compact, and nothing contained in this contract shall prejudice such rights.

(h) Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an act of its Legislature (Chapter 16, Statutes of California of 1929) upon which limitation the State of Arizona expressly relies.

(i) Nothing in this contract shall preclude the parties hereto from contracting for storage and delivery above Lake Mead of water herein contracted for, when and if authorized by law.

(j) As far as reasonable diligence will permit, the water provided for in this contract shall be delivered as ordered and as reasonably required for domestic and irrigation uses within Arizona. The United States reserves the right to discontinue or temporarily reduce the amount of water to be delivered, for the purpose of investigation and inspection, maintenance, repairs, replacements, or installation of equipment or machinery at Boulder Dam, or other dams heretofore or hereafter to be constructed, but so far as feasible will give reasonable notice in advance of such temporary discontinuance or reduction.

(k) The United States, its officers, agents, and employees shall not be liable for damages when for any reason whatsoever suspensions or reductions in the delivery of water occur.

(l) Deliveries of water hereunder shall be made for use within Arizona to such individuals, irrigation districts, corporations, or political subdivisions therein of Arizona as may contract therefor with the Secretary, and as may qualify under the Reclamation Law or other federal statutes or to lands of the United States within Arizona. All consumptive uses of water by users in Arizona, of water diverted from Lake Mead or from the main stream of the Colorado River below Boulder Dam, whether made under this contract or not, shall be deemed, when made, a discharge pro tanto of the obligation of this contract. Present perfected rights to the beneficial use of waters of the Colorado River system are unimpaired by this contract.

(m) Rights-of-way across public lands necessary or convenient for canals to facilitate the full utilization in Arizona of the water herein agreed to be delivered will be granted by the Secretary subject to applicable federal statutes.

POINTS OF DIVERSION: MEASUREMENTS OF WATER

8. The water to be delivered under this contract shall be measured at the points of diversion, or elsewhere as the Secretary may designate (with suitable adjustment for losses between said points of diversion and measurement), by measuring and controlling devices or automatic gauges approved by the Secretary, which devices, however, shall be furnished, installed, and maintained by Arizona, or the users of water therein in manner satisfactory to the Secretary; said measuring and controlling devices or automatic gauges shall be subject to the inspection of the United States, whose authorized representatives may at all times have access to them, and any deficiencies found shall be promptly corrected by the users thereof. The United States shall be under obligation to deliver water only at diversion points where measuring and controlling devices or automatic gauges are maintained, in accordance with this contract, but in the event diversions are made at points where such devices are not maintained, the Secretary shall estimate the quantity of such diversions and his determination thereof shall be final.

CHARGES FOR STORAGE AND DELIVERY OF WATER

9. No charge shall be made for the storage or delivery of water at diversion points as herein provided necessary to supply present perfected rights in Arizona. A charge of 50¢ per acre-foot shall be made for all water actually diverted directly from Lake Mead during the Boulder Dam cost repayment period, which said charge shall be paid by the users of such water, subject to reduction by the Secretary in the amount of the charge if it is concluded by him at any time during said cost-repayment period that such charge is too high. After expiration of the cost-repayment period, charges shall be on such basis as may hereafter be prescribed by Congress. Charges for the storage or delivery of water diverted at a point or points below Boulder Dam, for users, other than those specified above, shall be agreed upon between the Secretary and such users at the time of execution of contracts therefor, and shall be paid by such users; provided such charges shall, in no event, exceed 25¢ per acre-foot.

RESERVATIONS

10. Neither Article 7 nor any other provision of this contract, shall impair the right of Arizona and other States and the users of water therein to maintain, prosecute, or defend any action respecting, and is without prejudice to, any of the respective contentions of said States and water users as to (1) the intent, effect, meaning, and interpretation of said compact and said act; (2) what part, if any, of the water used or contracted for by any of them falls within Article III (a) of the Colorado River Compact; (3) what part, if any, is within Article III (b) thereof; (4) what part, if any, is excess or surplus waters unapportioned by said Compact; and (5) what limitations on use, right of use, and relative priorities exist as to the waters of the Colorado River system; provided, however, that by these reservations there is no intent to disturb the apportionment made by Article III (a) of the Colorado River Compact between the Upper Basin and the Lower Basin.

DISPUTES AND DISAGREEMENTS

11. Whenever a controversy arises out of this contract, and if the parties hereto then agree to submit the matter to arbitration, Arizona shall name one arbitrator and the Secretary shall name one arbitrator and the two arbitrators thus chosen shall meet within ten days after their selection and shall elect one other arbitrator within fifteen days after their first meeting, but in the event of their failure to name the third arbitrator within thirty days after their first meeting, such arbitrator not so selected shall be named by the Senior Judge of the United States Circuit Court of Appeals for the Tenth Circuit. The decision of any two of the three arbitrators thus chosen shall be a valid and binding award.

RULES AND REGULATIONS

12. The Secretary may prescribe and enforce rules and regulations governing the delivery and diversion of waters hereunder, but such rules and regulations shall be promulgated, modified, revised, or extended from time to time only after notice to the State of Arizona and opportunity is given to it to be heard. Arizona agrees for itself, its agencies, and water users that in the operation and maintenance of the works for diversion and use of the water to be delivered hereunder, all such rules and regulations will be fully adhered to.

AGREEMENT SUBJECT TO COLORADO RIVER COMPACT

13. This contract is made upon the express condition and with the express covenant that all rights of Arizona, its agencies and water users, to waters of the Colorado River and its tributaries, and the use of the same, shall be subject to and controlled by the Colorado River Compact signed at Santa Fe, New Mexico, November 24, 1922, pursuant to the Act of Congress approved August 19, 1921 (42 Stat. 171), as approved by the Boulder Canyon Project Act.

EFFECTIVE DATE OF CONTRACT

14. This contract shall be of no effect unless it is unconditionally ratified by an Act of the Legislature of Arizona, within three years from the date hereof, and further, unless within three years from the date hereof the Colorado River Compact is unconditionally ratified by Arizona. When both ratifications are effective, this contract shall be effective.

INTEREST IN CONTRACT NOT TRANSFERABLE

15. No interest in or under this contract, except as provided by Article 7 (1), shall be transferable by either party without the written consent of the other.

APPROPRIATION CLAUSE

16. The performance of this contract by the United States is contingent upon Congress making the necessary appropriations for expenditures for the completion and the operation and maintenance of any dams, power plants, or other works necessary to the carrying out of this contract, or upon the necessary allotments being made therefor by any authorized federal agency. No liability shall accrue against the United States, its officers, agents, or employees by reason of the failure of Congress to make any such appropriations or of any federal agency to make such allotments.

MEMBER OF CONGRESS CLAUSE

17. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

DEFINITIONS

18. Wherever terms used herein are defined in Article II of the Colorado River Compact or in Section 12 of the Boulder Canyon Project Act, such definitions shall apply in construing this contract.

19. IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed the day and year first above written.

THE UNITED STATES OF AMERICA.
By (s.) HAROLD L. ICKES,
Secretary of the Interior.

STATE OF ARIZONA, acting by and through its Colorado River Commission,
By (s.) HENRY S. WRIGHT, *Chairman.*
By (s.) NELLIE T. BUSH, *Secretary.*

Approved this 11th day of February 1944.
(s.) SIDNEY P. OSBORN,
Governor of the State of Arizona.

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.

METROPOLITAN WATER DISTRICT WATER STORAGE AND DELIVERY CONTRACT

CONTRACT FOR DELIVERY OF WATER, APRIL 24, 1930

(As amended by supplementary contract of Sept. 28, 1931)

(1) This contract, made this 24th day of April, nineteen hundred thirty, pursuant to the act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplementary thereto, all of which acts are commonly known and referred to as the reclamation law, and particularly pursuant to the act of Congress approved December 21, 1928 (45 Stat. 1057), designated the Boulder Canyon project act, between the United States of America, hereinafter referred to as the United States, acting for this purpose by Ray Lyman Wilbur, Secretary of the Interior, hereinafter styled the Secretary and the Metropolitan Water District of Southern California, a public corporation, hereinafter styled the district, organized and existing under the laws of the State of California;

Witnesseth:

EXPLANATORY RECITALS

(2) Whereas, for the purpose of controlling the floods, improving navigation, and regulating the flow of the Colorado River, providing for storage and for the delivery of the stored waters for reclamation of public lands and other beneficial uses exclusively within the United States, the Secretary, subject to the terms of the Colorado River compact, is authorized to construct, operate, and maintain a dam and incidental works in the main stream of the Colorado River at Black Canyon or Boulder Canyon adequate to create a storage reservoir of a capacity of not less than twenty million acre-feet of water; and

(3) Whereas, after full consideration of the advantages of both the Black Canyon and Boulder Canyon Dam sites, the Secretary has determined upon Black Canyon as the site of the aforesaid dam, hereinafter styled the Boulder Canyon Dam, creating thereby a reservoir to be hereinafter styled the Boulder Canyon Reservoir and has determined that the revenues provided for by this contract, together with other contracts in accordance with the provisions of the Boulder Canyon project act, are adequate in his judgment to insure payment of all expenses of operation and maintenance of the Boulder Canyon Dam and appurtenant works incurred by the United States, and the repayment within fifty (50) years from the date of completion of said works of all amounts advanced to the Colorado River dam fund under subdivision (b) of section 2 of the Boulder Canyon project act, together with interest thereon made reimbursable under said act; and

(4) Whereas, the district is desirous of entering into a contract for the delivery to it of water from Boulder Canyon Reservoir;

(5) Now, therefore, in consideration of the mutual covenants herein contained, the parties hereto agree as follows, to wit:

DELIVERY OF WATER BY THE UNITED STATES

(6) The United States shall, from storage available in the reservoir created by Hoover Dam, deliver to the district each year at a point in the Colorado River immediately above the district's point of diversion (at or in the vicinity of the proposed Parker Dam) so much water as may be necessary to supply the district a total quantity, including all other waters diverted by the district from the Colorado River, in the amounts and with priorities in accordance with the recommendation of the chief of the division of water resources of the State of California, as follows (subject to the availability thereof for use in California under the Colorado River compact and the Boulder Canyon project act):

The waters of the Colorado River available for use within the State of California under the Colorado River compact and the Boulder Canyon project act

shall be apportioned to the respective interests below named and in amounts and with priorities therein named and set forth, as follows:

SECTION 1. A first priority to Palo Verde irrigation district for benficial use exclusively upon lands in said district as it now exists and upon lands between said district and the Colorado River, aggregating (within and without said district) a gross area of 104,500 acres, such waters as may be required by said lands.

SEC. 2. A second priority to Yuma project of United States Bureau of Reclamation for beneficial use upon not exceeding a gross area of 25,000 acres of land located in said project in California, such waters as may be required by said lands.

SEC. 3. A third priority (a) to Imperial Irrigation District and other lands under or that will be served from the All-American Canal in Imperial and Coachella Valleys, and (b) to Palo Verde Irrigation District for use exclusively on 16,000 acres in that area known as the "Lower Palo Verde Mesa," adjacent to Palo Verde Irrigation District, for beneficial consumptive use, 3,850,000 acre-feet of water per annum less the beneficial consumptive use under the priorities designated in sections 1 and 2 above. The rights designated (a) and (b) in this section are equal in priority. The total beneficial consumptive use under priorities stated in sections 1, 2 and 3 of this article shall not exceed 3,850,000 acre-feet of water per annum.

SEC. 4. A fourth priority to the Metropolitan Water District of Southern California and/or the City of Los Angeles, for beneficial consumptive use, by themselves and/or others, on the coastal plain of Southern California, 550,000 acre-feet of water per annum.

SEC. 5. A fifth priority (a) to the Metropolitan Water District of Southern California, and/or the City of Los Angeles for beneficial consumptive use, by themselves and/or others, on the coastal plain of Southern California, 550,000 acre-feet of water per annum and (b) to the City of San Diego and/or County of San Diego, for beneficial consumptive use, 112,000 acre-feet of water per annum. The rights designated (a) and (b) in this section are equal in priority.

SEC. 6. A sixth priority (a) to Imperial Irrigation District and other lands under or that will be served from the All-American Canal in Imperial and Coachella Valleys, and (b) to Palo Verde Irrigation District for use exclusively on 16,000 acres in that area known as the "Lower Palo Verde Mesa," adjacent to Palo Verde Irrigation District, for beneficial consumptive use, 300,000 acre-feet of water per annum. The rights designated (a) and (b) in this section are equal in priority.

SEC. 7. A seventh priority of all remaining water available for use within California, for agricultural use in the Colorado River Basin in California, as said basin is designated on map No. 23000 of the Department of the Interior, Bureau of Reclamation.

SEC. 8. So far as the rights of the allottees named above are concerned, the Metropolitan Water District of Southern California and/or the City of Los Angeles shall have the exclusive right to withdraw and divert into its aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said district and/or said city (not exceeding at any one time 4,750,000 acre-feet in the aggregate) by reason of reduced diversions by said district and/or said city; provided, that accumulations shall be subject to such conditions as to accumulation, retention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final; provided further, that the United States of America reserves the right to make similar arrangements with users in other States without distinction in priority, and to determine the correlative relations between said district and/or said city and such users resulting therefrom.

SEC. 9. In addition, so far as the rights of the allottees named above are concerned, the City of San Diego and/or County of San Diego shall have the exclusive right to withdraw and divert into an aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said city and/or said county (not exceeding at any one time 250,000 acre-feet in the aggregate) by reason of reduced diversions by said city and/or said county; provided, that accumulations shall be subject to such conditions as to accumulation, retention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final; provided further, that the United States of America reserves the right to make similar arrangements with users in other States without distinction in priority, and to

determine the correlative relations between the said city and/or said county and such users resulting therefrom.

SEC. 10. In no event shall the amounts allotted in this agreement to the Metropolitan Water District of Southern California and/or the City of Los Angeles be increased on account of inclusion of a supply for both said district and said city, and either or both may use said apportionments as may be agreed by and between said district and said city.

SEC. 11. In no event shall the amounts allotted in this agreement to the City of San Diego and/or to the County of San Diego be increased on account of inclusion of a supply for both said city and said county, and either or both may use said apportionments as may be agreed by and between said city and said county.

SEC. 12. The priorities hereinbefore set forth shall be in nowise affected by the relative dates of water contracts executed by the Secretary of the Interior with the various parties.

The Secretary reserves the right to, and the district agrees that he may, contract with any of the allottees above named in accordance with the above-stated recommendation, or in the event that such recommendation as to Palo Verde Irrigation District is superseded by an agreement between all the above allottees or by a final judicial determination, to contract with the Palo Verde Irrigation District in accordance with such agreement or determination; provided, that priorities numbered fourth and fifth shall not thereby be disturbed.

Said water shall be delivered continuously as far as reasonable diligence will permit, but the United States shall not be obligated to deliver water to the district when for any reason such delivery would interfere with the use of Hoover Dam and Boulder Canyon Reservoir for river regulation, improvement of navigation, flood control, and/or satisfaction of perfected rights, in or to the waters of the Colorado River, or its tributaries, in pursuance of Article VIII of the Colorado River Compact, and this contract is made upon the express condition and with the express covenant that the right of the district to waters of the Colorado River or its tributaries is subject to and controlled by the Colorado River Compact. The United States reserves the right to discontinue or temporarily reduce the amount of water to be delivered for the purpose of investigation, inspection, maintenance, repairs, replacement, or installation of equipment and/or machinery at Hoover Dam, but so far as feasible the United States will give the district reasonable notice in advance of such temporary discontinuance or reduction, the United States, its officers, agents, and employees shall not be liable for damages when, for any reason whatsoever, suspensions or reductions in delivery of water occur. This contract is for permanent service, but is made subject to the express covenant and condition that in the event water for the district is not taken or diverted by the district hereunder for district purposes within a period of ten (10) years from and after completion of Hoover Dam as announced by the Secretary, it may in such event upon the written order of the Secretary and after hearing become null and void and of no effect.

RECEIPT OF WATER BY DISTRICT

(7) The district shall receive the water to be delivered to it by the United States under the terms hereof at the point of delivery above stated and shall at its own expense convey such water to its proposed aqueduct, and shall perform all acts required by law or custom in order to maintain its control over such water and to secure and maintain its lawful and proper diversion from the Colorado River.

MEASUREMENT OF WATER

(8) The water to be delivered hereunder shall be measured at the intake of the district's proposed aqueduct by such measuring and controlling devices or such automatic gages or both as shall be satisfactory to the Secretary. Said measuring and controlling devices, or automatic gages, shall be furnished, installed, and maintained by and at the expense of the district, but they shall be and remain at all times under the complete control of the United States, whose authorized representatives may at all times have access to them over the lands and rights of way of the district.

RECORD OF WATER DIVERTED

(9) The district shall make full and complete written monthly reports as directed by the Secretary on forms to be supplied by the United States of all

water diverted from the Colorado River. Such reports shall be made by the fifth day of the month immediately succeeding the month in which the water is diverted, and the records and data from which such reports are made shall be accessible to the United States on demand of the Secretary.

CHARGE FOR DELIVERY OF WATER

(10) A charge of twenty-five cents ($0.25) per acre-foot shall be made for water delivered to the district hereunder during the Boulder Dam cost-repayment period. It is understood by the district that it may divert water above Boulder Canyon Dam, but that such diversion of water above the dam will reduce the amount of power otherwise available at said dam, and may reduce the amount which would have been utilized, except at times when the reservoir is spilling, and an additional charge, determined as stated below, will be made on account of any such reduction in energy which would otherwise have been utilized in case water is diverted above the dam. The energy which could have been generated by the water diverted above the dam and which would have been utilized at times when the reservoir is not spilling will be calculated from the effective head, the quantity of water diverted, and the over-all efficiency of the power plant, as determined by the Secretary, whose determination shall be conclusive and binding upon the parties hereto. The additional charge per month for diversion above the dam will be the product of such amount of energy and the rate per kilowatt-hour for firm energy at Boulder Canyon Dam in effect at the time of such diversion. Nevertheless, if such diversion during any year (June 1 to May 31, inclusive) has not reduced the amount of firm energy during such year for which the United States has contracted, the diversion, to the extent that no reduction in firm energy has been occasioned, shall be computed at the rate for secondary energy then in force and credit given on the ensuing year's power bills of the district for the difference between the amount charged therefor and the amount so determined. The Secretary's determination of such credit shall be conclusive. The reservoir shall be considered as spilling whenever water is being discharged in excess of the amount used for the generation of power, whether such waste occurs over the spillway or otherwise. Energy equivalent to water delivered above the dam, determined as above, for which the firm energy rate is charged, shall be included in the total firm energy available at the dam, defined as four billion three hundred thirty million (4,330,000,000) kilowatt-hours per year (June 1 to May 31, inclusive), upon completion of the dam, as announced by the Secretary, and decreasing uniformly thereafter by eight million seven hundred sixty thousand (8,760,000) kilowatt-hours per year, and also included in the district's allotment of firm energy. Nevertheless if it be determined by the Secretary that the rate of decrease above stated is not in accord with actual conditions, the Secretary reserves the right to fix a lesser rate for any year (June 1 to May 31, inclusive) in advance.

MONTHLY PAYMENTS AND PENALTIES

(11) The district shall pay monthly for all water delivered to it hereunder, or diverted by it from the Colorado River, in accordance with the rate herein in article ten (10) established. Payments shall be due on the first of the second month immediately succeeding the month in which water is delivered and/or diverted. If such charges are not paid when due, a penalty of one per centum (1%) of the amount unpaid shall be added thereto, and thereafter an additional penalty of one per centum (1%) of the amount unpaid shall be added on the first day of each calendar month during such delinquency.

REFUSAL OF WATER IN CASE OF DEFAULT

(12) The United States reserves the right to refuse to deliver water to the district in the event of default for a period of more than twelve (12) months in any payment due or to become due the United States under this contract.

INSPECTION BY THE UNITED STATES

(13) The Secretary or his representatives shall at all times have the right of ingress to and egress from all works of the district for the purpose of inspection, repairs, and maintenance of works of the United States, and for all other proper purposes. The Secretary or his representatives shall also have free access at all reasonable times to the books and records of the district relating to

the diversion and distribution of water delivered to it hereunder with the right at any time during office hours to make copies of or from the same.

DISPUTES OR DISAGREEMENTS

(14) Disputes or disagreements as to the interpretation or performance of the provisions of this contract shall be determined either by arbitration or court proceedings, the Secretary of the Interior being authorized to act for the United States in such proceedings. Whenever a controversy arises out of this contract, and the parties hereto agree to submit the matter to arbitration, the district shall name one arbitrator and the Secretary shall name one arbirator, and the two arbitrators thus chosen shall elect three other arbitrators, but in the event of their failure to name all or any of the three arbitrators within five (5) days after their first meeting, such arbitrators, not so elected, shall be named by the senior judge of the United States Circuit Court of Appeals for the ninth circuit. The decision of any three of such arbitrators shall be a valid and binding award of the arbitrators.

RULES AND REGULATIONS

(15) There is reserved to the Secretary the right to prescribe and enforce rules and regulations governing the delivery and diversion of water hereunder. Such rules and regulations may be modified, revised, and/or extended from time to time after notice to the district and opportunity for it to be heard, as may be deemed proper, necessary, or desirable by the Secretary to carry out the true intent and meaning of the law and of this contract, or amendments hereof, or to protect the interests of the United States. The district hereby agrees that in the operation and maintenance of its diversion works and aqueduct, all such rules and regulations will be fully adhered to.

AGREEMENT SUBJECT TO COLORADO RIVER COMPACT

(16) This contract is made upon the express condition and with the express understanding that all rights hereunder shall be subject to and controlled by the Colorado River compact, being the compact or agreement signed at Santa Fe, N. Mex., 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," which compact was approved in section 13 (a) of the Boulder Canyon project act.

PRIORITY OF CLAIMS OF THE UNITED STATES

(17) Claims of the United States arising out of this contract shall have priority over all others, secured or unsecured.

CONTINGENT UPON APPROPRIATIONS

(18) This contract is subject to appropriations being made by Congress from year to year of moneys sufficient to do the work provided for herein, and to there being sufficient moneys available in the Colorado River Dam fund to permit allotments to be made for the performance of such work. No liability shall accrue against the United States, its officers, agents, or employees, by reason of sufficient moneys not being so appropriated nor on account of there not being sufficient moneys in the Colorado River Dam fund to permit of said allotments. This agreement is also subject to the condition that if Congress fails to appropriate moneys for the commencement of construction work within five (5) years from and after execution hereof, or if for any other reason construction of Boulder Canyon Dam is not commenced within said time and thereafter prosecuted to completion with reasonable diligence, then and in such event either party hereto may terminate its obligations hereunder upon one (1) year's written notice to the other party hereto.

RIGHTS RESERVED UNDER SECTION 3737, REVISED STATUTES

(19) All rights of action for breach of any of the provisions of this contract are reserved to the United States as provided in section 3737 of the Revised Statutes of the United States.

REMEDIES UNDER CONTRACT NOT EXCLUSIVE

(20) Nothing contained in this contract shall be construed as in any manner abridging, limiting, or depriving the United States of any means of enforcing any remedy either at law or in equity for the breach of any of the provisions hereof which it would otherwise have.

INTEREST IN CONTRACT NOT TRANSFERABLE

(21) No interest in this agreement is transferable, and no sublease shall be made, by the district without the written consent of the Secretary, and any such attempted transfer or sublease shall cause this contract to become subject to annulment at the option of the United States.

MEMBER OF CONGRESS CLAUSE

(22) No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom. Nothing, however, herein contained shall be construed to extend to this contract if made with a corporation for its general benefit.

In Witness Whereof, the parties hereto have caused this contract to be executed the day and year first above written. (Executed in quadruplicate original.)

THE UNITED STATES OF AMERICA,
By RAY LYMAN WILBUR,
Secretary of the Interior.

Attest:
NORTHCUTT ELY.

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA,
By W. P. WHITSETT,
Chairman of the Board of Directors.

Approved as to form:
W. B. MATHEWS,
General Counsel.
Attest:
S. H. FINLEY,
Secretary of the Board of Directors.
[SEAL]

DEPARTMENT OF THE INTERIOR

Information Service

BUREAU OF RECLAMATION

[For immediate release: Thursday, February 10, 1944 W.]

Secretary of the Interior Harold L. Ickes announced today he had signed, on behalf of the United States, a contract to deliver to the State of Arizona annually 2,800,000 acre-feet of Colorado River water from storage in the Bureau of Reclamation's Boulder Dam Reservoir, subject to its availability for use in Arizona under the provisions of the Colorado River compact and the Boulder Canyon Project Act.

Comissioner of Reclamation Harry W. Bashore said the contract would become effective when ratified by the Arizona Legislature and when this body unconditionally ratifies the Colorado River compact. The legislature on March 25, 1943, voted to ratify the compact, provided a contract for the delivery of water from Lake Mead was executed between the United States and Arizona.

The Secretary signed the contract after considering fully the objections presented by the State of California in a hearing on February 2 and representations made by the State of Arizona in reply. The contract had previously been approved by the Committee of Fourteen, which is composed of two representatives of each of the seven Colorado River Basin States. All members of the committee, except

those from California, approved the agreement which the Secretary has now signed.

In announcing his decision, Secretary Ickes issued the following memorandum:

"Memorandum re hearing February 2 on California's objections to the proposed contract between the United States and Arizona for the delivery of water from Lake Mead.

"There has been submitted to me for approval and execution a proposed contract between the United States and the State of Arizona for the delivery of water from Lake Mead for use in Arizona. Section 5 of the Boulder Canyon Project Act authorizes me to contract for the storage and delivery of water impounded by Boulder Dam. Under subdivision (a) of article 7 of the proposed contract the United States agrees to deliver annually from storage in Lake Mead for use in Arizona a maximum of 2,800,000 acre-feet of water, subject to its availability for use in Arizona under the provisions of the Colorado River compact and the Boulder Canyon Project Act, and under subdivision (b) of article 7 the United States agrees to deliver one-half of any excess or surplus water unapportioned by the compact to the extent such water is available for use in Arizona under the compact and act. The contract is conditioned upon the unconditional ratification of the compact by Arizona.

"The proposed contract was drafted by the Committee of Fourteen after the Arizona Legislature last spring passed an act contingently ratifying the compact—the contingency being the execution and ratification by the legislature of a contract for the delivery of water from Lake Mead. Representatives of the Bureau of Reclamation worked closely with the committee and made a number of modifications which were accepted by the committee and Arizona. Bureau representatives under my instructions have taken the position throughout the negotiations that any contract proposed should not commit the Department as to any controversial issue regarding the amounts of water available to Arizona, or to any compact State, under the compact and the act. The proposed contract has been approved by the representatives of each of the Colorado River States, except California.

"I have considered carefully the objections made by California in its printed brief and at the hearing before me on February 2. California is fearful that subdivisions (a) and (b) of article 7 construed together create an inference that the maximum of 2,800,000 acre-feet, which the United States agrees to deliver under subdivision (a), is water apportioned to the lower basin under article III (a) of the compact, and that Arizona could contend, to California's prejudice, that this constituted an administrative determination that Arizona was entitled by this contract to 2,800,000 acre-feet of III (a) water. I am convinced that California's fears in this respect are unfounded for at least two reasons. First, I wish to make it clear, and to emphasize, that the delivery of water under both subdivision (a) and subdivision (b) of article 7 is expressly 'subject to its availability under the Colorado River compact and the Boulder Canyon Project Act.' The proposed contract does not attempt to obligate the United States to deliver any water to Arizona which is not available to Arizona under the terms of the compact and act. Secondly, article 10 was purposely designed to prevent Arizona, or any other State, from contending that the proposed contract, or any provision of the proposed contract, resolves any issue on the amounts of water which are apportioned or unapportioned by the compact and the amounts of apportioned or unapportioned water available to the respective States under the compact and the act. It expressly reserves for future judicial determination any issue involving the intent, effect, meaning, and interpretation of the compact and act. The language of article 10 is plain and unequivocal and adequately reserves all questions of interpretation of the compact and the act.

"It is my opinion that I have authority under section 5 of the act to execute such a contract as is proposed to be made with Arizona. The Department has made contracts with California and Nevada for the delivery of waters from Lake Mead subject to its availability under the compact and act. Now that Arizona has agreed to ratify the compact, it is my opinion that Arizona is entitled to be accorded the same consideration that the Department has accorded to California

and Nevada. Accordingly, I have decided to approve and execute the proposed contract with Arizona.

"HAROLD L. ICKES,
"*Secretary of the Interior.*"

"FEBRUARY 9, 1944."

California and Arizona have been at odds for more than 20 years over the division of the waters of the Colorado River system. The fundamental controversy between the two States concerns the amount of water to which each State is entitled under the compact and the Boulder Canyon Project Act.

The dispute dates back to 1922 when six of the seven States in the Colorado River Basin agreed to the Colorado River compact which apportioned the waters from the main river and its tributaries to the upper and lower basins. Arizona was the lone objector. Subsequently the legislatures of all States, except Arizona, ratified the compact.

In 1928 the Congress passed the Boulder Canyon Project Act which provided that the act would not become effective until the California Legislature agreed to limit its use to 4,400,000 acre-feet of water apportioned in article III (a) of the compact, plus one-half of the excess or surplus unapportioned water. California passed such a limitation act in 1929.

EXCERPTS FROM LETTERS WHICH ARE SHOWN IN THE INTERIM REPORT ON THE COLORADO RIVER AS TRANSMITTED BY THE SECRETARY OF THE INTERIOR TO THE CONGRESS (H. DOC. 419, 80TH CONG., 1ST SESS.)

1. From the letter of the Commissioner of Reclamation to the Secretary, dated July 17, 1947 (approved and adopted by the Secretary on July 19, 1947):

"The water-right situation in the Colorado River Basin is highly controversial. The several documents bearing upon the matter—the Colorado River compact, the Boulder Canyon Project Act, the California Self-Limitation Act, the various contracts for the delivery of water from Lake Mead, and the Mexican treaty—are, in important particulars, variously interpreted by the States which are parties to them. In the realization that it was not within the scope or authority of the report to attempt to decide such controversial questions, a deliberate effort was made in its preparation to avoid any interpretation of these documents.

* * * * * * *

"The manner in which the report estimates the quantitative use of water by existing and potential projects has been criticized from opposite viewpoints by the basin States. California has stated that the report departs from an important technical concept of the Colorado River compact in that it does not determine 'consupmptive use' at the place of water use, but instead determines 'stream depletion' resulting from the various developments measured at the point where the river crosses the international boundary. Arizona advances the 'stream depletion' theory as the proper measure of quantitative use. Colorado takes a similar position, but states that the report does not properly evaluate depletions because it fails to give sufficient weight to losses from the natural stream channels above Lee Ferry.

* * * * * * *

"Viewed from both local and national standpoints, there is no doubt as to the urgency for continuing at once the development of the resources of the Colorado River. The principal obstacle to immediate progress is the fact that, although neither the upper nor lower basin is currently using all of the water allocated to it by the Colorado River compact, there is disagreement as to how the unused water shall be distributed among the States of each of the two basins. Until these disagreements are at least partially resolved there is little hope that substantial progress can be made toward meeting the needs of the region and the Nation.

* * * * * * *

"My conclusions are:

* * * * * * *

"(2) That further development of the water resources of the Colorado River Basin, particularly large-scale development, is seriously handicapped, if not barred, by lack of a determination of the rights of the individual States to utilize the waters of the Colorado River system. The water supplies for projects to accomplish such development might be assured as a result of compact among

the States of the separate basins, appropriate court or congressional action, or otherwise;

"(3) That the States of the upper Colorado River Basin and States of the lower Colorado River Basin should be encouraged to proceed expeditiously to determine their respective rights to the waters of the Colorado River consistent with the Colorado River compact; * * *."

2. From the letter of the Secretary to the President (through the Bureau of the Budget), dated July 19, 1947:

"There are enclosed a report to me dated June 6, 1946, from the Acting Commissioner of Reclamation, and an accompanying report, dated March 22, 1946, by the regional directors of regions III and IV of the Bureau of Reclamation, on the development of the water resources of the Colorado River Basin in Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.

* * * * * * *

"As stated in the accompanying letter from the Commissioner of Reclamation to me dated July 17, 1947, which I have approved and adopted, due to existing circumstances a comprehensive plan of development of the water resources of the Colorado River Basin cannot be formulated at this time. Accordingly, although I cannot recommend authorization of any projects at this time, I am sending the accompanying inventory report forward in order that you and the Congress may be apprised of this comprehensive inventory of potential water resource developments in the Colorado River Basin, and of the present situation regarding water rights in the Colorado River Basin. * * *."

3. From the letter of the Director of the Bureau of the Budget to the Secretary, dated July 23, 1947:

"Acting under authority of the President's directive of July 2, 1946, I am able to advise you that there would be no objection to submission of the proposed interim report to the Congress, but that the authorization of any of the projects inventoried in your report should not be considered to be in accord with the program of the President until a determination is made of the rights of the individual States to utilize the waters of the Colorado River system."

4. From the letter of the Secretary to the Speaker of the House of Representatives, dated July 24, 1947:

"There is enclosed herewith a copy of my interim report dated July 19, 1947, on the status of our investigations of potential water resource developments in the Colorado River Basin in Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming.

* * * * * * *

"As stated in the interim report, existing circumstances tend to preclude the formulation of a comprehensive plan of development of the water resources of the Colorado River Basin at this time. Accordingly, although I cannot now recommend authorization of any project, I am transmitting the report to you in order that the Congress may be apprised of this comprehensive inventory of potential water resource developments in the Colorado River Basin and of the present situation regarding water rights in that basin.

"On July 19, 1947, the report was submitted to the President. The Bureau of the Budget has advised me that there would be no objection to the submission of the report to the Congress, but that the authorization of any of the projects inventoried in the report should not be considered to be in accord with the program of the President until a determination is made of the rights of the individual States to utilize the waters of the Colorado River system. * * *"

EXTRACTS FROM LETTER FROM COMMISSIONER OF RECLAMATION MICHAEL W. STRAUS, TO THE SECRETARY OF THE INTERIOR, SUBMITTING REPORT OF THE BUREAU OF RECLAMATION ON THE CENTRAL ARIZONA PROJECT, DATED JANUARY 26, 1948

"In response to a request by the chairman of the Subcommittee on Irrigation and Reclamation of the Senate Public Lands Committee, I submit herewith my proposed report on the central Arizona project in the lower Colorado River Basin. The project, described in the attached report of the regional director dated December 19, 1947, involves the construction of Bridge Canyon Dam and power plant on the Colorado River above Hoover Dam to develop urgently needed power for California and the lower Colorado River Basin, and provide energy for pumping water from Lake Havasu behind Parker Dam for diversion to the highly developed irrigated area in the central portion of Arizona. The project also involves the construction of pumping plants, aqueducts, related dams, irrigation and drainage systems, power plants, transmission lines, and incidental works as

described in the attached report. The diversion of irrigation water to central Arizona is needed to avert economic stagnation in the area.

* * * * * * *

"The proposed project has engineering feasibility, and the proposed reimbursable costs probably can be repaid in 78 years under the plan outlined in this and the attached report.

* * * * * * *

"The total estimated cost of the project, based on present prices, is $738,408,000. Of this amount, $658,096,000 is indicated as properly chargeable to power, irrigation, and municipal water and $80,312,000 to flood control, the preservation and propagation of fish and wildlife, silt control, recreation, and salinity control. The regional director recommends that the former group be treated as reimbursable, the latter as nonreimbursable.

"Based upon payment of $4.50 per acre-foot for water delivered at the farmer's headgate, the regional director indicates a difference of about $5,000,000, or 2 percent, between returns from the irrigators and the estimated operation, maintenance, and replacement costs properly chargeable to the proposed improvements for irrigation. In view of the magnitude and complexity of the proposed project and of the long-range cost-index projection involved, this 2-percent differential is considered to be well within the limits of accuracy of estimating operation, maintenance, and replacement costs and payment by irrigators. The $4.75 per acre-foot which local interests indicate they are willing and can pay, would in 78 years more than satisfy the estimated operation, maintenance, and replacement costs. In any event, the water users should pay, in a 78-year period, an amount not less than the total operation, maintenance, and replacement costs of the irrigation portion of the project occurring in a like period and as much more, applicable to repayment of the construction investment, as later detailed studies show to be practicable. Annual operation and maintenance expenses can be met from the various sources of project revenue.

"A summary of the financial analysis of the project is shown in the following table. It is based on the recommendation of the regional director and upon payment by irrigators of $4.75 per acre-foot of water delivered at the farmer's headgate. * * *

Summary of financial analysis

CONSTRUCTION COSTS

Reimbursable:	
Power	$243,798,000
Irrigation	397,693,000
Municipal water supply	16,605,000
Total	658,096,000
Nonreimbursable:	
Flood control	6,641,000
Silt control	28,097,000
Recreation	37,459,000
Fish and wildlife	3,129,000
Salinity control	4,986,000
Total	80,312,000
Total project cost	738,408,000

OPERATION, MAINTENANCE, AND REPLACEMENT COSTS, 78-YEAR PERIOD

Power	$286,915,200
Irrigation	242,112,000
Municipal water supply	3,915,600
Total	532,942,800
Flood control	967,200
Silt control	2,254,200
Recreation	2,909,300
Fish and wildlife	647,400
Salinity control	6,973,200
Total	13,751,400

PROJECT REVENUES, 78-YEAR PERIOD

Power, less interest component	$888,262,800
⅛ of interest component (4⅛ interest component, $95,147,200)	23,786,800
Irrigation	250,828,500
Municipal water supply	41,176,200
Total project revenues	1,204,054,300
Less operating costs defrayed from revenues	532,942,800
Available to amortize reimbursable construction costs	671,111,500
Reimbursable construction costs	658,096,000
Surplus	13,015,500

"Assurance of a water supply is an extremely important element of the plan yet to be resolved. The showing in the report of the availability of a substantial quantity of Colorado River water for diversion to central Arizona for irrigation and other purposes is based upon the assumption that claims of the State of Arizona to this water are valid. It should be noted, however, as the regional director points out, that the State of California challenges the validity of Arizona's claims. If the contentions of California are correct, there will be no dependable water supply available from the Colorado River for this diversion. While water is physically available in the Colorado River at the present time, and is wasting to the sea, the importance of the questions raised by the divergent views and claims of the States is apparent. The Bureau of Reclamation and the Department of the Interior cannot authoritatively resolve this conflict. It can be resolved only by agreement among the States, court action, or by an agency having proper jurisdiction. It is assumed that the Congress, in considering this proposed project, will give this conflict the full consideration it deserves. The submission of this report is not intended in any way to prejudice full consideration of this controversial matter, nor should this report be construed as affecting the water rights of Indians or Indian reservations.

"In view of the urgent need for power from Bridge Canyon Dam and for irrigation, domestic and industrial water supplies in central Arizona, and conditioned upon a settlement of the water right conflict being secured such that a water supply can be assured for the project, I recommend that the project be authorized for construction in accordance with the recommendations of the regional director, in which I concur and which I adopt, except as modified herein with respect to the policy by which minimum payment required of the irrigators shall be determined."

* * * * * * *

The letter from which the foregoing excerpts are taken was—

"Approved: February 5, 1948.

"/s./ J. A. KRUG,
"*Secretary of the Interior.*"

MEMORANDUM RE SENATE JOINT RESOLUTION 145, HOUSE JOINT RESOLUTIONS 225, 226, 227, AND 236, AND H. R. 4097, AUTHORIZING SUIT CONCERNING RIGHTS TO WATER IN LOWER BASIN, COLORADO RIVER.

(Alan Bible, attorney general of Nevada; Fred N. Howser, attorney general of California; Arvin B. Shaw, Jr., assistant attorney general of California)

I. AN INTERSTATE CONTROVERSY EXISTS

California and Arizona are the major claimants to the use of waters of the Colorado River which are available for use in the lower basin of that river. Nevada has a smaller claim. Utah and New Mexico, which lie chiefly in the upper basin, claim still smaller quantities for the minor portions of those States lying in the lower basin.

A complex controversy exists between Arizona and California over their claims to waters of the river. This controversy has continued in one form or another for 25 years. It is grounded on the fact that the two States interpret differently a series of documents and statutes which, collectively, have been called the "law of the river." These writings include the Colorado River compact (1922), the

Boulder Canyon Project Act (1928), the California Limitation Act (1929), the Boulder Canyon Project Adjustment Act (1940), the Mexican Water Treaty (1945) and a group of water contracts executed by the Secretary of the Interior under the authority of section 5 of the Project Act with (*a*) five public agencies in California (1930–34); (*b*) the State of Nevada (1942–43) and (*c*) the State of Arizona (1944).

At the instance of Arizona, several facets of the problem have been submitted to the Supreme Court in *Arizona* v. *California, et al* (283 U. S. 423 (1931), *Arizona* v. *California, et al* (202 U. S. 341 (1934)), and *Arizona* v. *California, et al* (298 U. S. 558 (1936)). Each of these cases was dismissed by the Court, with opinion, on preliminary proceedings. At the instance of the United States, the case of *United States* v. *Arizona* (295 U. S. 174 (1935)) was prosecuted to enjoin military resistance by Arizona to construction of Parker Dam by the Bureau of Reclamation. Injunction was denied and the difficulty was then overcome by act of Congress.

The subject-matter of the controversy has not been comprehensively treated by the Supreme Court. There is, consequently, a variety of unsolved questions, upon the solution of which depends the economic future of the lower basin.

No specific question is known to exist relative to the claims of Nevada, Utah, and New Mexico. Yet their interests are parts of a complex whole and will be concerned in the judicial treatment of the whole.

No problems requiring present disposition are believed to exist between the upper basin and the lower basin. The upper basin States, Wyoming, Utah, Colorado, and New Mexico and, as to a trifling interest, Arizona, have for a year or more been engaged in negotiations for a compact to divide the upper basin water among them. It is believed that this effort will be effectual. On the other hand, for reasons hereinafter shown, it is not believed that such a lower basin compact can be negotiated.

II. The Resolutions and Bill

A. Preliminary Interstate Correspondence

On March 3, 1947, Governor Warren of California addressed to Governor Pittman of Nevada and Governor Osborn of Arizona a letter in which he proposed that the three Governors meet for the purpose of disposing of the lower basin controversy by either, (1) negotiation of the compact, (2) arbitration or, (3) judicial determination. Governor Pittman replied March 6, expressing the opinion that negotiation or arbitration would not be successful and suggesting that the three States join in asking Congress to authorize suit in the Supreme Court of the United States, Governor Osborn's reply of March 12, 1947, while expressing willingness to meet with the other Governors to discuss matters of common interest, takes, in substance, the position that there is no controversy and, hence, no need of any determination. (Copies of this correspondence are attached as appendices, A, B, and C.)

Here it should be noted that, over the years since 1922, there have been literally scores of conferences between official representatives of the lower basin States directed toward negotiation of a lower basin compact. Some of these efforts were brief, but others extended over weeks and months at a time. The States have painstakingly and sincerely, over a long period, attempted to negotiate a compact, a course which the Supreme Court has several times indicated that it prefers them to follow (*Washington* v. *Oregon* (214 U. S. 205, at p. 218, and other cases)). While other considerations may have affected some of the earlier negotiations, it is the fact that in the more recent conferences the rock upon which the negotiations foundered was the insufficiency of the supply of water in the lower basin to provide for the economic aspirations of the States. It must be borne in mind that, progressively since 1922, estimates of the water supply available for the lower basin have radically decreased. In addition, the treaty with Mexico, ratified in 1945, took from the river for Mexico a quantity of about a million acre-feet more than had been theretofore considered the maximum proper allowance. These facts have inevitably intensified the struggle between Arizona and California.

Efforts to negotiate a compact having been exhausted, it was concluded by the State governments of California and Nevada that Congress should be requested to adopt enabling legislation requisite to a judicial determination of the controversy.

B. INTRODUCTION OF THE RESOLUTIONS

On July 3, 1947, Senator McCarran, for himself and Senators Downey, Knowland, and Malone, introduced Senate Joint Resolution 145. The subject is thus nonpartisan. Identical resolutions—House Joint Resolutions 225, 226, 227, and 236—and a bill, H. R. 4097, have been introduced in the House by Congressmen Sheppard, Phillips, Poulson, Gearhart, and Fletcher, respectively.

C. SCOPE OF LEGISLATION

The legislation recites that the development of water projects in the lower basin is hampered by the existence of the long-standing controversy abovementioned. It is stated to be introduced "for the purpose of avoiding a multiplicity of actions and expediting the development of the Colorado River Basin." It directs the Attorney General to commence in the Supreme Court a proceeding against the five States of the lower basin. The proceeding is termed "a suit or action in the nature of interpleader." The parties defendant are to be required "to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the lower Colorado River Basin."

D. REFERENCE TO COMMITTEES

The legislation has been referred, in the Senate, to the Committee on Public Lands, and, in the House, to the Committee on the Judiciary.

III. THE DISPUTED DOCUMENTS

Since the controversial issues relate to the interpretation of writings, a brief outline of the more significant of them is submitted.

A. COLORADO RIVER COMPACT

The Colorado River compact (Fed. Recl. Laws Ann., 1943 ed., p. 363) is an interstate agreement made for the purpose of apportioning the use of the waters of the Colorado River system. The "system," by definition (art. II (a)), "means that portion of the Colorado River and its tributaries within the United States of America." The division is not among the several States, but between two grand subbasins, upper and lower (art. III (a) and (b)). These subbasins are the parts of the basin "from which waters naturally drain into" the system above and below Lee Ferry (art. II (f) and (g)). Lee Ferry is a point in the river in northern Arizona, near the Utah line.

The use of only a part of the water supply is divided. Further apportionment of the use of any surplus may be made by a further compact after October 1, 1963, if the States so unanimously agree (art. III (f) and (g)). This provision is permissive, not mandatory.

It is provided (art. VII) that—

> "Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes."

It is further provided (art. IX) that—

> "Nothing in this compact shall be construed to limit or prevent any State from instituting or maintaining any action or proceeding, legal or equitable, for the protection of any right under this compact or the enforcement of any of its provisions."

It is, finally, provided (art. XI) that the compact shall be binding when "approved by the legislatures of each of the signatory States and by the Congress of the United States."

The compact was negotiated at Santa Fe, N. Mex., by commissioners appointed pursuant to statute by each of the seven States of the basin, presided over by Herbert Hoover, then Secretary of Commerce, pursuant to act of August 19, 1921 (42 Stat. 171). It was signed by each of the seven commissioners. It was ratified by the legislatures of six States in 1923, but Arizona refused to ratify. Thereafter, the six States chose to ratify the compact as a six-State agreement (Stats. Wyo. 1925, ch. 82; Stats. Colo. 1925, ch. 177; Stats. N. Mex. 1925, S. B. 105; Stats. Nev. 1925, S. B. 87; Stats. Cal. 1929, ch. 15; Stats. Utah, 1929, ch. 31). Arizona continued to delay ratifying the compact for over 20 years, but purported to ratify in 1944 (Stats. Ariz. 1st Special Sess. 1944, ch. 5).

B. BOULDER CANYON PROJECT ACT

The Boulder Canyon Project Act (45 Stat. 1057), approved December 21, 1928, was the sixth of a series of bills for improvement of the lower river which was considered by the Congress during the period 1919 to 1928. It is a complex piece of legislation, providing for—

1. Construction of Hoover Dam, for the purposes of flood control, improvement of navigation, river regulation, and storage and delivery of water for reclamation of public lands and other beneficial purposes (sec. 1);
2. Construction of the All-American Canal to Imperial and Coachella Valleys, Calif. (sec. 1);
3. Construction of Hoover Dam power plant, by the sale of the energy from which the dam was principally to be financed (sec. 1);
4. Execution by the Secretary of the Interior of contracts for storage and delivery of water and contracts for electrical energy (sec. 5);
5. Priority in right to the several uses of water, first, navigation, etc.; second, irrigation and domestic uses; and third, power (sec. 6);
6. Subjection of all uses and users to the compact (sec. 8);
7. Approval of the Colorado River compact (sec. 13 (a)); and
8. Investigation and report by the Secretary of the Interior as to a comprehensive plan of development of the basin (sec. 15).

Section 4 (a) of the Project Act declares that the act shall not take effect, unless and until—

> "(1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact, mentioned in section 13 hereof, and the President by public proclamation shall have so declared; or (2) if said States fail to ratify the said compact within 6 months from the date of the passage of this act, then until six of said States, including the State of California, shall ratify said compact and shall consent to waive the provisions of the first paragraph of article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and shall have approved said compact without conditions, save that of such six-State approval, and the President by public proclamation shall have so declared, and, further, until the State of California, by act of its legislature, shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of this act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this act and all water necessary for the supply of any rights which may now exist, shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact."

Thus Congress hinged its assent to the compact and the plan of development of the lower basin upon (1) seven-State ratification of the compact, or (2) ratification by six States, including California, plus the enactment by California of a prescribed limitation act.

The second paragraph of section 4 (a) outlined a possible subcompact for the lower basin, which Congress would approve. Such compact has never been executed, hence this paragraph is of interest only because it affords some material for interpretation of the limitation act required by the first paragraph of the section.

C. CALIFORNIA LIMITATION ACT

On March 4, 1929, the California Legislature, in addition to ratifying the six-State compact, adopted the California Limitation Act, in the words prescribed in section 4 (a) of the Project Act (Stats. Cal. 1929, ch. 16). Five other States having ratified the six-State compact, the President on June 25, 1929, issued the proclamation required by section 4 (a) and declared the act in effect (The Hoover Dam Contracts, Dept. Int. 1933, p. 429). The six-State compact consequently, was also made effective.

D. WATER CONTRACTS

1. Under the authority of section 5 of the Project Act, the Secretary of the Interior then proceeded to execute contracts with five California public agencies for storage and delivery from Lake Mead, the reservoir created by Hoover Dam, of quantities of water designated in a schedule of priorities which had been agreed to by the California agencies. These contracts require delivery to be made at designated points on the section of the river which forms the eastern boundary of California. The contracts were executed with the following parties and on the following dates:

(*a*) The Metropolitan Water District of Southern California (1930);
(*b*) Imperial Irrigation District (1932);
(*c*) Palo Verde Irrigation District (1933);
(*d*) City of San Diego (1933);
(*e*) Coachella Valley County Water District (1934).

These five contracts uniformly require the United States to deliver from storage at Hoover Dam "so much water as may be necessary to supply the district" (or city) "a total quantity, including all other waters diverted by the district" (or city) "from the Colorado River, in the amounts and with priorities in accordance with the" schedule of priorities "(subject to the availability thereof for use in California under the Colorado River compact and the Boulder Canyon Project Act):

"The waters of the Colorado River available for use within the State of California under the Colorado River compact and the Boulder Canyon Project Act shall be apportioned to the respective interests below named and with amounts and with priorities therein named and set forth, as follows:" (Here follows a list of seven priorities which may be summarized as follows: The first, second, and third priorities go to Palo Verde Irrigation District, Yuma Federal Reclamation Project in California, Imperial Irrigation District, and Coachella Valley County Water District, to a total of 3,850,000 acre-feet per annum. The fourth and fifth priorities go to the Metropolitan Water District and City of San Diego in the aggregate amount of 1,212,000 acre-feet. The sixth and seventh priorities go to the irrigation interests in the amount of 300,000 acre-feet.)

2. The Secretary has also made two contracts with the State of Nevada for an aggregate of 300,000 acre-feet per annum (1942–43). These contracts are made "subject to the availability thereof for use in Nevada under the provisions of the Colorado River compact and the Boulder Canyon Project Act."

3. The Secretary has also contracted with the State of Arizona (1944) for delivery of water. This contract is made "subject to the availability thereof for use in Arizona under the provisions of the Colorado River compact and the Boulder Canyon Project Act." The nominal quantities named in the contract are 2,800,000 acre-feet and "one-half of any excess or surplus waters unapportioned by the Colorado River compact to the extent such water is available for use in Arizona under said compact and said act." These quantities are nominal only, in that a considerable number of deductions and qualifications of the quantities appear in the contract.

Article 7 (*f*) of the contract provides:

"Arizona recognizes the right of the United States and the State of Nevada to contract for the delivery from storage in Lake Mead for annual beneficial consumptive use within Nevada for agricultural and domestic uses of 300,000 acre-feet of the water apportioned to the lower basin by the Colorado River compact, and in addition thereto to make contract for like use of one twenty-fifth of any excess or surplus waters available in the lower basin and unapportioned by the Colorado River compact, which waters are subject to further equitable apportionment after October 1, 1963, as provided in article III (*f*) and article III (*g*) of the Colorado River compact."

Article 7 (*g*) provides:

"Arizona recognizes the rights of New Mexico and Utah to equitable shares of the water apportioned by the Colorado River compact to the lower basin and also water unapportioned by such compact, and nothing contained in this contract shall prejudice such rights."

Article 7 (*h*) of the contract provides:

"Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake

Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an act of its legislature (ch. 16, Statutes of California of 1929) upon which limitation the State of Arizona expressly relies."

Article 10 of the Arizona contract provides:

"Neither article 7, nor any other provision of this contract, shall impair the right of Arizona and other States and the users of water therein to maintain, prosecute or defend any action respecting, and is without prejudice to, any of the respective contentions of said States and water users as to (1) the intent, effect, meaning, and interpretation of said compact and said act; (2) what part, if any, of the water used or contracted for by any of them falls within article III (*a*) of the Colorado River compact; (3) what part, if any, is within article III (b) thereof; (4) what part, if any, is excess or surplus waters unapportioned by said compact; and (5) what limitations on use, rights of use and relative priorities exist as to the waters of the Colorado River system; provided, however, that by these reservations there is no intent to disturb the apportionment made by article III (a) of the Colorado River compact between the upper basin and the lower basin."

A hearing was held before Secretary Ickes February 2, 1944, as to whether the Secretary should sign the Arizona contract. On February 10, 1944, Secretary Ickes, on signing the contract, made public a memorandum in which he stated:

"First I wish to make it clear, and to emphasize, that the delivery of water under both subdivision (a) and (b) of article 7 is expressly 'subject to its availability under the Colorado River compact and the Boulder Canyon Project Act.' The proposed contract does not attempt to obligate the United States to deliver any water to Arizona which is not available to Arizona under the terms of the compact and act. Secondly, article 10 was purposely designed to prevent Arizona, or any other State, from contending that the proposed contract, or any provision of the proposed contract, resolves any issue on the amounts of waters which are apportioned or unapportioned by the compact and the amount of apportioned or unapportioned water available to the respective States under the compact and the act. It expressly reserves for future judicial determination any issue involving the intent, effect, meaning and interpretation of the compact and act. The language of article 10 is plain and unequivocal and adequately reserves all questions of interpretation of the compact and the act."

E. TREATY WITH MEXICO

A treaty between the United States and the United Mexican States [Ex. A, 78th Cong., 2d sess.] signed February 3, 1944, together with a protocol signed November 14, 1944 [Ex. H, 78th Cong., 2d sess.], was ratified by the United States Senate April 18, 1945, subject to 11 reservations [Supplement to Ex. A, 78th Cong., 2d sess.] and thereafter ratified by the Mexican Senate and promulgated.

By this treaty (art. 10), the United States agreed to deliver at the Mexican boundary, a guaranteed annual quantity of 1,500,000 acre-feet of Colorado River water and a conditional additional quantity of 200,000 acre-feet, as ordered in schedules (art. 15) to be filed by Mexico. Mexico is also entitled to any water passing the boundary outside the schedules (art. 10 (b)).

IV. Character of Proposed Litigation

A. MAJOR ISSUES INVOLVED

While there is a variety of more or less minor or detailed divergencies of opinion between California and Arizona relative to the meaning of the disputed documents, three major issues exist, which, in the aggregate, involve the right of one State or the other to over 1,000,000 acre-feet of water per annum. These three issues are:

1. Whether by the terms of the California Limitation Act California is entitled to participate in the 1,000,000 acre-feet of water referred to in article III (b) of the Colorado River compact. This issue is one of interpretation of the California Limitation Act and the corresponding language in section 4 (a) of the Boulder Canyon Project Act.

2. Whether the measure of "beneficial consumptive use" of waters of the Gila River in Arizona is the actual beneficial consumptive use of such waters

made in Arizona, or is the amount of the depletion by Arizona of the virgin flow of the Colorado River at its confluence with the Gila. This is a question of interpretation of article III of the Colorado River compact.

3. Whether the 4,400,000 acre-feet of the water apportioned by article III (a) of the Colorado River compact to which California is limited by the Project Act and Limitation Act is a net quantity, or is subject to reduction by reason of evaporation and other reservoir losses, particularly at Lake Mead. This is, again, a question of interpretation of the California Limitation Act and section 4 (a) of the Project Act.

These subjects will be presented in the order set out. The purpose of this presentation is, of course, not to brief the issues exhaustively, but to show that legal questions exist and that they are substantial, seriously disputed, and of importance.

1. Status of III (b) water under limitation act

It is California's position that, in enacting the California Water Limitation Act (Stats. Calif. 1929, ch. 16), it did not renounce the right to participate in the use of the million acre-feet of water by which the lower basin is authorized to increase its beneficial consumptive use of waters of the river under paragraph (b) of article III of the compact; that such million acre-feet constitutes a part of the "excess or surplus waters unapportioned by the Colorado River compact" as that term is used in the Limitation Act and, as a part of such excess or surplus, is available for use in the lower basin, including California. Arizona, on the contrary, argues, and bases her computations of water supply on the proposition, that, by the terms of the Limitation Act, California renounced any claim to the 1,000,000 acre-feet specified in article III (b); and, therefore, that the only place such water may be lawfully used in the United States is in the State of Arizona.

As above noted, section 4 (a) of the Project Act provided that the act should not take effect until all seven States ratified the Colorado River compact, or, if such seven-State ratification did not occur within 6 months, unless six of the States, including California, should ratify the compact, and California, by act of its legislature, in consideration of the passage of the Project Act should agree for the benefit of the other States of the basin, to limit its use of Colorado River water to:

> "4,400,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of the said compact."

Arizona did not ratify the compact within the 6 months' period, thus forcing California (since California wanted the project built) to adopt the Limitation Act. California also ratified the compact, as did five other States.

The Boulder Canyon Project Act and the Limitation Act constitute a compact or contract made by the State of California with the United States for the benefit of the other States of the basin. Such compacts, evidenced by reciprocal legislation, have been recognized by the Supreme Court, *Poole* v. *Fleeger* (11 Pet. 185); *Searight* v. *Stokes* (3 How. 151); *Neil Moore & Co.* v. *Ohio* (3 How. 720); *Pennsylvania* v. *Wheeling Bridge Co.* (13 How. 621). The interpretation of the statutory compact composed of the Limitation Act and the Project Act is a matter of contract law. The intent of the parties must control. For the purpose of disclosing that intent, consideration should be given to (*a*) the text of the Colorado River compact, (*b*) the legislative history of section 4 (a) of the Project Act, and (*c*) the text of that section.

(*a*) *The Colorado River compact.*—Article III (a) of the Colorado River compact reads as follows:

> "There is hereby apportioned from the Colorado River system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist."

Paragraph (b) provides that:

> "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."

Paragraph (c) relates to the possibility of a supply of water to Mexico under treaty.

Paragraphs (d) and (e) are not pertinent hereto.

Paragraph (f) provides that:

> "Further equitable apportionment of the beneficial uses of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October 1, 1963, if and when either basin shall have reached its total beneficial consumptive use as set out in paragraphs (a) and (b)."

Paragraph (g) provides the mechanics of such additional apportionment.

Paragraph (b), the meaning of which is particularly involved in the controversy, does not use the word "apportion" with reference to the 1,000.000 acre-feet. The phrase "right to increase" appears. Nor does (b) include the term "in perpetuity." Had it been the intent of the framers of the compact to consider the waters referred to in paragraphs (a) and (b) as being in the same class, it would have been extremely simple to cover the matter in one paragraph, apportioning 7,500,000 acre-feet to the upper basin and 8,500,000 acre-feet to the lower basin. The fact that paragraph (b) was set up as it was, indicates a different intent. The intent, while not clearly apparent on the face of the compact, is disclosed by the contemporaneous official report of Delph E. Carpenter.

Mr. Carpenter was commissioner for the State of Colorado on the Colorado River Commission which framed the compact; in fact, he is generally credited with being the father of the idea of a compact among the States of Colorado River Basin. Immediately after the compact was signed by the States' representatives at Santa Fe, Mr. Carpenter, under date of December 15, 1922, reported to the Governor and legislature of the State of Colorado. His report was made a part of the Congressional Record during the debates in the Senate on the Boulder Canyon Project Act (Congressional Record, Senate, 70th Cong., 2d sess., December 14, 1928. vol. 70, pt. 1. pp. 577–579. 584–585). In his report (p. 577), Mr. Carpenter says:

> "Seven million five hundred thousand acre-feet, exclusive annual beneficial consumptive use, is *set apart and apportioned in perpetuity* to the upper basin and a like amount to the lower basin.
>
> * * * * * * *
>
> "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 acre-feet annual beneficial consumptive use before being authorized to call for a further apportionment of any surplus waters of the river.*
>
> "No further apportionment of surplus waters of the river shall occur within the next 40 years. At any time after 40 years, if the development in the upper basin has reached 7,500,000 acre-feet annual beneficial consumptive use or that of the lower basin has reached 8,500,000 acre-feet, any two States may call for a further apportionment of any surplus waters of the river, but such supplemental apportionment shall not affect the *perpetual apportionment of 7,500,000 acre-feet made to each basin by this compact.*"

Later in his comments (p. 578), Mr. Carpenter makes this statement:

> "The repayment of the cost of the construction of necessary flood-control reservoirs for the protection of the lower river country probably will result in a forced development in the lower basin. *For this reason a permissible additional development in the lower basin to the extent of a beneficial consumptive use of 1,000,000 acre-feet was recognized in order that any further apportionment of surplus waters might be altogether avoided or at least delay to a very remote period. This right of additional development is not a final apportionment.*" [Italics supplied.]

According to Mr. Carpenter's statement, the right to increase the use of waters referred to in III (b) is not an apportionment, but merely a measure of the time when the lower basin may apply for additional apportionment under paragraph (f), article III. This, we take to be the true significance and intent of the compact.

Mr. Carpenter's explanation of the compact was before the Congress at the time the Colorado River compact was approved, and the Boulder Canyon Project Act adopted. There was no contrary statement, nor was any question raised as to the accuracy of Mr. Carpenter's analysis.

During the progress of the debate in the Senate on the Project Act the same interpretation was used. It is true that at times the aggregate of (a) and (b), that is, 8,500,000 acre-feet, was more or less casually referred to as water "apportioned" to the lower basin. It is to be noted, however, that whenever any party to the debate attempted to be precise about the matter the distinction between the apportionment of water under III (a) and the right to increase under III (b)

was preserved. For example, Senator Hayden, of Arizona, in describing the compact (p. 388) said (page references to debates are to Congressional Record, 70th Cong., 2d sess., vol. LXX, pt. 1):

> "The Colorado River compact, as originally written, contemplated that the seven States of the Colorado River Basin would enter into an agreement apportioning 7,500,000 acre-feet of the waters of that basin to the upper basin, 7,500,000 acre-feet to the lower basin, and reserving to the lower basin the right to increase its beneficial consumptive use of water by an additional 1,000,000 acre-feet."

Senator Bratton, of New Mexico, in describing the compact, maintained the same distinction. He said (p. 326):

> "Under the terms of the compact 15,000,000 acre-feet of water per annum was apportioned, 7,500,000 acre-feet thereof to the upper basin, and 7,500,000 acre-feet to the lower basin, with the additional provision that the lower basin was given the right to increase its beneficial consumptive use of water from said stream system."

Arizona argues that the reference in paragraph (f) of article III to "further equitable apportionment of * * * waters * * * unapportioned by paragraphs (a), (b), and (c)" is conclusive that the III (b) water is apportioned water. It may be argued that this language, in a negative way at least, indicates that the framers of the compact considered the 1,000,000 acre-feet referred to in paragraph (b) as apportioned. It is to be noted, however, that paragraph (c) is also mentioned in article III (f), along with (a) and (b). That paragraph refers to a possible treaty with Mexico. No quantity of water is "apportioned" thereby. In fact, the compacting States had no power, and did not attempt, to apportion water to Mexico. That power resided in the United States. It would appear, then, that no finality or determinative significance attaches to the word "unapportioned" in paragraph (f). The word is negative and does not mean that each of the paragraphs referred to "apportions" water.

In any event, the matter being one of contract law, we are concerned with the manner in which the parties to the contract used the words, rather than with any absolute or abstract meaning. Also, it must be remembered that the real question is one of the construction of the United States-California Statutory Compact of 1928, embodied in the Project Act and Limitation Act, not the construction of the Interstate Compact of 1922. One turns, then, to the legislative history of section 4 (a) of the Project Act, for the purpose of determining what was in the minds of the Senators who participated in the framing of the California limitation.

(*b*) *Legislative history of section 4 (a) of the Project Act.*—During the debate on the floor of the Senate on the Boulder Canyon Project Act, Senator Hayden offered an amendment to section 4 (a) (p. 162) which, for parliamentary reasons, was later withdrawn in favor of an amendment offered by Senator Phipps, of Colorado (p. 382). Senator Phipps' amendment provided that the Project Act should not take effect unless the Colorado River compact be ratified by all seven of the States, or, if the seven States fail to ratify the compact within 1 year from the date of the passage of the act, then until six of the States, including California, should ratify the compact, and the State of California, by act of its legislature, should agree with the United States for the benefit of the other States of the basin, that:

> "* * * the aggregate annual consumptive use (diversions less returns to the river) *of water of and from the Colorado River for use in the State of California * * * shall not exceed 4,600,000 acre-feet of the waters apportioned to the lower-basin States by the Colorado River compact*, plus not more than one-half of any excess or surplus waters unapportioned by said compact * * *." [Italics supplied.]

It will be noted that the Phipps' amendment did not read "waters apportioned by article III (a) of the compact," but that the limitation applied to "waters apportioned by the Colorado River compact" plus one-half of excess or surplus, no mention being made of article III (a). This distinction becomes important, as will shortly appear. Senator Bratton, of New Mexico, proposed an amendment to the Phipps amendment changing the figure "4,600,000" to "4,400,000." This amendment was agreed to (p. 387).

While the matter was in this stage, Senator Phipps gained the floor and said (p. 459):

> "Referring to the amendment which is now before the Senate, in order to remove any possible misunderstanding regarding the 4,400,000 acre-feet of water, *I desire to perfect the amendment* by inserting, on page 3, line 4 after the word 'by,' the 'paragraph (a) of article 3 of', so that it will

show that that allocation of water refers directly to the 7,500,000 acre-feet of water that are mentioned in paragraph 3." [Italics supplied.]

Senator Phipps referred to the additional language as a "perfecting" amendment, that is, an amendment to improve language without changing the substance of the provision.

If the right to increase set out in paragraph (b) of article III had constituted an "apportionment," the first Phipps' amendment would relate to an apportionment of 8,500,000 acre-feet. If the right to increase was not an apportionment, the amendment would relate to an apportionment of 7,500,000 acre-feet. The perfecting amendment, adding the reference to paragraph (a) of article III, unquestionably related to an apportionment of 7,500,000 acre-feet. It is clear that the Senator considered the words "apportioned by the compact" to be synonymous with the phrase "apportioned by paragraph (a) of article III of the compact." He did not, therefore, consider the water referred to in paragraph (b) "apportioned" water. It is, accordingly, in the class of "excess or surplus waters unapportioned" by the compact.

Senator Phipps would not have referred to his amendment as a "perfecting amendment," if he had thought that the effect would be to change the meaning so that, instead of relating to an aggregate of 8,500,000 acre-feet, it would relate to 7,500,000 acre-feet. That would be a substantial change, and not a perfecting amendment.

Senator Hayden offered no objection to the perfecting amendment, saying:

"* * * it makes it even more in conformity with the amendment that I now offer."

Senator King of Utah obtained the floor to comment on the Phipps' amendment. The following colloquy then occurred between Senator King and Senator Johnson of California (p. 459):

"Mr. KING. If I may have the attention of the Senator from California and the Senator from Colorado, I direct attention to line 5, page 3, of the amendment offered by the Senator from Colorado. Let me read back a few words: 'plus not more than one-half of any excess or surplus waters unapportioned by said compact.' I was wondering if there might not be some uncertainty as to what surplus waters were therein referred to. *I think it was the intention to refer to the surplus waters mentioned in paragraph (b) of article 3 of the compact, being the 1,000,000 acre-feet supposed to be unappropriated.* [Italics supplied.]

Mr. JOHNSON. No; that is not quite my understanding. It is by no means certain that there is any other, and it is by no means certain that there is the one million; but the language referred to any other waters.

Mr. KING. Speaking for myself, I have no objection; but I was under the impression that the purpose was to link it with paragraph (b), so as to be sure that California was to receive one-half of the 1,000,000 acre-feet.

Mr. JOHNSON. Not necessarily. This gives one-half of the unapportioned water, and I think it is a better way to leave the matter.

Mr. KING. If it is sufficiently certain to suit the Senators of the lower basin, I have no objection.

Mr. JOHNSON. I think it is."

It was clear to Senator King that the III (b) water was "surplus."

The effect of Senator Johnson's comments was to deny any distinction between the 1,000,000 acre-feet of III (b) water and any other excess or surplus. Understanding the word "unappropriated," as used by Senator King, as meaning "unapportioned," Senator Johnson construed the Phipps' amendment, read in connection with the compact, as giving California one-half of all the unapportioned water, inclusive of the 1,000,000 acre-feet. He was not sure that there would be as much water in the surplus as a million acre-feet, but whatever the surplus amounted to, California was to be entitled to one-half.

Senator King, in a further effort to remove any possible misunderstanding, put this question to Senator Hayden of Arizona (p. 460):

"Does the Senator interpret the compact to mean that if there is any unappropriated water in addition to the 1,000,000 acre-feet referred to in the compact, that that is subject to the same disposition or division as the 1,000,000 acre-feet?"

Senator Hayden replied:

"There is no question about it, in the light of the statement I have just read * * *."

In this answer, Senator Hayden lumped the 1,000,000 acre-feet with any other excess or surplus of unapportioned water and expressed the view that all such waters were subject to the same disposition.

Senator Phipps' amendment, including his "perfecting" amendment, was adopted and became the final text of the first paragraph of section 4 (a) of the Project Act.

Senator Hayden then offered an amendment requiring a three-State lower basin compact. His language was amended to authorize, rather than require, a three-State compact, and, as so modified, now appears as the second paragraph of section 4 (a).

In reviewing the record of the Senate debates in which the text of the Project Act was hammered out, it is apparent that the Senators who participated in the discussion of section 4 (a) of the act, used the word "apportioned" as applying to the 15,000,000 acre-feet referred to in article III (a) of the compact and considered all additional water to be in the class of unapportioned excess or surplus water. In adopting the Limitation Act, with this record before it, the California Legislature was entitled to view the matter in the same light. The intent of the parties to the resulting statuory compact is clear and controlling.

Not directly a part of the legislative history of the Project Act, but so closely connected in point of time and so significant as coming from the State of Arizona as to be an important item of contemporaneous interpretation is the following statement from the brief of Arizona in opposition to motions to dismiss (pp. 33, 34) in the first case of *Arizona* v. *California* (283 U. S. 423):

> "Under the compact, then, the only water of which the right to exclusive beneficial use in perpetuity may be acquired in the lower basin is the water apportioned to that basin. Such apportionment is limited to 7,500,000 acre-feet of water per annum by article III (a). The Colorado brief, page 40, contends that paragraph (b) of article III operates to increase this apportionment to 8,500,000 for the lower basin. This, we submit, is not the case. If it had been intended to apportion the larger amount, the compact could easily have said so. The difference in language between paragraphs (a) and (b) is plain, and the difference in meaning is clear. Paragraph (b) does not *apportion in perpetuity*, as does paragraph (a), any beneficial use of water. It is very careful not to do this. It is to be read with paragraph (c) and relates solely to the method of sharing between the basins any future Mexican burden which this Government might recognize. This burden is to be satisfied first out of 'surplus' waters, and surplus waters are defined, not as surplus over quantities 'apportioned,' but as surplus over quantities '*specified* in paragraphs (a) and (b).' Any deficiency remaining is to be borne equally by the two basins. Thus the lower basin, which without paragraph (b) might use water in excess of its apportionment without acquiring any exclusive right in perpetuity thereto, is enabled to retain such uses to the extent of 1,000,000 acre-feet per annum against the first incidence of the Mexican burden. Thereafter it is entitled to require the upper basin to share from its apportionment equally in the satisfaction of any deficiency. In other words, all that paragraphs (b) and (c) accomplish is to require the upper basin to reduce its apportionment in favor of Mexico before the lower basin is required to do so, the lower basin being entitled to contribute first, to the extent of 1,000,000 acre-feet, water which it may have used but to which it has no exclusive right in perpetuity—that is, water not apportioned to it. The water apportioned is that to which exclusive beneficial use in perpetuity is given in paragraph (a), less any deductions which may have to be recognized as provided in paragraphs (b) and (c)." [Emphasis the brief writers.']

This brief was signed by K. Berry Peterson, attorney general of Arizona, and by Clifton Mathews (now Judge C. C. A. 9) and Dean G. Acheson (since Under Secretary of State), of counsel. It represents what was the current opinion of both Arizona and California at the time and contrasts strangely with Arizona arguments conceived at a much later period.

(c) *Text of section 4 (a) of Project Act.*—The text of section 4 (a) of the Project Act, as finally adopted, is in entire accordance with (1) Mr. Carpenter's explanation of the Colorado River compact, (2) the understanding of the Members of the Senate at the time the bill was under consideration, (3) the understanding of the California Legislature, and (4) the contemporaneous views of the State of Arizona, as expressed in Mr. Acheson's brief.

Section 4 (a) has two phases, first, that part which, in the absence of a seven-State compact, required California to adopt a limitation act, as the price of passage of the Project Act, and, second, the congressional authorization of a three-State compact apportioning the waters of the lower Colorado River Basin. The first phase was consummated by action of the State of California in adopting the Limitation Act. The authorization to enter into a three-State compact was never carried out. However, the language used in authorizing the three-State compact is valuable as a guide to the interpretation of the earlier part of the section. It must be presumed that words and phrases were used in the same sense throughout the section. In fact, the two parts must be read together in order to make sense. Unless this is done, the three-State compact would provide no water at all for California.

The second paragraph of section 4 (a) reads:

> "The States of Arizona, California, and Nevada are authorized to enter into an agreement which shall provide (1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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 but if, as provided in paragraph (c) of article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico by the lower basin, and (5) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses, and (6) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact, and (7) said agreement to take effect upon the ratification of the Colorado River compact by Arizona, California, and Nevada."

In section 4 (a), the Congress was unquestionably attempting to provide a means of settling questions relating to the use of all of the waters available to the lower basin under the Colorado River compact. Nothing appears in the act nor in the debate which indicates any intent to leave the question of III (b) water open. California is limited to 4,400,000 acre-feet of water apportioned by article III (a) of the compact, "plus not more than one-half of any excess or surplus waters unapportioned by" the Colorado River compact. Arizona, under the three-State compact, would have been allotted 2,800,000 acre-feet of water apportioned by article III (a) plus "one-half of the excess or surplus waters unapportioned by the Colorado River compact." These words are identical with the words used with reference to the California limitation. In neither the limitation on California nor the three-State compact is III (b) water mentioned. Unless we take entirely unwarranted assumption that Congress intended to leave the III (b) water out of consideration, the only possible conclusion is that the word "unapportioned," as used in section 4 (a), includes the water referred to in article III (b) of the Colorado River compact, and that such water is part of the excess or surplus, one-half of which is available to California. By the same token, under the three-State compact, one-half of such water would have been available to Arizona. The two allotments, 4,400,000 acre-feet to California and 2,800,000 acre-feet to Arizona, plus 300,000 acre-feet to Nevada, exhaust the 7,500,000 acre-feet apportioned to the lower basin by article III (a). The two allotments of unapportioned water, one-half each to California and Arizona, exhaust the unapportioned water.

The two paragraphs of section 4 (a) of the Project Act, the first dealing with the California limitation, and the second with the proposed lower basin compact, must be read together as parts of a whole. The proposed lower basin compact,

taken literally, and alone, would provide no water at all for California. The California allocation set out in the first paragraph should, by implication, be read into and form a part of the compact described in the second paragraph. Only by that means could the proposed compact be rounded out as a complete scheme for disposition of the lower basin water. It could not be expected that California would enter into any such compact if it provided California no water. The two paragraphs of section 4 (a) dovetail together in such a way as to demonstrate that they are *in pari materia*. Identical expressions in the two paragraphs must, therefore, be given identical construction.

The suggested three-State compact (clauses 3 and 4) also contemplated that Arizona should have the exclusive beneficial use of the Gila and that except as to return flow reaching the Colorado River, the Gila should never be subject to diminution by reason of the allowance of water to Mexico under treaty. Arizona argues that this means that under the proposed compact the Gila water was to be in addition to the 2,800,000 acre-feet of III (a) water theretofore mentioned. By compact definition, III (a) water is water of "the Colorado River system," a phrase which includes the Gila. Arizona's argument is, thus, that the 2,800,000 acre-feet proposed for Arizona, although described as III (a) water, i. e., system water, was intended to be taken from the main stream only, and the use of the waters of the Gila would constitute a firm right in addition thereto.

That interpretation presents a mathematical impossibility. That the uses on the Gila must be charged to III (a) water is clear, from the language of the compact, which says that that apportionment "shall include all water necessary for the supply of any rights which may now exist." At the time the compact was written, the rights on the Gila were well established and "existed." To consider the Gila as an addition to the 2,800,000 acre-feet would carry the proposed apportionment of III (a) water to Arizona, together with those made to the other States, far beyond the figure of 7,500,000.

The language of clauses 3 and 4 of the proposed three-State compact can be reconciled with clauses 1 and 2 of that compact, and with the Colorado River compact, only by considering the use of the Gila, not as an addition to. but as included within the III (a) water which would have been available to Arizona under the proposal. If the proposed three-State compact had been adopted, the language of clauses 3 and 4 would have had the effect of protecting the Gila from diversion for uses out of the State of Arizona and as limiting the draft to serve the Mexican burden to the water in the main stream.

In the light of Mr. Carpenter's explanation of the compact, the legislative history of the Project Act and the internal evidence of the text of the Project Act, it is clear that the Congress and California intended that California should participate in III (b) water. The Limitation Act should be so construed.

2. Measure of charge against III (a) water on account of Gila uses

The Gila River, in its lower reaches, was, in a state of nature, a wasting stream. In the last 100 miles above the point where it disembogues in the Colorado, its bed is wide, sandy flat, and subject to the intense heat of the desert. As a result, although an average of about 2,300,000 acre-feet of water per annum flows into the Phoenix area in central Arizona from the mountainous watershed of the Gila and its tributaries, it has been estimated by the Bureau of Reclamation that, in a state of nature, before any water was put to use in central Arizona, an average of only approximately 1,300,000 acre-feet per annum flowed from the Gila, at its mouth, into the Colorado. The rest was lost by evaporation, deep seepage, and transpiration. Arizona argues that it is chargeable, for its use of Gila water, only to the extent it "depletes" the flow of the main stream of the Colorado below the quantity which would have flowed in it in a state of nature. California contends that that view is a distortion of the measure of charge specified in the compact, namely, "beneficial consumptive use." By construction of an extensive system of impounding reservoirs in the mountains east of Phoenix and batteries of pumps in the lowlands, Arizona projects have accomplished the capture and utilization of substantially all of the 2,300,000 acre-feet. All of that water supply is actually being beneficially and consumptively used in Arizona and produces crops. One way of expressing the problem is, therefore: "Is a State or project entitled to salvage, by conversion works, water which in a state of nature was wasted, and not be charged under the compact for the water so salvaged?"

Under many conditions the amount of "depletion" of a stream may approximate the amount of "beneficial consumptive use;" in fact, that may be generally

true. In many instances, however, and to an unusual degree in the case of the Gila, the depletion of the main stream is not equivalent to beneficial consumptive use.

(*a*) The apportionment of water under the Colorado River compact was not made in terms of main-stream depletion. It was made in terms of utilization. Article III (a) of the compact apportions "the exclusive beneficial consumptive use" of waters of the "Colorado River system" (which art. II (a) defines as including both main stream and tributaries). Article III (a) makes no reference to stream depletion nor, in fact, to conditions existing in a state of nature. What is chargeable to each basin, and logically to each State, is whatever water of the system is actually put to beneficial consumptive use.

No definition of the phrase "beneficial consumptive use" is found in the compact, presumably because the term is a common one and well understood in water law as meaning diversions from a river minus return flow to that river.

The California limitation clause of the first paragraph of section 4 (a) of the Project Act, defines consumptive use parenthetically as "diversions less returns to the river." This plainly means returns to the river from which diversions are made. Thus, Gila uses are to be measured as diversions from the Gila less returns to the Gila.

(*b*) The present Arizona argument, that the charge to Arizona for Gila uses is to be measured by its depletion of the main stream, is evidently one of fairly recent conception. In the bill of complaint in the first case of *Arizona* v. *California* (283 U. S. 423 (par. VII, p. 8)) it was alleged:

> "Of the appropriated water so diverted, used and consumed in Arizona, 2,900,000 acre-feet are diverted from the Gila River and its tributaries."

In the third case of *Arizona* v. *California* (298 U. S. 558), the bill of complaint alleged (par. VII, p. 13):

> "Of the virgin flow of the Gila in the Phoenix area, 2,885,000 acre-feet per year have been used and appropriated in Arizona and 15,000 in New Mexico."

That these figures are excessive may be granted. The difference between them and the figure of 2,300,000 acre-feet hereinabove stated as the inflow into, and the consumptive use in, the Phoenix area is explained by the following allegations in the third case (par. VI, p. 12):

> "The average annual virgin flow of the Gila River into the Phoenix, Ariz., area is 2,359,000 acre-feet."

and (par. VII, p. 13):

> "A large quantity of the waters of the Gila used for irrigation in and above the Phoenix area returns to the stream and is again diverted and used, with the result that the diversions exceed its virgin flow."

In conclusion on this subject, it must be made crystal-clear, that under the California view, there is no double charge by reason of use and reuse of the same water. The inflow into the Phoenix area is 2,300,000 acre-feet and substantially all of it is consumed. This could not happen by one diversion of that quantity, for some return flow to the Gila is inevitable. No matter how many times the water is rediverted, Arizona is chargeable only with the original inflow which has been consumed. But of that amount, and not some theoretical virgin flow into the Colorado, Arizona has made "beneficial consumptive use" and with that amount Arizona should be charged.

3. Application of reservoir losses

The third question is whether the amount of 4,400,000 acre-feet per annum of III (a) water to which California is limited by its Limitation Act is subject to reduction on account of reservoir losses.

There will be reservoir losses at Lake Mead and elsewhere aggregating on the order of 1,000,000 acre-feet per annum. Arizona argues that California must stand the reduction of its 4,400,000 acre-feet of III (a) water to the extent of forty-four seventy-fifths of these reservoir losses, or roughly, 600,000 acre-feet.

Section 4 (a) of the Project Act and the reciprocal language of the California Limitation Act do not justify such reduction. The controlling language is:

> "* * * that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River *for use in the State of California* * * * shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact * * *." [Italics supplied.]

(a) Lake Mead lies in the States of Arizona and Nevada. The limitation on California relating to diversions "for use in the State of California" cannot be construed as including any part of the reservoir losses occurring at Lake Mead. As the word is ordinarily used, such water is not "diverted" nor is it "used" in California.

(b) Again, the limitation clause specifically defines the beneficial consumptive use which shall be chargeable to California as "diversions less returns to the river." The California diversions are all made, as the California contracts made under authority of the Project Act expressly state, at three points on the section of the river which forms the eastern boundary of California, to wit, Parker Dam, Blythe Intake, and Imperial Dam. If California's charge is to be measured by those diversions, less return flow, they are not subject to another deduction for reservoir losses at Lake Mead and other up-stream reservoirs.

The limitation of 4,400,000 acre-feet is a net limitation. There is nothing in the text of the limitation nor in its legislative history which ponts to any other conclusion.

B. THE ISSUES, BEING LEGAL IN CHARACTER, ARE DETERMINABLE IN A REASONABLE TIME

From the foregoing review of major issues, it is plain that the matters in controversy between Arizona and California are characteristically legal issues, being matters of interpretation of statutes and other documents. The ordinary factual elements, relating to quantities and time of flow and use, which characterize most water litigation are not to any substantial extent critical factors.

It is true that some of the classic interstate water cases, such as *Kansas* v. *Colorado* (206 U. S. 46); *Wyoming* v. *Colorado* (259 U. S. 419), and *Nebraska* v. *Wyoming and Colorado* (325 U. S. 589), have required 10 years or more to reach adjudication. This has occurred because in each of these cases it was necessary for the court to appoint a master to take voluminous testimony relative to factual issues. In the case at bar it is not considered that a master need be appointed, nor that factual testimony be taken. The issues which are significant as between California and Arizona can be adjudicated upon briefs and oral argument within a reasonable time, not to exceed 2 to 3 years.

During the last 2 to 3 years, Arizona and California have been contending in the political arena before congressional committees over certain Arizona project authorizations. It is believed that unless litigation is commenced, these States will unfortunately be bound to continue such contest in Congress, and that a much longer time and a much greater expense and effort will probably be so devoted than would be required to initiate and complete an action in the Supreme Court.

C. MAGNITUDE AND SIGNIFICANCE OF ISSUES

1. Magnitude

(*a*) The quantity of water involved in the first issue between California and Arizona detailed in section A last above, namely, the issue as to III (b) water, is 1,000,000 acre-feet. The question is whether Arizona is entitled to all the 1,000,000 acre-feet, or whether it forms a part of the excess and surplus waters of which California is entitled to at least one-half.

(*b*) The quantity involved in the second issue, relating to the meaning of "beneficial consumptive use," as applied to the Gila River uses in Arizona, is, roughly, another 1,000,000 acre-feet. Either Arizona will use this 1,000,000 without being charged for it, or the "excess or surplus" unapportioned by the compact is increased by 1,000,000 acre-feet and one-half of it is available to California.

(*c*) The quantity involved in the third issue, as to reservoir losses, is about 600,000 acre-feet. California will either be charged or not be charged with this amount, and the surplus will be increased, or not, accordingly.

2. Effects on interests of lower basin States

The vast quantities of water which are at stake are sufficient to provide with domestic, industrial, and municipal water, say, 5,000,000 people, or, on the other hand, to provide half a million or more acres of land with irrigation water in quantities customarily used in the lower basin. What might be called the market value of the right to this quantity of water runs into billions of dollars. Hundreds of millions of dollars are required merely for the construction of works for the utilization of such quantities of water. Upon the right to take and use this water is, therefore, dependent the existence in one place or another in the lower basin

of civilization, productivity, and taxpaying ability, State and National, of inestimable significance.

(*a*) *California.*—Owing to the system of priorities set up by the California water contracts, California's share of the waters of the Colorado River goes, first, to the agricultural agencies; second, to the municipal (i. e., domestic and industrial) users; and, third, in a small quantity to irrigation agencies again. Thus, should California lose the right to any such quantities of water as are involved in the three issues above presented, the impact falls, first, lightly, upon irrigation uses, and, next, disastrously, upon the domestic users. Since domestic uses are indispensable, and the hundreds of thousands of people who are crowding into southern California must be served, it is evident that a decision greatly adverse to California would set off a chain reaction of turmoil and conflict of catastrophic character.

(*b*) *Arizona.*—The State of Arizona is most vigorously pressing for the enactment by the Congress of S. 1175, which would authorize the proposed central Arizona project. The Secretary of the Interior, in his report of February 5, 1948, has conditioned his approval of the project upon such a settlement of the water right conflict that a water supply can be assured for the project. It is thus self-evident that Arizona's interest in a determination of the controversy may be measured, in a way, by whether or not its economy is to be enhanced by an investment of Federal funds in the project, in the estimated amount of $700,000,000.

(*c*) *Nevada.*—While the quantity of water for which Nevada has contracted, 300,000 acre-feet, is less than that of California and Arizona, it is of great value to Nevada for industrial and domestic purposes and irrigation. Also, while Nevada's share has never been disputed by California or Arizona, and is regarded as III (a) water, Nevada is seriously concerned as to the effect of political processes upon the stimulation of projects and development in the other States in the lower basin, with consequent repercussions as to Nevada's allotment. Nevada considers that it is entitled to have its right set at rest by Supreme Court decree.

In addition, Nevada has a contract executed by the Secretary of the Interior under the Project Act for a maximum of aproximately 18 percent of the hydroelectric power produced at Hoover Dam. This contract is of preeminent importance to Nevada as a source of low-cost energy with which to operate a large-scale industrial development in southern Nevada.

The major project now actively pressed by the State of Arizona is the central Arizona project, as envisioned by S. 1175. This bill contemplates two features which are directly adverse to the interest of Nevada. First, as set out in Bureau of Reclamation plans disclosed to the Senate Committee on Public Lands in the hearing on S. 1175, the operation of a power plant at the proposed Bridge Canyon Dam (located immediately above Lake Mead) would be so "coordinated" with the operation of the power plant at Hoover Dam, from which Nevada has contracted for its power, as to reduce the quantity of power available to Nevada and increase the cost of such power to Nevada. Second, the bill contemplates that ultimately over a million acre-feet of water would be drawn from the river at Bridge Canyon Dam through a gravity tunnel and aqueduct for delivery to the Phoenix area. The consequence would be that that quantity of water would not flow through the Hoover Dam power plant, and, again, the quantity of power available, and the cost thereof, to Nevada would be adversely affected.

(*d*) *Utah and New Mexico.*—The lower-basin rights of Utah and New Mexico in Colorado River water have never been adjudicated nor defined by compact nor contract. While the quantities to which these States are equitably entitled are small, they are apparently, to a greater degree than Nevada's, subject to impairment by the political process, and should, for the safety of those States, be defined.

3. The controversy blocks prudent development of the basin

(*a*) Under date of June 7, 1946, the Secretary of the Interior approved a report entitled "The Colorado River," which in general character is an inventory of possible projects for the development of the Colorado River Basin. In this report it is stated (par. 70 of Regional Directors' Report):

> "The following recommendations are made in view of the fact that there is not enough water available in the Colorado River system to permit construction of all the potential projects outlined in the report and for full expansion of existing and authorized projects, and that there has not been a final determination of the respective rights of the Colorado River Basin States to deplete the flow of the Colorado River: * * *

2. That the States of the Colorado River Basin determine their respective rights to deplete the flow of the Colorado River consistent with the Colorado River compact."

This report was submitted to Congress July 24, 1947, by the Secretary of the Interior (H. Doc. 419, 80th Cong., 1st sess.). In transmitting this report to Congress, the Secretary incorporated a letter addressed to him by the Director of the Budget, dated July 23, 1947, in which it is stated:

"It is noted that your report does not recommend the authorization of any projects at this time, but rather comprises a comprehensive inventory of potential water resource developments in the basin. Acting under authority of the President's directive of July 2, 1946, I am able to advise you that there would be no objection to submission of the proposed interim report to the Congress, but that the authorization of any of the projects inventoried in your report should not be considered to be in accord with the program of the President until a determination is made of the rights of the individual States to utilize the waters of the Colorado River system."

(*b*) The Secretary's letter to the Speaker of the House, of July 24, 1947, includes the following:

"As stated in the interim report, existing circumstances tend to preclude the formulation of a comprehensive plan of development of the water resources of the Colorado River Basin at this time. Accordingly, although I cannot now recommend authorization of any project, I am transmitting the report to you in order that the Congress may be apprised of this comprehensive inventory of potential water resource developments in the Colorado River Basin, and of the present situation regarding water rights in that basin."

(*c*) Still more recent is the Secretary's report of February 5, 1948, on S. 1175, above mentioned. The Secretary states:

"Assurance of a water supply is an extremely important element of the plan yet to be resolved. The showing in the report of the availability of a substantial quantity of Colorado River water for diversion to central Arizona for irrigation and other purposes is based upon the assumption that claims of the State of Arizona to this water are valid. It should be noted, however, as the regional director points out, that the State of California challenges the validity of Arizona's claims. If the contentions of California are correct, there will be no dependable water supply available from the Colorado River for this diversion. While water is physically available in the Colorado River at the present time, and is wasting to the sea, the importance of the questions raised by the divergent views and claims of the States is apparent. The Bureau of Reclamation and the Department of the Interior cannot authoritatively resolve this conflict. It can be resolved only by agreement among the States, court action, or by an agency having proper jurisdiction. It is assumed that the Congress, in considering this proposed project, will give this conflict the full consideration it deserves. The submission of this report is not intended in any way to prejudice full consideration of this controversial matter, nor should this report be construed as affecting the water rights of Indians or Indian reservations.

"In view of the urgency for power from Bridge Canyon Dam and for irrigation, domestic and industrial water supplies in central Arizona, and conditioned upon a settlement of the water right conflict being secured such that a water supply can be assured for the project, I recommend that the project be authorized for construction in accordance with the recommendations of the regional Director, in which I concur and which I adopt, except as modified herein with respect to the policy by which minimum payment required of the irrigators shall be determined."

Thus the Secretary is properly unwilling to see the project proceed, unless the conflict is resolved in such a manner as to assure a water supply for the central Arizona project.

To sum up, the responsible executives of the administration realize that by reason of the lack of determination of rights to water in the lower basin, they cannot recommend that projects be authorized for construction. Not only that, they realize that not even a comprehensive plan of development can be formulated until such determination has been made. It will be recalled that by section 15 of the Project Act, the Secretary of the Interior was charged with the duty of formulating such a comprehensive plan.

(d) Much the same views as those expressed by the executive departments are evidenced by the report of the House Public Lands Committee on the reauthorization of the Gila project (Rept. No. 910, 80th Cong., 1st sess.). At page 3 of the report the committee says:

> "It is the intent of the committee that nothing in this bill is to be construed as affecting the rights of the States of Arizona or California as to the use of the amount of water in the lower Colorado River Basin, that each State is entitled to under the existing compact, contracts, or law. The committee feels the dispute between these two States on the lower Colorado River Basin should be determined and settled by agreement between the two States or by court decision because the dispute between these two States jeopardizes and will delay the possibility of prompt development of any further projects for diversion of water from the main stream of the Colorado River in the lower Colorado River Basin.
>
> "Therefore, the committee recommends that immediate settlement of this dispute by compact or arbitration be made, or that the Attorney General of the United States promptly institute an action in the United States Supreme Court against the States of the lower basin, and any other necessary parties, requiring them to assert and have determined their claims and rights to the use of the waters of the Colorado River system available for use in the lower Colorado River Basin."

With this report before it, the Congress adopted the bill.

As heretofore shown, the States of the upper basin are engaged in negotiation of a compact which should clear the track for planning and development in the upper basin. The States of the lower basin having found it impossible, as hereinbefore shown, to reach a comparable compact, it appears indispensable to the development of the lower basin States that a determination of their water rights be made by the Supreme Court.

V. The United States Is a Necessary Party

In the second case brought by Arizona against California and the other States in the basin (*Arizona* v. *California, et al.*, 292 U. S. 341), Mr. Justice Brandeis, speaking for a unanimous Court, held in the last sentence of the opinion (p 360):

> "We have no occasion to determine whether leave to file the bill should be denied also because the United States was not made a party and has not consented to be used."

In the last case of the three (*Arizona* v. *California, et al.*, 298 U. S. 558), Mr. Justice Stone, speaking again for a unanimous Court said (p. 571):

> "It is argued that the constitutional power of the United States to exert any control over the water stored at Boulder Dam is subject to the rights of Arizona to an equitable share in the unappropriated water 'until such a time as commerce is actually moving on the river,' and that in any case Congress has subordinated that power to Arizona's rights by the provisions of section 4 (a) of the Boulder Canyon Project Act, which authorizes Arizona, California, and Nevada to enter into an agreement as to their relative rights in the water of the river. But these and similar contentions, so far as they were not answered adversely to Arizona in *Arizona* v. *California*, *supra*, 456, cannot be judicially determined in a proceeding to which the United States is not a party and in which it cannot be heard.
>
> "Every right which Arzona asserts is so subordinate to and dependent upon the rights and the exercise of an authority asserted by the United States that no final determination of the one can be made without a determination of the extent of the other. Although no decree rendered in its absence can bind or affect the United States, that fact is not an inducement for this Court to decide the rights of the States which are before it by a decree which, because of the absence of the United States, could have no finality. *California* v. *Southern Pacific Co.* (157 U. S. 229, 251, 257); *Minnesota* v. *Northern Securities Co.* (184 U. S. 199, 235, 245–247); *International Postal Supply Co.* v. *Bruce* (194 U. S. 601, 606); *Texas* v. *Interstate Commerce Commission* (258 U. S. 158, 163). A bill of complaint will not be entertained which, if filed, could only be dismissed because of the absence of the United States as a party. *Louisiana* v. *McAdoo* (234 U. S. 627)."

It is settled law that the United States, by virtue both of its paramount constitutional rights and of its contractual obligations under the Project Act, is a necessary party to the adjudication of the water rights of the lower basin in the Colorado River.

VI. Interests of United States Would Be Advanced by Determination

A. General Interest in Development of Lower Basin

As *parens patriae*, the United States has both direct and indirect interests in the prudent and sound development of the lower basin States. It is the duty of the United States under the general-welfare clause of the Constitution to provide for the advancement of the interests of the States and of all its citizens and residents. As shown by the last five censuses, the States of the lower basin have increased in population at a far greater rate than any other portion of the United States. As is a matter of common knowledge, this trend has been accentuated since the taking of the last census. The trend is not occasioned by unusually high birth rate, or by immigration from foreign countries. It is the result of voluntary movement of millions of people of the United States toward what they choose to accept as desirable living and working conditions in the Pacific Southwest. Wherever they may choose to settle, in Arizona, Nevada, or California, it is the concern of the United States to aid them, in the exercise of its constitutional authority, by providing and protecting the water supplies which are indispensable to their domestic needs and irrigation requirements.

The projects required to furnish domestic and irrigation water and incidental hydroelectric power are so vast in scope and cost as to require in large part financing by the Federal Government. No other agency is competent to that end. Planning and construction of most of the projects can best be accomplished by experienced Federal agencies. It is, therefore, a responsibility of the United States to see that such projects are prudently planned and so distributed as to advance the long-term welfare of the Nation. By such planning and development, areas of desert waste can be brought into productivity and the Nation's supply of food and fiber can be enhanced. More directly important, the tax revenues of the United States can be permanently augmented as the result of agricultural and industrial production.

The United States has assumed control over the Colorado River, which is an interstate, international, navigable stream. It has constructed and is constructing great dams and power plants on the river. The need for integrated operation of these works forbids future development of any part of the river by States or local public or private agencies. On this account, the United States has come under responsibility to see that the development of the river proceed as rapidly as may be warranted by economic rules. Particularly, the United States is as much under responsibility as the States and local communities to use such means as are available to avoid the stalemate on the river which has been found to result from the existence of interstate controversy.

B. Proprietary Interests in Development of Public Lands

The United States holds as a proprietor immense areas of public lands in the lower basin States. Some of these public lands are suitable and available for development with water of the Colorado River, although it must be recognized that the possibilities of development of public lands in the lower basin are more limited than was once thought. To such extent as the public domain may be improved by irrigation, the United States has a direct interest in seeing to it that such development is orderly and permanent and is not subjected to undue risk of failure of water supply.

The United States has already, in furtherance of the improvement of the public domain, as well as private lands, constructed great projects such as the Yuma project in Arizona and California, the All-American Canal project in California, and the Salt River project in Arizona. The Gila project in Arizona is under construction. The United States is under an impressive moral obligation to protect its investment in these projects by taking such measures that the lower-basin water supply will not be spread too thin.

C. Trust Interest in Indian Lands

A number of important areas in the lower basin, aggregating in excess of 100,000 acres, consist of lands held in trust by the United States for Indians. Such areas are now undeveloped and unproductive, but are so situated and are composed of such suitable soils as to be eligible for development by irrigation from the Colorado River. In some cases major works have already been constructed for irrigation.

The obligations of the United States to Indian tribes are recognized by article VII of the Colorado River compact, which provides:

"Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes."

Under this provision and the decision in *Winters* v. *United States* (207 U. S. 564) and other cases, it is understood that the Indian lands have a paramount right to adequate water supply. These paramount rights are, however, to be accounted for in any division of the waters of the river among the States, so that each State will be chargeable for the waters required for Indian lands within its borders.

It is the duty of the United States to see to it that no developments in the lower basin so consume the available water as to encroach upon or embroil in controversy the water supply needed for Indian lands. Considering the uncertainties which exist as to total dependable water supply of the lower basin, the United States can best discharge its duty to Indians by causing a determination of aggregate water rights of each State to be made. When such determination has been made the protection of Indian rights against encroachment is made simple. Without such determination overlapping claims to water may at the least create friction, controversy, and difficulty in protecting the Indian projects.

D. INTEREST UNDER INTERNATIONAL OBLIGATIONS

The United States has another interest in the waters of the Colorado River, consisting of its obligation to deliver water to the United Mexican States under the treaty of February 3, 1944 (Ex. A, 78th Cong., 2d sess.). This Mexican right is paramount under the treaty power, which is committed by the Constitution to the President, with the advice and consent of the Senate. Clearly the United States should not commit itself to States nor communities to deliver to them water which may be required to satisfy the treaty. Nor should it risk public moneys on construction of water projects which, because the water supply which is supposed to serve them must be applied to satisfy the treaty, may turn out to be monuments to mistaken judgment.

E. INTEREST IN PROTECTION OF FEDERAL TREASURY

It is quite apparent that by political determinations, either in Congress or in the executive departments, projects may be authorized and constructed with Federal funds which, unless a determination of water rights in the lower basin is made, may turn out to be fruitless. The projects under contemplation involve huge expenditures of money. For illustration, cost estimates on the ultimate completion of the central Arizona project exceed $1,000,000,000. Whether or not the pending resolutions are adopted by this Congress it is evident that some day the determination of water rights in the lower basin must be made by the Supreme Court. The aggregate water supply probably available to the lower basin is not sufficient to provide in full the needs of projects now constructed and under construction, and those for which commitments exist in Nevada, Utah, and New Mexico. The essential question between Arizona and California, therefore, is whether something in excess of 1,000,000 acre-feet of water per annum shall be used on projects now constructed and in course of construction in California, or whether that quantity shall be diverted to serve a new project in Arizona not yet authorized. Whenever a determination is made by the Supreme Court it will follow, either that works in California now existing, built at a cost of $200,000,000, will be without water, or that the proposed works in Arizona which would cost from seven hundred millions to one billion dollars will be dry. In either case an investment of hundreds of millions of public money, Federal or local, will be demonstrated to have been a mistake.

It is obviously to the interest of the United States to protect its taxpayers and its Treasury by arranging for the adjudication which will, it is believed, obviate an important financial risk.

F. INTEREST IN ADMINISTRATION OF WATER UNDER PROJECT ACT

By section 5 of the Boulder Canyon Project Act it is provided that the Secretary of the Interior may contract for the storage of water in Lake Mead and for delivery thereof, and it is further provided that "No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated." Acting under this authority, the Secretary of the Interior has made a number of contracts with public agencies in Cali-

fornia and with the States of Nevada and Arizona. The possibility exists and is not fully obviated by the terms of the contracts, taken as a group, that the quantities of water specified in these contracts exceed the water supply available to the lower basin. The Secretary of the Interior has, for all practical purposes, taken possession of the river. He is under the duty of administering the river and the water supply in Lake Mead under the contracts. Conflicting claims are made against him for delivery of water. The Secretary has, of course, no true judicial authority. He cannot decide the momentous issues which exist among the States in the lower basin. By the letters heretofore quoted from the interim report on the Colorado River (H. Doc. 419, 80th Cong., 1st sess.) and by his report on the central Arizona project, Secretary Krug is on record that his hands are tied, until a determination is made. Secretary Ickes' statement in his official memorandum on signing the Arizona water contract may also be recalled. He said of the contract, "It expressly reserves for future judicial determination any issue involving the intent, effect, meaning, and interpretation of the compact and act."

In addition to his functions of contracting for and distributing water from Lake Mead, the Secretary was charged with the duty of formulating a comprehensive plan of development of the Colorado River Basin by section 15 of the Project Act, which reads:

> "The Secretary of the Interior is authorized and directed to make investigation and public reports of the feasibility of projects for irrigation, generation of electric power, and other purposes in the States of Arizona, Nevada, Colorado, New Mexico, Utah, and Wyoming for the purpose of making such information available to said States and to the Congress, and of formulating a comprehensive scheme of control and the improvement and utilization of the water of the Colorado River and its tributaries. * * *"

By section 2 (d) of the Boulder Canyon Adjustment Act of July 19, 1940, this authorization was extended to include California. The Colorado River (H. Doc. 419, 80th Cong., 1st sess.) is an interim report which inventories possible projects throughout the basin.

As has been noted, the Secretary has recently declared in his interim report that until the water rights of the basin States are determined he cannot perform his statutory duty to prepare a comprehensive plan.

To enable the Secretary to carry out his functions under the Boulder Canyon Project Act correctly and promptly, the United States should seek the adjudication provided in the pending resolutions.

VII. Jurisdiction

A. The Supreme Court has jurisdiction of traditional chancery remedies

As a part of its exclusive original jurisdiction over controversies between States, the Court takes jurisdiction of the traditional chancery remedies. For example, in the second case of *Arizona* v. *California* (292 U. S. 341), which was a bill to perpetuate testimony, Mr. Justice Brandeis, for a unanimous Court, held (p. 347):

> "First: No bill to perpetuate testimony has heretofore been filed in this Court, but no reason appears why such a bill may not be entertained in aid of litigation pending in this Court or to be begun here. Bills to perpetuate testimony have been known as an independent branch of equity jurisdiction before the adoption of the Constitution."

B. Interpleader and bills in nature of interpleader are traditional chancery remedies

Interpleader is aptly described in 48 C. J. S. 38:

> "Interpleader is an ancient and well-established equitable remedy, which was in existence before the enactment of interpleader statutes, and which is maintainable independently of statute under general equity jurisdiction."

Interpleader is distinguished from a bill in the nature of interpleader in that in the former the plaintiff disclaims any interest to the fund or thing in controversy, whereas in the latter he does not necessarily do so. A proceeding in the nature of interpleader is described in 48 C. J. S. 42:

> "A bill in the nature of a bill of interpleader is distinguished from a bill of interpleader proper, as discussed supra sections 2–4, in that there are grounds of equitable jurisdiction other than the mere right to compel defend-

ants to interplead, and complainant may seek some affirmative equitable relief. In other words, although personal interest deprives complainant of a right to a strict bill of interpleader, as considered infra section 16, it does not defeat the right to a bill in the nature of interpleader, and where there are two or more claimants to the fund or property, complainant may have recourse to the bill to ascertain and establish his own rights, even though, at the same time, he seeks to defeat all of the claims against himself * * *.

"Ordinarily, a bill in the nature of a bill of interpleader and a bill of interpleader, aside from the distinction as to the interest of plaintiff, are governed by the same general principles."

Thus in the important case of *Texas* v. *Florida* (306 U. S. 398), the Supreme Court held that it had jurisdiction of a bill in the nature of interpleader among States under its exclusive original jurisdiction. The case arose by reason of the claims of four States to impose death taxes on the same estate. The Court says at page 405:

"Before the Constitution was adopted a familiar basis for the exercise of the extraordinary powers of courts of equity was the avoidance of the risk of loss ensuing from the demands and separate suit of rival claimants to the same debt or legal duty."

The Court further says (p. 406):

"The peculiarity of the strict bill of interpleader was that the plaintiff asserted no interest in the debt or fund, the amount of which he placed at the disposal of the Court and asked that the rival claimants be required to settle in the equity suit the ownership of the claim among themselves. But as the sole ground for equitable relief is the danger of injury because of the risk of multiple suits when the liability is single" (citing cases), "and as plaintiffs who are not mere stakeholders may be exposed to that risk, equity extended its jurisdiction to such cases by the bill in the nature of interpleader. The essential of the bill in the nature of interpleader is that it calls upon the Court to exercise its jurisdiction to guard against the risks of loss from the prosecution in independent suits of rival claims where the plaintiff himself claims an interest in the property or fund which is subjected to the risk."

The Court holds at pages 407–408:

"When, by appropriate procedure, a court possessing equity powers is in such circumstances asked to prevent the loss which might otherwise result from the independent prosecution of rival but mutually exclusive claims, a justiciable issue is presented for adjudication which, because it is a recognized subject of the equity procedure which we have inherited from England, is a 'case' or 'controversy' within the meaning of the constitutional provision; and when the case is one prosecuted between States, which are the rival claimants, and the risk of loss is shown to be real and substantial, the case is within the original jurisdiction of this Court conferred by the judiciary article."

The Court concludes (p. 411):

"We think that the special master's finding of jeopardy is sustained; that a justiciable 'case' between the States is presented; and that a cause of action cognizable in equity is alleged and proved. The fact that no relief by way of injunction is sought or is recommended by the special master does not militate against this conclusion. While in most causes in equity the principal relief sought is that afforded by injunction, there are others in which the irreparable injury which is the indispensable basis for the exercise of equity powers is prevented by a mere adjudication of rights which is binding on the parties. This has long been the settled practice of this Court in cases of boundary disputes between States" (citing cases). "In the case of bills of peace, bills of interpleader and bills in the nature of interpleader, the gist of the relief sought is the avoidance of the burden of unnecessary litigation or the risk of loss by the establishment of multiple liability when only a single obligation is owing. These risks are avoided by adjudication in a single litigation binding on the parties."

It is settled that the Supreme Court has original jurisdiction of a bill in the nature of interpleader maintained by one State against other States. It is also established that the Court has original jurisdiction of a case brought by the United States against a State or States, which jurisdiction is in all respects similar to that of the jurisdiction in interstate cases and controversies (*U. S. v. Texas*, 143 U. S. 621). No reason appears, therefore, why the Court does not have jurisdiction of a bill in the nature of interpleader brought by the United States against a State or States.

C. UNITED STATES IS STAKEHOLDER OF FUND OF WATER IN LAKE MEAD

The United States has in its physical possession and is administering through the Secretary of the Interior a large and constantly replenished fund of water contained in the reservoir, Lake Mead, impounded by Hoover Dam. That the magnitude of this store of water may be grasped, it may be noted that the capacity of the reservoir, 32,500,000 acre-feet, is equivalent to over 75,000 gallons of water for each of the 140,000,000 people in the United States. It is provided in section 6 of the Boulder Canyon Project Act:

> "The title to said dam, reservoir, plant, and incidental works shall forever remain in the United States, and the United States shall, until otherwise provided by Congress, control, manage, and operate the same, * * *."

By section 5 of the act, as heretofore shown, the Secretary of the Interior is authorized to contract for the storage of water in the reservoir and for the delivery thereof to such points on the river and on the All-American Canal as may be agreed upon, for irrigation and domestic uses, etc. The same section provides:

> "No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated."

Thus, the Secretary of the Interior is charged with the duty of (1) operating the dam, and (2) making contracts for the delivery of water from Lake Mead, in accordance with the act. His contractees, to whom he will deliver water by the operation of the gates at the dam, are the only persons who may be entitled to use the stored water. The Secretary has made, as heretofore shown, contracts for use of water stored in Lake Mead in each of the States of Arizona, California, and Nevada. As shown by the Secretary's memorandum on signing the most recent of these contracts (the Arizona contract), the Secretary did not attempt in making that contract to decide the issues between California and Arizona as to the interpretation of the disputed documents, but expressly indicated that those issues were reserved for future judicial determination.

The States of California and Arizona are now making inconsistent and conflicting demands upon the Secretary for water stored in Lake Mead. Specifically, Arizona is asking the Secretary to approve S. 1175, which would entail delivery of over a million acre-feet of water from Lake Mead. California asks him not to do so. The Secretary, acting for the United States is, therefore, in the position of a stakeholder upon whom cross-demands are made for the same quantities of the property held by him. His dilemma is shown by his report to congressional committees on S. 1175.

The resolutions now pending in Congress call for the commencement of a suit or action in the nature of interpleader, rather than a strict interpleader. This course is taken in recognition of whatever interests the United States may assert in the subject matter, including, of course, its paramount rights and authority under the commerce clause of the Constitution over navigation and flood control and its obligations under the treaty clause, as to the Mexican supply. In view of these and other possible Federal interests in the subject matter, it is not conceived that strict interpleader would be an appropriate remedy.

The proposal in the resolutions that the United States commence the action and require the States to interplead is designed to put the States in as fair and equal a position as possible with respect to burden of proof and otherwise. Since each State, upon interpleading, would be both cross-complainant and cross-defendant none of them would in this respect have any superiority of position. Further, since the United States would control the litigation, unnecessary delays, which the parties might consider to be to their advantage, could be minimized.

VIII. CONCLUSION

It has been shown that there has existed for the last generation between Arizona and California a controversy over a water supply of vast economic importance to the States. This controversy is of a character which, were the States independent sovereigns, would likely lead to war. The States have on innumerable occasions devoted their efforts to a disposal of the controversy by the negotiation of a compact. These efforts have failed, not because of lack of willingness or sincerity in the negotiations, but because the water supply of the lower basin is so limited that it cannot serve the economic aspirations of both States, and neither can voluntarily sacrifice its claims to the point necessary to consummate a compromise.

The controversy depends upon the interpretation of a series of documents, statutory and contractual in character. The issues, of which three major points

have been analyzed herein, being issues regarding interpretation of documents, are legal in nature and determinable by the Court within a reasonable time without the necessity of factual evidence.

The United States is a necessary party to any adjudication. It is in manifold ways concerned with the development of the lower basin of the Colorado River, of which it has taken charge. In addition the United States is specifically and directly concerned with the use of water of the Colorado River in connection with its constitutional functions respecting navigation and flood control, treaty obligations, development of public lands, and of Indian lands. The United States is further chargeable with a high degree of responsibility for the sound and prudent investment of the funds of its taxpayers in public works for utilization of water. The Secretary of the Interior has publicly stated that the existing uncertainty as to division of the waters of the lower basin among the States precludes him from approving the authorization of projects, and even from formulating the comprehensive plan of development which Congress required him in section 15 of the Project Act to formulate.

The litigation proposed by the pending resolutions is within the original jurisdiction of the Supreme Court.

The considerations above summarized lead to the conclusion that it is to the interest of the United States, as well as the States in the lower basin, that the water rights of the States of the lower basin of the Colorado River, be determined by such a suit as is proposed in the pending resolutions.

Dated February 18, 1948.

ALAN BIBLE,
Attorney General of Nevada.
FRED N. HOWSER,
Attorney General of California.
ARVIN B. SHAW, Jr.,
Assistant Attorney General of California.

APPENDIX A

STATE OF CALIFORNIA, GOVERNOR'S OFFICE,
Sacramento 14, March 3, 1947.

Hon. SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz., and
Hon. VAIL N. PITTMAN,
Governor of Nevada, Carson City, Nev.

MY DEAR GOVERNORS: We have just completed our review of the comprehensive plan for the Colorado River system as presented by the Bureau of Reclamation, and I am more than ever impressed by the staggering size and complexity of the proposal.

It is quite apparent, and it is admitted in the comprehensive plan, that the 134 projects inventoried will, if constructed, use more water than is available in the river system. This fact will undoubtedly emphasize the differences of opinion concerning the water to be made available to each State. It is therefore of the utmost importance to the lower basin States that we reconcile our differences as soon as possible.

The negotiations of the past have failed to bring about agreement between Arizona and California but I am of the opinion that there must be some fair basis upon which their respective rights can be determined. The only methods that occur to me are: (1) Negotiation of a compact; (2) arbitration; and (3) judicial determination.

I would therefore like to suggest that we three governors of the affected States endeavor first to enter into a compact which will resolve our differences and finally determine our respective rights.

In the event you believe for any reason that this cannot be done, I suggest that we submit all our differences to arbitration, agreeing to be bound by the results thereof.

If this is not feasible, I propose that we join in requesting Congress to authorize a suit to determine our rights in the Supreme Court of the United States, which suit could, if agreeable to the States, be submitted on an agreed statement of facts.

I believe that either method could produce the desired results. If you agree with me, I suggest that the three of us meet at some time and place mutually agreeable for the purpose of further exploring the subject. If we can place our

three States in a position to maintain a common front in urging the speedy and orderly development of the Colorado River system, we will have rendered a great service to our people.

Hoping that I may have your reaction to this proposal and with best wishes, I am,

Sincerely,

EARL WARREN, *Governor.*

APPENDIX B

STATE OF NEVADA, EXECUTIVE CHAMBER,
Carson City, March 6, 1947.

Hon. EARL WARREN,
Governor of California, Sacramento, Calif.

DEAR GOVERNOR WARREN: Replying to your letter of March 3, 1947, will say that I fully agree with you as to the necessity of the three lower Colorado River Basin States reconciling their different views regarding division of the water allotted to them under the provisions of the Colorado River compact, and for maintaining a strong unified front for the proper development of the great system. The report of the Bureau of Reclamation on the Colorado River is an inventory of all possible projects, and while of much value, it does not advocate the construction of projects beyond the limit of available water, but if the States do not reach an agreement, such a chaotic condition might develop.

All through the administration of Governor Carville in Nevada, sincere efforts were made by Nevada to bring California and Arizona to an agreement on the tri-State compact authorized under section 4 (a) of the Boulder Canyon Project Act, for division of the downstream water. Nevada's interest was to make secure her small allotment of 300,000 acre-feet, together with an appropriate share of the surplus water, however that surplus might be divided between California and Arizona. Neither Arizona nor California took exception to Nevada's position, so in effect, we were only trying to bring Arizona and California to an agreement.

A great number of meetings were held, the three States being represented by the Colorado River Commission of Arizona, the Colorado River Board of California, and the Colorado River Commission of Nevada, with Governor Carville or his representative usually presiding. Nothing was accomplished by these conferences. At last Nevada discontinued negotiations and contracted directly with the Bureau of Reclamation for 300,000 acre-feet of water from Lake Mead storage, as water was urgently needed for the basic magnesium project.

Our experience leads us to an opinion that California and Arizona will be unable to negotiate a compact, and may be unwilling to agree on terms of arbitration. Nevada has spent much time and money in efforts to bring the tri-State compact into being, completely without results.

I am in accord with your thought that the three States, in the absence of other agreement, should join in requesting Congress to authorize a suit in the Supreme Court of the United States to determine our respective rights, and suggest that a method of presentation before the Court be agreed upon between Arizona and California, with which agreement Nevada will concur.

My kindest personal regards.

Sincerely yours,

VAIL PITTMAN, *Governor.*

APPENDIX C

EXECUTIVE OFFICE, STATE HOUSE,
Phoenix, Ariz., March 12, 1947.

Hon. EARL WARREN,
Governor, State of California, Sacramento, Calif.

MY DEAR GOVERNOR WARREN: I have your letter of March 3, addressed to Gov. Vail Pittman and myself, concerning the report of the Bureau of Reclamation on the development of the water resources of the Colorado River Basin.

I presume from your letter that you have completed and sent to the Bureau your comments on the above-mentioned report. I, too, have furnished the Bureau with my comments and am enclosing a copy to you herewith. It will be appreciated if you will furnish me with a copy of your report.

Ever since I have been Governor of Arizona I have endeavored to cooperate with all other States in the Colorado River Basin in all matters of common interest. Arizona has at all times been represented on the committee of fourteen and sixteen, whose name has now been changed to the Colorado River Basin States committee. Arizona is now represented on the Colorado River Basin States committee, which committee as presently constituted and as heretofore constituted, has been very helpful in all matters affecting the interests of the respective States in the Colorado River. Arizona is now cooperating in plans for the utilization of Colorado River water in the respective States within the allocation of water available to them.

I will be pleased to meet you, or with you and Governor Pittman, or with the Governors of other interested States, to discuss all matters of common interest to our respective States.

All seven of the Colorado River Basin States, Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, five of which States are still represented on the Colorado River Basin States committee, are parties to the Colorado River compact, which apportions the water of the Colorado River system as between the upper basin and the lower basin and to Mexico. The compact contains provisions which make utilization of water over and above the apportionment made by the compact of interest to all of the States of the basin.

Portions of Utah and New Mexico are in the lower basin, and are entitled to share in the apportionment made to the lower basin and in the use of any available water which is unapportioned by the Colorado River compact.

California, in consideration of the passage by the Congress of the Boulder Canyon Project Act and as a condition precedent to the taking effect of that act and the construction of Boulder Dam, Imperial Dam, and the All-American Canal, by chapter 16, California Statutes 1929, entered into a statutory agreement with the United States and for the benefit of each of the Colorado River Basin States, irrevocably and unconditionally limiting California's claim to water of the Colorado River to 4,400,000 acre-feet per annum of the apportioned water, plus not more than half of the water unapportioned by the Colorado River compact. The quantity of surplus water, that is, water unapportioned by the compact, varies from year to year and is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona recognizes the right of California to use the quantity of water to which California, by the statutory agreement, is forever limited.

Arizona recognizes the right of Nevada to use 300,000 acre-feet of apportioned water per annum, plus one-twenty-fifth of available unapportioned water, subject to further apportionment of the unapportioned water by agreement between the compact States after 1963.

Arizona has a contract with the United States for delivery for use in Arizona from the main stream of the Colorado River, subject to its availability for use in Arizona, under the Colorado River compact and the Boulder Canyon Project Act, of so much water as is necessary to permit the beneficial consumptive use in Arizona of main stream water to a maximum of 2,800,000 acre-feet of the apportioned water, plus one-half of the available surplus, less such part of the one-twenty-fifth thereof as Nevada may use, the quantity of which surplus, of course, varies from year to year, and which surplus is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Nevada is entitled, and I am sure that Nevada does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Arizona is entitled.

It therefore appears that California and Nevada are now in a position to join Arizona in urging the speedy consideration and passage of S. 433 now pending in the United States Senate and H. R. 1598, its companion bill, now pending in the House of Representatives, which are authorization bills to authorize the construction of the central Arizona project, and H. R. 1597, which is an authorization bill to relocate the boundaries of the Gila project heretofore authorized.

I am certain that the passage of these bills and the construction of the works which they seek to authorize, will be of great and incalculable benefit, not only to Arizona, but to California and Nevada and to the United States as a whole.

They are vitally necessary to the welfare and to the economy of the whole southwest region. They do not in any way interfere with the full use in California and in Nevada of the water to which California and Nevada are respectively entitled.

If either California or Nevada is interested in the promotion and construction of projects for the utilization of water to which they are respectively entitled,

I would like to know it in order that I may render such aid as seems appropriate.

It is difficult for me to understand what, if anything further, need be done to place either California or Nevada or Arizona in position to support the utilization in our respective States of our respective shares of the water of the Colorado River, which shares have already been determined by the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, the water delivery contracts of the California agencies, the Nevada water delivery contracts, and the Arizona water delivery contract.

However, I will be glad to meet and discuss with you and the Governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences and if it should develop that anything further is necessary, we can consider the proper course to pursue.

During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other Governors of the basin States as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly.

With all good wishes, I am

Sincerely,

SIDNEY P. OSBORN,
Governor.

Senator MCFARLAND. I have a few questions that I would like to ask Mr. Ely at this time, if I may, and then some time later in the hearing I might want to ask him some more questions.

Senator O'MAHONEY. If you will wait for just a moment, I want him to answer the question that I asked.

Mr. ELY. Senator O'Mahoney, your question was asked about the effect on the upper basin States of Arizona's present theory as compared to our theory.

Senator O'MAHONEY. I wanted you to state more explicitly your view of that, as suggested in the statement that you made just before the termination of your prepared presentation.

Mr. ELY. If I may give you a rather extended answer, I should like to do it to try to make myself clear.

We have endeavored here to trace the reversal by Arizona of her earlier position on four points, the first being the quantity of consumptive uses chargeable on the Gila River, second, whether the 1,000,000 acre-feet of III (*b*) water is apportioned or surplus, third, as to whether the uses on the Gila are chargeable under article III (*a*) or III (*b*) and, fourth, the status of the 75,000,000 acre-feet guaranteed by the upper basin under article III (*d*) of the compact.

Now, with respect to the question of whether the uses on the Gila River, as elsewhere under the compact, should be measured by actual consumption—that is, by measuring the diversions and the return flow, or by depletion measured at the mouth of the river; that is, by ignoring any measurement of diversion and measuring the flow out of the Gila only—we have said that the consumptive use theory is supported by the history of these various documents, and that the depletion theory is not.

As to the effect of these reversals of position on the upper basin States and upon California: Arizona now says that the 75,000,000 acre-feet delivered by the upper basin under article III (*d*) of the compact, at Lee Ferry, is identical with the water apportioned by article III (*a*) of the compact to the lower basin.

It is stated also that the 1,000,000 additional acre-feet referred to in article III (*b*) is not found in the main stream at all, but is all found in the Gila, and that under her depletion theory Arizona is chargeable only with uses on the Gila amounting to about 1¼ million acre-feet, anyhow. This accounts for all of the water flowing in the lower basin, unless the upper basin sends us more. In that case, where is there any surplus under Arizona's definition?

There being no surplus by Arizona's theory in the lower basin, where is the water for Mexico to come from? Article III (c) of the compact says that the water for Mexico shall be satisfied first out of surplus, and if the surplus is inadequate, then the two basins shall share the deficiency equally, the upper basin in such event to add its share of that deficiency to the 75,000,000 acre-feet guaranteed under article III (d).

If Arizona should be held correct, in a decade of drought like 1931 to 1940 the 75,000,000 acre-feet guaranteed by the upper basin under article III (d) would have to be increased by one-half of the amount of the Mexican burden, or 1,500,000 acre-feet per year.

Actually, it would be substantially worse than that, because the guaranty to Mexico is measured at the border, whereas the upper basin, in order to make it possible for one-half of 1,500,000 to arrive at the border would obviously have to deliver a considerable excess over that at Lee Ferry. But in any event, over the 10-year period of the drought we are assuming, like that of 1931 to 1940, coming after full development in the upper basin, the guaranty during that 10-year period would not be 75,000,000 feet, but something like 82.5 million acre-feet as a minimum; for the reason that upon Arizona's theory the surplus accountable under the compact in the lower basin is virtually written off.

But under California's theory the uses under the compact being measured as consumptive uses, diversions less returns to the river, even in a decade like 1931 to 1940, by our accounting, the 75,000,000 acre-feet which the upper basin would deliver under its guaranty at Lee Ferry would be so much "wet water," including water of all categories, and it is not identifiable with the waters apportioned to the lower basin by article III (a).

By our theory, that 75,000,000 acre-feet does contain substantial quantities of water over and above the water apportioned to the lower basin by article III (a). Under our theory, the upper basin would not be called upon to add to the 75,000,000 acre-feet guaranty, water for Mexico, or at the worst it would be called upon to add less than it would be called upon to provide under Arizona's theory. The whole purpose of Arizona's argument upon these four points is to reduce the accounting for surplus in the lower basin, by writing down the uses on the Gila River to a figure less than the actual consumptive use.

Now, the result of forcing the upper basin, by sustaining the depletion theory, to increase its 75,000,000 acre-feet guaranty in a decade of drought is very well pointed out by a paragraph which I would like to quote from a preliminary report written in 1944 by the Bureau of Reclamation, which was intended for a comprehensive report on the Colorado River, but which for some reason did not appear in the final printed report, House Document 419.

The truth of what the Bureau has to say here is self-evident. It said:

> If a dry decade like that of 1931–40 should occur, the average annual stream depletion above Lee Ferry would be 2,440,000 acre-feet, provided that all projects now under construction and authorized were completed and in operation. Depletions from potential projects, amounting to 1,845,000 acre-feet for irrigation within the upper basin, 1,792,000 acre-feet for export diversions to areas within the States of the upper basin, and 831,000 acre-feet for evaporation from power and hold-over reservoirs, would bring the ultimate stream depletion to 6,908,000 acre-feet. Although this is less than the 7,500,000 acre-feet allocated to the upper basin by the Colorado compact, actually, it is more than would have been available. The average annual flow at Lee Ferry, in the 1931–40 period, had no upstream diversions been made, would have been 12,234,000 acre-feet. After deducting from this the 7,500,000 acre-feet allocated to the lower basin, only 4,734,000 acre-feet would have remained for the upper basin. Full upper-basin depletion of 6,908,000 acre-feet could have been made therefore only if at the beginning of the decade the upper basin had hold-over storage sufficient to permit releases of 2,174,000 acre-feet annually throughout the 10-year period.

That is to say, 21,740,000 acre-feet of storage at the beginning of the drought period of 1931–40. That drought is now extended for several years more. It is obviously impossible to guess with accuracy the incidence of the drought and have all your reservoirs full, ready to meet the drought. If, in addition to the consequences spelled out in that quotation, the upper basin should be required to release during the same drought water equivalent to one-half of the Mexican burden, because the 75,000,000 release guaranteed under III (d) should be held on Arizona's theory to be identical with the 7.5 million per year apportioned to the lower basin, hence to include no surplus for Mexico, then you would be required to add seven or eight million more to storage to prepare for the drought, fortuitously guessing the beginning of the drought. Consequently, we say that for the upper basin to accept Arizona's new depletion theory may have consequences to those States that are as catastrophic as to California.

With respect to California, the result is very easily spelled out. Under Arizona's theory, we would not, of course, get the 5,802,000 acre-feet that the comprehensive report, House Document 419, says could be used by feasible California projects. We would not get the 5,613,000 acre-feet that State Engineer George W. Malone, now Senator from Nevada, reported could be included in feasible California projects, when the Project Act was under consideration. We would not get the 5,485,000 acre-feet that Arizona conceded in the third Supreme Court case. We do not claim any of those figures, but we do claim the 5,362,000 acre-feet covered by our contracts.

On Arizona's theory we would not get that. As a matter of fact, under Arizona's depletion theory we would not get the 4,400,000 acre-feet that she says she concedes to us. The testimony of their witnesses in the hearings on the Gila project in the House made it clear that we would get 3,869,000 acre-feet on their theory. That is something less than we had in fact put to use out of the flow of the river prior to the construction of Hoover Dam. The construction of that dam, on Arizona's theory, would add substantially no stored water for California. The metropolitan water district aqueduct, built at a cost of $200,000,000, would be substantially without water, because its priority under California law as set up and recognized in the California water contracts is necessarily junior to the older appropriations of the agricultural areas, which aggregate 3,850,000 acre-feet.

Senator McFARLAND. While we are on that subject, I will take that first, Mr. Ely.

Mr. Ely, the compact allocates 7,500,000 acre-feet per annum to the upper basin States; does it not?

Mr. ELY. Yes; it apportions that in perpetuity.

Senator McFARLAND. Now, if the term "consumptive use" is construed to be that which California contends, that Wyoming, Colorado, and Utah are chargeable with the water which they divert on the tributaries, regardless of the amount that would have reached the stream, then it does affect them very materially; does it not?

Mr. ELY. The diversions minus the return flow in the upper basin, which is our contention as to how consumptive use is measured, our engineers tell me does not differ very much in result to the upper basin States from measuring the charge against them under the depletion theory; that is to say, by measuring the flow at certain lower points on the river before and after irrigation developments are made.

Senator McFARLAND. Regardless of what your engineers tell you, that construction would materially affect each State in the amount of water that might be allocated to it for consumptive use; would it not?

Mr. ELY. I do not quite follow your question, sir.

Senator McFARLAND. Well, as to the amount you reduce the main flow of the river, each State is just as much interested in that theory as Arizona, except California, is it not? California has no tributary and contributes not one drop of water to the Colorado River.

Mr. ELY. I think that we are talking about two different things.

Senator McFARLAND. I will try to make it plain. What is your main tributary in Wyoming?

Senator O'MAHONEY. It is the Green River in Wyoming.

Senator McFARLAND. If on the Green River, Mr. Ely, there is diverted, we would say, 1,000,000 acre-feet of water and none of that water reached the Colorado, then under your theory Wyoming would be chargeable with the full 1,000,000 acre-feet, regardless of whether it would have reached the main stream or not.

Mr. ELY. How could it not have reached the main stream, Senator?

Senator McFARLAND. You do not contend for one minute, do you, that every drop of water that flows in a tributary would reach the main stream if it were not diverted?

Mr. ELY. No, we claim that the consumptive uses are diversions where made minus return flow where made——

Senator McFARLAND. And Wyoming would be chargeable with the amount of water, according to your theory, which you would place on Arizona, with the amount of water that fell in that watershed regardless of whether it would have reached the main stream of the Colorado or not.

Mr. ELY. No, sir; Wyoming would be chargeable just as California is chargeable, and as we think Arizona is chargeable, by the diversions made by her various projects minus the return flow.

Senator McFARLAND. You cannot put California in because she has no tributaries, and contributes nothing to the river.

Mr. ELY. It is identically the same rule that follows as to all of the States.

Senator McFARLAND. And so the other States are materially interested in the construction of the term "consumptive use"?

Mr. ELY. Yes. Of course, they wrote that into their compact.

Senator MCFARLAND. And if the Green River, when it entered into the Colorado, its depletion or ordinarily the amount that flows into the river—its virgin flow—if it were 500,000 acre-feet per year and the amount that fell in the watershed was 1,000,000 acre-feet, Wyoming would be charged with 1,000,000 acre-feet according to your theory, regardless of whether it would have reached the river or not?

Mr. ELY. Not at all, sir.

Senator MCFARLAND. No?

Mr. ELY. It would be chargeable by the amount actually diverted by her projects and used and consumed; that is, by the amount diverted minus the amount returned to the stream.

Senator MCFARLAND. Regardless of whether it would have reached the main stream or not?

Mr. ELY. Yes.

Senator MCFARLAND. Then Wyoming is just as much interested in this construction of California, which is peculiarly beneficial to California because you have no tributaries, and because you contribute nothing to the river, as is Arizona.

Mr. ELY. No, sir, for the reason that if our engineers are correct, the results of the two theories, as applied to Wyoming, are of minor difference. As applied to the Gila or applied to California, or applied to any other user of the lower basin, it is of tremendous significance because of the different effects of climate and evaporation, and so on.

Senator MCFARLAND. But it would be applicable to the Upper Basin States.

Mr. ELY. The same rule should apply to all seven States. If one rule applies to Arizona, the same rule should apply to California; and if one rule applies to California, the same rule should apply to Arizona.

Senator MCFARLAND. It could not apply to California.

Mr. ELY. The statute says so; diversions minus returns to the river.

Senator MCFARLAND. The rule in regard to the tributaries could not apply to California because she has none.

Mr. ELY. The rule in every State is the same, Senator; you cannot charge us on one basis and your own State on another.

Senator MCFARLAND. Well, we are talking about tributaries, and it does not apply to you because you have no tributary.

Mr. ELY. The Colorado River is defined.

Senator MCFARLAND. Have you any tributaries?

Mr. ELY. The Colorado River is defined in the compact as including its tributaries, and it is all one system treated alike, and the compact draws no distinction between the main stream and the tributaries, either in the matter of how consumptive uses will be charged or any other way.

Senator MCFARLAND. I do not care to argue with you, but each State is interested, regardless of whether you say it is small or great, in the construction of the term "consumptive use," as to whether it means the amount that she depletes the main stream of the river or whether it is in accordance with your construction.

Mr. ELY. I think that is correct, and each State is particularly interested in any change of definition which we contend is now meant by Arizona.

Senator McFARLAND. So this question could not be settled, if litigation were had; it could not be decided without affecting all of the States in the basin.

Mr. ELY. The other States, to go to that point, Senator, might very well desire to intervene in the action we propose. That is their matter. They might wish to file briefs amicus curiae, but the specific issues we propose are issues between California and Arizona, involving the differences between them on how the diversions on the Gila should be measured.

Senator McFARLAND. I think that you have answered the question that I had—clearly that they are affected.

Now, in regard to Mr. Carpenter's testimony, or Mr. Carpenter's statement, where it says, on page 19, "the measure of the apportionment is the matter of water loss to the river." That means the main stream, does it not?

Mr. ELY. No, sir; the river is defined in the Colorado River compact. To dispel any doubt upon that, may I read the definition on that?

Senator McFARLAND. I am not talking about what the compact states; I am talking about what Mr. Carpenter had in mind, Mr. Ely. I am not talking about what the compact states is the Colorado River system; I am talking about what Mr. Carpenter had in mind.

Mr. ELY. He necessarily had in mind the compact which he had participated in writing 3 weeks before.

Senator McFARLAND. That is a question which we will go into later.

Mr. ELY. May I read into the record the definitions in article 2?

Senator McFARLAND. Read it in. You have read it in before.

Mr. ELY (reading):

> The term "Colorado River system" means that portion of the Colorado River and its tributaries within the United States of America.

Senator McFARLAND. But he does not say the Colorado River system; he says the river.

Mr. ELY. He uses "river" in the same sense as the compact does.

Senator McFARLAND. That is your conclusion, and I do not want to argue it with you; but we will introduce our testimony, and I just wanted to flag that part, because that is very much in our favor.

Now, on page 1, where you state that California has at stake the existing projects built and operating in which over $500,000,000 have been invested, California did not for one moment contend that there should be litigation before she was allowed to use this water, did she?

Mr. ELY. No, sir; because the uses were within the amounts of the Limitation Act.

Senator McFARLAND. That is what we contend now. Now, let us go to your next proposition on page 9, where you say, or refer to the Arizona engineers stating that the virgin flow of the Gila River would be 1,275,000 acre-feet. There is no material dispute as to that, is there?

Mr. ELY. Various figures have been used, from 1,077,000 up to, roughly, 1,300,000.

Senator McFARLAND. But that figure is substantially the same as the Reclamation Service contends, is it not?

Mr. ELY. No, Senator; I am glad that you mentioned that point. The figure of, roughly, 1,100,000 acre-feet which is used so often as the supposed flow of the Gila River into the Colorado in a state of nature was explained during the debates on the Boulder Canyon Project Act

by Senator Hayden as having been furnished to him by the Director of the Geological Survey, and represented the average of the flow for the period beginning in 1903 up to about 1920.

During that period, tremendous areas had gone into cultivation on the Gila and Salt River, virtually all of the Salt River project was under irrigation, and the Roosevelt Dam had been built, and if that figure is correct for the flow of that period, 1903–20, then obviously it is not the original virgin flow for the Gila into the Colorado River.

What that flow might have been is a matter of conjecture, as to any particular year that we may be confronted with now.

Senator MCFARLAND. The California witnesses in the hearing on the bill 1175 substantiated that figure pretty well, did they not?

Mr. ELY. If I may say so, we are speaking of different things. You are speaking of an average. We feel that under the compact averages are not the basis by which the charges are measured. Under the compact the annual uses are treated, and we say that to apply your depletion theory accurately to any given year of operation under the compact, whether 1948 or 1949, or whatever, it would be necessary to make some approximation of what would have flowed out of the Gila River into the Colorado in a state of nature in a water year like that.

That is without the intervention of any irrigation or man-made developments.

We deny that even on the depletion theory, there is any validity for taking averages, that each year under the specific terms of the compact it must be dealt with on an annual basis.

Senator MCFARLAND. The United States Geological Survey Bureau estimates that at 1,207,000 acre-feet, do they not?

Mr. ELY. As an average.

Senator MCFARLAND. If you have any definitions, we would be glad to have them presented. You never have presented them thus far, and if you have any definitions we would like to have them. Those are the figures, I think, that the chairman will remember, which the California witnesses agreed to during the S. 1175 hearings.

Now, Mr. Ely, you are familiar with what is known as the Hoover Dam contracts, are you not; the book which was published by Mr. Raymond Lyman Wilbur, Secretary of the Interior, and Northcutt Ely, assistant to the Secretary?

Mr. ELY. I am one of the authors.

Senator MCFARLAND. I would refer you to page 375 of that book. You, as an Assistant Secretary, participated in the preparation of a contract which was submitted to Arizona while you were Assistant Secretary; did you not?

Mr. ELY. My title was Assistant to the Secretary, but I did participate in the preparation of such a contract; yes.

Senator MCFARLAND. I call your attention to the top of page 375, or maybe we had better read all of that, beginning on page 374 of the contract which was submitted:

From storage available in the reservoir created by Hoover Dam, the United States will deliver under this contract each year at points of diversion hereinafter referred to on the Colorado River so much available water as may be necessary to enable the beneficial consumptive use in Arizona of not to exceed 2,800,000 acre-feet annually by all diversions effected from the Colorado River and its tributaries below Lee Ferry (but in addition to all uses of water from the Gila River and its tributaries), subject to the following provisions.

Now, at that time you construed the compact and the Boulder Canyon Act and the California Limitations Act as giving—or the Interior Department construed the Colorado River compact, the Boulder Canyon Project Act and the California Irrigation Act as giving Arizona the right to 2,800,000 acre-feet of water and the Gila River water; did you not?

Mr. ELY. Not 2,800,000 acre-feet of III (a) water, because if you will read on, that will make that clear.

Senator MCFARLAND. I think that that is clear. We have some water, without question, we are using some water other than the Gila water; I am willing to read it on.

Mr. ELY. I would like to read paragraph 10 (c):

It is recognized by the parties hereto that differences of opinion may exist between the State of Arizona and other contractors as to what part of the water contracted for by each falls within article III (a) of the Colorado River compact, what part under article III (b) thereof, what part is surplus water under said compact, what part is unaffected by said compact, and what part is affected by various provisions of section 4 (a) of the Boulder Canyon Project Act. Accordingly, while the United States undertakes to supply, from the regulated discharge of Hoover Dam, waters in quantities stated by this contract as well as contracts heretofore or hereafter made pursuant to regulations of April 23, 1930, amended September 28, 1931, this contract is without prejudice to relative claims of priorities as between the State of Arizona and other contractors with the United States, and shall not otherwise impair any contract heretofore authorized by said regulations.

The regulations cited are those under which the California water contract were made.

Senator MCFARLAND. We never have contended that we have not diverted some water from the main stream of the Colorado River other than the Gila, but the fact remains—and this speaks for itself, Mr. Chairman, and I care not to argue it in detail—that at that time the Interior Department offered a contract to the State of Arizona for 2,800,000 acre-feet in addition to all of the water of the Gila River, and I ask at this time that this offered contract be printed in the record in full.

Senator MILLIKIN. It will be done.

(The contract is as follows:)

BOULDER CANYON PROJECT

REGULATIONS: DELIVERY OF WATER IN ARIZONA

I

These regulations are promulgated to further the peaceful enjoyment by Arizona, California, and Nevada of the waters of the Colorado River. They state the form of a water-delivery contract which the United States will enter into with the State of Arizona, subject to certain conditions stated below.

II

The authorization for a contract provided in these regulations shall remain in force only for so long a period as the State of Arizona, and claimants to the use of water therein, do not interfere, by litigation or otherwise, with diversions of other holders, present and future, of water contracts with the United States and with diversion works constructed by or for them or the United States. In the event of such interference these regulations and the authorization herein contained shall thereupon become void.

III

The United States, subject to the foregoing conditions, will enter into a contract with the State of Arizona in substantially the form stated in exhibit A, hereto annexed as a part hereof.

RAY LYMAN WILBUR,
Secretary of the Interior.

FEBRUARY 7, 1933.

EXHIBIT A

UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION—BOULDER CANYON PROJECT

CONTRACT FOR DELIVERY OF WATER

This contract, made this — day of ———, 1933, pursuant to the act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof and supplemental thereto, all of which acts are commonly known and referred to as the reclamation law, and particularly pursuant to the act of Congress approved December 21, 1928 (45 Stat. 1057), designated the Boulder Canyon project act, between the United States of America, hereinafter referred to as the United States, acting for this purpose by Ray Lyman Wilbur, Secretary of the Interior, hereinafter styled the Secretary, and the State of Arizona, acting for this purpose by ———.

Witnesseth:

EXPLANATORY RECITALS

Whereas, pursuant to the direction of the said Boulder Canyon project act, the Secretary has caused to be let a contract for the construction of a dam, known and referred to hereinafter as Hoover Dam, in the main stream of the Colorado River at Black Canyon and said dam will create at the date of completion a storage reservoir having a maximum water-surface elevation at about one thousand two hundred and twenty-nine (1,229) feet above sea level (U. S. Geological Survey datum) and a capacity of about 30,500,000 acre-feet; and

3. Whereas, the Secretary is required by the said Boulder Canyon project act to use said dam and the reservoir created thereby first, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic use, and the satisfaction of perfected rights in pursuance of Article VIII, of the Colorado River compact, and third, for power; and

4. Whereas, said Boulder Canyon project act authorizes the Secretary, under such general regulations as he may prescribe, to contract for the storage of water in said reservoir and for delivery thereof at such points on the river as may be agreed upon, and provides further, that no person shall have or be entitled to have the use for any purpose of the water stored as aforesaid, except by contract made as therein stated; and

5. Whereas, the Secretary has heretofore promulgated regulations dated April 23, 1930, amended September 28, 1931, authorizing the execution of certain other water delivery contracts, and it is the desire of the parties to this agreement to contract for the storage of waters for use on lands in Arizona, and to assure the peaceful and uninterrupted performance of all such contracts, including this; and

6. Whereas, by direction of Congress, water has been reserved and appropriated for lands within the Colorado River Indian Reservation in Arizona, unaffected by the Colorado River compace by virtue of Article VII thereof; and

7. Whereas, the United States and the State of Arizona, contemplating the future construction of other reclamation projects and desiring to avoid claims by foreign water users to waters stored by Hoover Dam to the detriment of said projects, desire to provide for the storage of certain quantities of water for the benefit of lands in Arizona without prejudice to whatever right the parties may have hereafter to contract as to additional quantities of water; and

8. Whereas, the diversion works in the Colorado River contemplated for certain of the contractors under said regulations of April 23, 1930, amended September 28, 1931, particularly the proposed Imperial Dam, and the proposed dam for the Metropolitan Water District of Southern California near Parker, will be of service for delivery of waters covered by this contract, and it is essential

to the purpose of this contract that the building of said works, when approved by the United States, shall not be interfered with;

9. Now, therefore, in consideration of the mutual covenants herein contained, the parties hereto agree as follows, to wit:

DELIVERY OF WATER BY THE UNITED STATES

10. From storage available in the reservoir created by Hoover Dam, the United States will deliver under this contract each year at points of diversion hereinafter referred to on the Colorado River so much available water as may be necessary to enable the beneficial consumptive use in Arizona of not to exceed two million, eight hundred thousand (2,800,000) acre-feet annually by all diversions effected from the Colorado River and its tributaries below Lee Ferry (but in addition to all uses from waters of the Gila River and its tributaries), subject to the following provisions:

(a) This contract is without prejudice to the claims of the State of Arizona and States in the Upper Basin as to their respective rights in and to waters of the Colorado River, and relates only to water physically available for delivery in the Lower Basin under the terms hereof.

(b) The United States does not undertake by this contract to deliver water above Hoover Dam; but the obligation to deliver water below Hoover Dam shall be diminished to the extent that consumptive uses in Arizona effected by diversions from the Colorado River and its tributaries below Lee Ferry diminish the inflow to the reservoir.

(c) It is recognized by the parties hereto that difference of opinion may exist between the State of Arizona and other contractors as to what part of the water contracted for by each falls within Article III (a) of the Colorado River compact, what part within Article III (b) thereof, what part is surplus water under said compact, what part is unaffected by said compact, and what part is affected by various provisions of section 4 (a) of the Boulder Canyon project act. Accordingly, while the United States undertakes to supply, from the regulated discharge of Hoover Dam, waters in quantities stated by this contract as well as contracts heretofore or hereafter made pursuant to regulations of April 23, 1930, amended September 28, 1931, this contract is without prejudice to relative claims of priorities as between the State of Arizona and other contractors with the United States, and shall not otherwise impair any contract heretofore authorized by said regulations.

(d) This contract is without prejudice to the right of the United States to make further disposition of water available for use in the Lower Colorado River Basin not heretofore allocated by regulations nor herein contracted for, or to the respective claims of the States of Arizona, New Mexico, Utah, California, and Nevada, and of Mexico, to such additional water.

(e) The water provided for in this contract shall be delivered continuously, so far as reasonable diligence will permit, to the extent such water is beneficially used for irrigation and domestic purposes. The United States reserves the right to discontinue or temporarily reduce the amount of water to be delivered for the purpose of investigation, inspection, maintenance, repairs, replacement or installation of equipment and/or machinery at Hoover Dam, but so far as feasible will give reasonable notice in advance of such temporary discontinuance or reduction. The United States, its officers, agents and employees shall not be liable for damages when for any reason whatsoever suspensions or reductions in delivery of water occur.

SUBORDINATE CONTRACTS AUTHORIZED

11. Deliveries of water subject to the terms of this contract may be made for lands within any Indian Reservation in Arizona, and to any individual, irrigation district, corporation, or any political subdivision of the State or Arizona, which may qualify under the Reclamation Law or other Federal statute. Contracts with such water users for such deliveries, subject to the terms of this contract, may be made by the Secretary in his discretion. Such contracts and deliveries made thereunder shall be deemed as made in discharge, pro tanto, of the obligations of this contract.

POINTS OF DIVERSION: MEASUREMENT OF WATER

12. The water to be delivered under this contract shall be measured at the points of diversion, or elsewhere as the Secretary may direct, by measuring and controlling devices or automatic gages approved by the Secretary, which, however, shall be furnished, installed, and maintained by the States of Arizona, or

the users of water. Said measuring and controlling devices or automatic gages shall be subject to the inspection of the United States, whose authorized representatives may at all times have access to them, and any deficiencies or inaccuracies found shall be promptly corrected. The United States shall be under no obligation to deliver any water which may be diverted at points at which such devices are not maintained, but in the event that diversions are made at points where measuring and controlling devices or automatic gages are not maintained in accordance with this contract, the Secretary shall estimate the quantity of the diversions and his determination shall be final.

RECORDS OF WATER DELIVERIES

13. The State of Arizona shall cause to be made by water users or otherwise monthly reports on forms to be supplied by the United States of all water diverted from the Colorado River. Such reports shall be made by the fifth day of the month immediately succeeding the month in which the water is delivered.

NO CHARGES FOR DELIVERY OF WATER

14. No charge shall be made for water or for the use, storage, or delivery of water for irrigation, or water for potable purposes, in Arizona.

NO ARIZONA DIVERSIONS TO BE MADE EXCEPT PURSUANT HERETO: DIVERSIONS IN OTHER STATES

15. It is the object of this contract to assure to those (including the State of Arizona) who have contracted or may hereafter contract with the United States for delivery of waters stored by Hoover Dam, the quiet performance of their respective contracts. It is accordingly agreed that:

(a) The State of Arizona will hereafter grant no permits for, nor otherwise authorize, uses of the waters of the Colorado River and its tributaries (other than the Gila River and its tributaries), except subject to the terms of this contract.

(b) The State of Arizona and its permittees will not interfere, by litigation or otherwise, with deliveries of water under any contract between the United States and water users in the State of Nevada, or any contract made pursuant to regulations dated April 23, 1930, amended September 28, 1931, nor with the construction of diversion works by or for the holder thereof, nor with diversions or other uses affected by such works; unless and until such contractor interferes, by litigation or otherwise, with the enjoyment of this contract. But in the event of such interference by any other such contractor with the enjoyment of this contract, the State may, at its election, either rely on this contract, or assert all rights which the State or any water user therein would have had against such party if this contract had not been made.

(c) Breach by the State of any of the provisions of this article shall entitle the United States at its option to cancel this contract and any or all subordinate contracts referred to in Article XI.

DURATION OF CONTRACT

16. This contract is for permanent service, subject to the provisions contained in the preceding article.

DISPUTES AND DISAGREEMENTS

17. Whenever a controversy arises out of this contract, and if the parties hereto then agree to submit the matter to arbitration, the State of Arizona shall name one arbitrator and the Secretary shall name one arbitrator, and the two arbitrators thus chosen shall elect three other arbitrators within fifteen (15) days after their first meeting, but in the event of their failure to name all or any of the three arbitrators within thirty (30) days after their first meeting, such arbitrators, not so elected, shall be named by the Senior Judge of the United States Circuit Court of Appeals for the Ninth Circuit. The decision of any three of the five shall be a valid and binding award.

RULES AND REGULATIONS

18. The Secretary may prescribe and enforce rules and regulations governing the delivery and diversion of water hereunder, but such rules and regulations

shall be promulgated, modified, revised, and/or extended from time to time only after notice to the State of Arizona and opportunity for it to be heard.

19. As required by section 13 (c) of the Boulder Canyon Project Act, this contract is made upon the express condition and with the express understanding that all rights hereunder shall be subject to and controlled by the Colorado River compact, being the compact or agreement 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," as approved by the Boulder Canyon Project Act, but is without prejudice to the respective contentions of the State of Arizona and of the parties to said compact, as to interpretation thereof.

EFFECTIVE DATE OF CONTRACT

20. This contract shall take effect when an act of the legislature of Arizona ratifying it shall have become effective, but within two years of the date hereof.

INTEREST IN CONTRACT NOT TRANSFERABLE

21. No interest in or under this contract shall be transferable by either party without the written consent of the other.

MEMBER OF CONGRESS CLAUSE

22. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom. Nothing, however, herein contained shall be considered to extend to this contract if made with a corporation for its general benefit.

In witness whereof the parties hereto have caused this contract to be executed the day and year first above written.

THE UNITED STATES OF AMERICA,
By RAY LYMAN WILBUR,
Secretary of the Interior.
THE STATE OF ARIZONA,
By ——— ———.

Approved as to form, February 7, 1933:
RAY LYMAN WILBUR,
Secretary of the Interior.

Attest:
The foregoing contract was ratified by act of the legislature of Arizona which became effective ———, 193—, true copy of which is hereto annexed.

———— ————,
Secretary of the State of Arizona.

Senator MCFARLAND. I may have a few questions after we reconvene, but I do not care to ask any more at this time.

Senator MILLIKIN. Do you have anything further, Senator O'Mahoney?

Senator O'MAHONEY. This is a proposal to send this case to the Supreme Court for adjudication. In the event it were adjudicated against the contention of the State of California, what in your judgment would be the result? Would that decision be accepted by the State of California?

Mr. ELY. That is a bridge that would have to be crossed later, or a portion of the stream that would have to be crossed when we reach it. If I would give my own idea, these great water controversies have to be put at rest, and the Supreme Court is the final arbiter.

If the Supreme Court meets and fairly answers these questions as we hope it would, I would expect that California and Arizona both would be bound by it and proceed accordingly.

Senator O'MAHONEY. We have a recent illustration of failure to accede to the decision of the Supreme Court, namely, the tidelands case.

Mr. ELY. I do not purport to be an expert on tidelands, Senator O'Mahoney.

Senator O'MAHONEY. I asked this question because I have a very definite feeling that after so prolonged a dispute, which unquestionably has the effect of retarding the development of the whole basin, we ought to have an end to the controversy. My question, therefore, is intended to elicit your opinion as to whether we could not better solve this controversy in the Congress which, after all, makes the law which the Supreme Court only will interpret.

Mr. ELY. In our opinion, Senator, this question is not susceptible of a legislative determination; it is a judicial question. When the Boulder Canyon Project Act was under debate, and this very proposal was under discussion, it was made clear that it is beyond any constitutional power of Congress by legislation to interfere with the rights involved. Even if it were within its constitutional power, it should be beyond the discretionary exercise of that power by Congress to attempt to modify existing agreements between the States.

Senator O'MAHONEY. Do I understand you to mean, then, that the vested rights of the States already perfected under the Boulder Canyon Act and the compact are such that the elements of controversy cannot be determined without changing those rights?

Mr. ELY. We feel only a judicial determination can dispose of these questions, inasmuch as vested rights are involved.

Senator MILLIKIN. Would that require bringing into the case everyone that has a claim; every individual who has a claim to a water right?

Mr. ELY. No, sir; we say that the questions that together make up the 2,000,000 or more acre-feet in controversy, are three in number, that they are all questions of legislative construction and of contract law, and that it is unnecessary to convert this case into a water-adjudication suit of the kind that was in court for interminable years in *Colorado* v. *Kansas* or *Wyoming* v. *Colorado*. These are all questions of law or questions of contract.

Senator O'MAHONEY. Does California now have apportioned to it or under contract all of the water which it can claim, or are there certain waters not yet apportioned or allocated?

Mr. ELY. I am glad to have an opportunity to answer that question. I have seen the same inquiry represented, only with innuendo and in a less kindly way than your inquiry, in various newspapers, that California by some device seeks to break down the Limitation Act, the Project Act, and the compact, to expand her uses of water.

That is not correct. California has by the terms of the compact and by the Project Act and the Limitation Act and these contracts established what we regard to be the quantities which the compact and the Congress intended we should have. That is 5,362,000 acre-feet.

Senator O'MAHONEY. We are dealing here with a water system, a river system which has a flow inadequate to meet all of the demands that are being made upon it. Now, from the point of view of California, how much water have you actually put to use under contract?

Mr. ELY. I should prefer to place that figure in the record, if I may. It is available, I am sure, but I do not have it accurately in mind.

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Senator O'MAHONEY. Let me ask you to put it in the record in this form: A, the amount of water to which you feel California is entitled, and B, the amount of water which has already been apportioned and utilized by existing systems, and C, the amount of additional water which California desires to use, and D, the source from which that additional water will come; and finally, whether or not the sum of all of these is, in the opinion of California, within the existing law and limitation.

(See p. 447 for answers by Mr. Ely.)

Mr. ELY. I can answer all of those except as to the specific figure of present use that you asked.

Taking the last portion first: The figure of 5,362,000 acre-feet, which is the aggregate of our contracts, we say is within the quantity to which we are entitled to take by the terms of the compact, and Limitation Act.

Second, that all of the projects to use that entire quantity are, in fact, constructed, some not yet to their ultimate capacity, but with the essential and critical portions of the projects built.

For example, the metropolitan water-district aqueduct from Parker Dam or thereabouts to the Coastal Plain has been constructed at a cost of about $200,000,000. It is not yet using by any means its full capacity, which will be at the rate of 1,212,000 acre-feet per year. Obviously, that is so, because every great metropolitan aqueduct, whether for Los Angeles or New York or Denver or Philadelphia, or wherever is necessarily built to take care of the needs of the population for a half century or more in advance, if it were built to meet only today's needs, it would be a foolish investment.

The quantity being taken through the metropolitan aqueduct to the Coastal Plain is as yet only a fraction of the quantity ultimately to be taken. But the portion that is going through the metropolitan aqueduct now to San Diego, for example, is the difference between survival and catastrophe to San Diego.

As the years go on, the service to other portions of the Coastal Plain will be expanded, all in accordance with the original plan.

Mr. SHAW. May I ask for a clarification of your third question: The word "additional," if I sensed it correctly, was meant to be additional over present uses; is that correct?

Senator O'MAHONEY. I have handed the reporter my copy of the questions.

Mr. SHAW. The question was, C, What additional quantity of water, and if I sensed it correctly, you meant additional over present uses.

Senator O'MAHONEY. That is right.

Mr. SHAW. I wanted to clarify that.

Mr. ELY. That is the difference between 5,362,000 acre-feet, which is the maximum, and the present uses, whatever they may be shown by the figure that will be submitted.

Senator O'MAHONEY. I would like to know whether in your opinion there is any difference in the amount of water which California claims in the Limitation Act, and under the compact, and the Boulder Canyon Act. You can answer those when you prepare those answers.

Mr. ELY. I can give you an answer now, and supply it in more detail later.

Had there been no Limitation Act at all and had Congress simply ratified the Colorado River compact as a seven-State document and had all seven States ratified to make that possible, then by the terms of the compact there would have been no direct allocation to any one

of the seven States; the compact is a division between the upper basin as such and the lower basin as such. Within each basin the States were left to internal adjustment.

In the absence of any interim adjustment in the lower basin by agreement and without any limitation act, California, Arizona, and Nevada would each have established their rights to the use of the stream by appropriation, presumably. It was assumed when the compact was written, that in the absence of a lower-basin compact, priorities in time, regardless of State lines, would establish priorities in right.

Arizona and California would some day in the absence of an agreement have adjudicated their conflicting appropriative claims in such portion of the waters of the lower basin as were limited to them by the Colorado River compact.

In that event, without a limitation act, I think it is fair to say that California's uses would have ultimately been beyond 5,362,000 acre-feet. That figure was arrived at on the demand of the Interior Department that the State of California set up some order of priorities on the various projects that were competing for water contracts, and in arriving at that figure a number of projects were excluded, and thrown completely out, which by comparison with the projects that have been brought on in more recent years would have been eminently feasible.

One is the Chucawalla Valley, an area for which Congress authorized by act of Congress a diversion in 1911, but which never had been developed. It was thrown bodily out of California's claims when this figure of 5,362,000 was set up by contract.

Had nature run its course, and x years in the future, had the projects then capable of development under then feasibility standards presented their claims before the court, it is quite possible that California's ultimate claim would have been far beyond that which we now present.

Senator O'MAHONEY. I would like to have you answer these other two questions: whether the maximum amount of water which California claims under the Limitation Act and the other documents comes to it through III (a) or III (a) plus III (b), and whether the claim it asserts under III (b) is a contingent claim or a firm claim in perpetuity.

Mr. ELY. I shall give an answer to that now. Maybe I would like to add a memorandum in more detail, but I can give you an answer now, in general.

We say that waters as referred to in article III (b) of the compact, are waters which are not apportioned. The lower basin acquires no right in perpetuity to them without putting them to use, unlike the waters apportioned by article III (a). But this million acre-feet is a part of the unapportioned waters, the excess or surplus, that the lower basin as such is permitted by the compact to use, and by such use to acquire; not by grant or whatever word you wish to use as regards the water under III (a), but by use or appropriation. It is a right of appropriation which must be recognized to the extent exercised if there is a further apportionment of the river, after 1963.

It is my personal view that if the lower basin, by the date of any such apportionment, whenever it may come—and it has to be a unanimous agreement on a new apportionment, or there is none—if the lower basin has not by that time put to full use the 1,000,000 acre-feet

of water referred to in article III (b), that that falls into and becomes a part of the surplus otherwise available for consideration.

I feel that the Limitation Act, which limited California to 4,400,000 acre-feet of the waters apportioned by article III (a), plus one-half of the excess, was not intended to exclude California from participation in any part of the waters over and above the 7½ million referred to in III (a); that it was intended, to the contrary, to permit California to use one-half of the waters over and above the 7½ million referred to in article III (a), whenever they might be, or however they might be classified.

Senator O'MAHONEY. What was the date when you feel that this water in III (b) becomes surplus?

Mr. ELY. If I am correct, the waters referred to in article III (b) were a part of the excess or surplus within the meaning used in section 4 (a) of the Project Act, from the beginning; that when, as, and if there is a further apportionment after 1963, the date stated in the compact, if that 1,000,000 acre-feet has not been put to use it is not apportioned in perpetuity like the III (a) water, but then becomes available for reapportionment as surplus.

Senator O'MAHONEY. Let us assume that the flow of the river in any particular year, and over a 10-year period, is sufficient only to supply the III (a) water; what is the status of any demands that you may set up, by way of improvements, to III (b) water?

Mr. ELY. By "river," we of course mean the river system, and if I may take it that you mean that, too, that there is available in the lower basin of the Colorado River in any one year 7½ million acre-feet only or, to put it more accurately, the consumptive uses in the lower basin aggregate 7½ million only, then under the terms of the Limitation Act, on the assumption that there is no water available for any additional consumptive use, the Limitation Act would limit us to 4,400,000 acre-feet, because that is the amount of III (a) to which we are limited.

But I sensed in your question, Senator, by reference to a 10-year average, perhaps the assumption that in the question you are identifying the 7½ million apportioned by article III (a) to the lower basin, with the 75 million guaranteed during the 10-year period by the upper basin under article III (d). We say there is no such identity; that the one did not come into being because it happened to be 10 times the other, but the III (d) guaranty is entirely irrespective of and independent of the apportionment made in article III (a), and that the compact would be completely operative as an apportionment of consumptive uses without that guaranty.

Senator O'MAHONEY. I am trying to determine what your opinion is as to whether or not any claims you may set up by way of constructive works to the use of III (b) waters, become firm by reason of that, irrespective of III (a), and constitute, therefore, a firm demand and not a contingent demand upon the river?

Mr. ELY. If, by the time the second apportionment is made, whenever it may come, the lower basin has in fact established uses of 8½ million acre-feet, namely, 7½ million reserved in perpetuity and an additional use of 1 million, then by that time the 8½ million will have become protected and must be respected in any second apportionment, if that answers your question.

Senator O'MAHONEY. Yes, it does.

Mr. ELY. That 1,000,000 acre-feet we get, not in perpetuity without use, but we get it by using it.

Senator O'MAHONEY. In your opinion, whenever use is established for III (b) water, then it becomes a firm demand upon the river system?

Mr. ELY. Yes, sir.

May I complete one answer? We regard the compact as being fully operative as an apportionment of consumptive use under article III (a) and as a permission to the lower basin to increase its consumptive use, under article III (b), without any reference to the guaranty in article III (d) at all. We say that if III (d) were not there, and if the lower basin had not insisted upon it as a guaranty or reassurance of the availability of that quantity of water, the compact would be a fully operative and fully understandable document.

As to article III (d), it is superimposed as an added guaranty and an added reassurance to the lower basin, as Judge Sloan said, and has no relation to the apportionment in article III (a) or to the water as to which we may acquire a right by use under article III (b).

Senator MILLIKIN. Mr. Ely, assume that we litigated the stream, and assume that we kept the issues confined in the way that you have suggested, I am wondering whether that would not necessarily, no matter what the outcome, impinge somewhat on private rights; and, if so, how could we prevent another round of litigation?

Mr. ELY. I think that is a fair question, and certainly it is entitled to exploration. I would assume from the decision of the Supreme Court in the Hinderlider case that the States appearing in the case as parties to a compact are bound and their water users are bound by the terms of the compact, even though that may interfere with a right otherwise asserted, and that consequently when the Supreme Court, by its decree, adjudicates what the compact means, the effect is as though that meaning had been written into the compact agreed to by the States, and that the States do have power by compact to "impinge on," to use your word, the rights of their citizens.

Senator MCFARLAND. I just wanted to ask a couple of brief questions, if I might.

Mr. Ely, in order to make the issues just a little plainer, if in truth and fact III (b) water is apportioned water, you would admit that California has no claim to it, would you not?

Mr. ELY. No, sir. That leads into rather an involved situation, Senator. We feel the evaporation losses chargeable to either basin must be taken into account in determining the residue available for any user or any State, and we would feel that the evaporation losses in the lower basin are properly offset against the III (b) water in any event. That viewpoint has been developed here much better than I could but that, in general, is the answer.

Senator MCFARLAND. Even though it is apportioned water just the same as III (a), you do contend that under the California Limitation Act you have a right to the use of it?

Mr. ELY. No, sir; we would say that the evaporation losses must be offset against it.

Senator MCFARLAND. Other than that, would you concede that you have no right to it?

Mr. ELY. I am not sure that I can give you a categorical answer to that. I am dealing with a question that was developed earlier, Senator, it is an engineering point developed in some detail earlier, and they can develop it again if you wish.

Senator MCFARLAND. On these cases, all brought by Arizona before Arizona entered into the compact, at no time did California try to help Arizona get this controversy settled by litigation, did they?

Mr. ELY. No, sir. We felt it would be grossly unfair to have Arizona, a stranger to the compact, obtain an adjudication of its meaning and then if they liked it come in and if they did not like it stay out.

Senator MCFARLAND. On page 4 of your statement, you referred to the conference of the Governors and water commissioners of the seven basin States. There was an arbitration by the Governors, was there not?

Mr. ELY. No, sir, we do not so state.

Senator MCFARLAND. You do not state that, but I am asking you if that is a fact?

Mr. ELY. No, sir. The fact is that the Governors of the seven States met in 1927 at Denver in an effort to resolve these differences, and at the end of protracted sessions, involving several weeks, they came forward with certain proposals. Those proposals were submitted to both Arizona and California, and they were specifically rejected by both States.

If the record is desired as to Arizona's response with respect to them, I can give it. We say quite candidly California rejected them. Arizona at various times has said that she accepted them. I can prove, if anybody desires it for the record, that she likewise presented a counterproposal which the four Governors of the upper basin States declined to accept.

The upper basin Governors' proposal was submitted to the Senate Committee on Irrigation and Reclamation, which had it under consideration, and that committee likewise rejected the proposal. It formulated its own formula, and during the course of subsequent debate on the Senate floor there emerged section 4 (a).

Senator MCFARLAND. We will submit, Mr. Chairman, evidence to show that these proposals were rejected by California, this arbitration, and that the proposals would have given Arizona more water than she is now contending for. There is no need to go into that in detail.

Senator MILLIKIN. Arizona will have opportunity to answer and also to rebut.

Senator MCFARLAND. I just wanted to state that I did not concede for one moment the answer as given. I am only trying to shorten the hearings.

Senator MILLIKIN. I believe we can take it for granted that nothing is admitted by any adverse party in the course of any of these examinations.

Senator MCFARLAND. I hope so.

Mr. ELY. Mr. Chairman, Congressman Fletcher has entered the room and asked whether he might be heard.

Senator MILLIKIN. We will be very glad to hear the Congressman.

STATEMENT OF HON. CHARLES K. FLETCHER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Representative FLETCHER. I should like to inform the committee briefly why I strongly favor the legislation now before it, Senate Joint Resolution 145, which is identical to H. R. 4097 which I introduced in the House of Representatives.

This Colorado River controversy between California and Arizona rests on the fact that the two States interpret differently a series of documents and statutes known as "The Law of the River." It has become apparent that no settlement can be reached through the channels of negotiation or arbitration. However, I cannot stress too strongly that a final solution must be found. It is vital to industry, to agriculture, and to our national defense. In other words, it is vital to progress, development, and security.

Mr. G. E. Arnold, director of the water department, city of San Diego, will state the case for San Diego city.

San Diego County, which I represent, as well as the city of San Diego, has approximately 600,000 population, of which over 500,000 are dependent today on Colorado River water.

The San Diego County Water Authority has Colorado River water facilities now in use which were developed with the expectation that our water rights were valid. The validity of our water rights are now questioned, and we wish to have the Supreme Court settle the water rights question on a fair and friendly basis.

Permit me to call the committee's attention to a resolution recently adopted at the national convention of the United States Chamber of Commerce, which indicates the thinking of men in all walks of life. It is very short, and I shall read it:

> Where two or more States on the same stream system are involved, the allocation between the States of the benefits arising from the river flow, including benefits from consumptive use of the water, should be made by interstate compacts through the application of the doctrine of "equitable apportionment"; or, failing that, by arbitration, or by original litigation in the Supreme Court of the United States.

That has been, and is, California's course. For more than 25 years, California has sought an agreement with Arizona. Every effort has failed. Now my State has proposed that the issues be placed before the Supreme Court for impartial adjudication.

We have searched for a possible alternative, and have found none. There remains, in my belief, only one course by which this unfortunate and most serious controversy can be settled. And that is by the litigation for which this legislation provides.

Senator O'MAHONEY. May I ask you, Mr. Congressman, in your opinion, aside from the question between California and Arizona, if this matter were submitted to the Supreme Court could it be settled there without in any way affecting the rights of the upper basin as set forth in the compact?

Representative FLETCHER. I am not an attorney, Senator, but as a layman I would say that it could be settled without in any way affecting the rights of the others.

Senator O'MAHONEY. You introduced, Mr. Congressman, the companion bill, the one before this committee in the House?

Representative FLETCHER. Upon the advice and with the prompting of the attorneys in San Diego City and the San Diego County Water Authority, who are far more familiar with it than I.

Senator O'MAHONEY. When you introduced the bill, did you have any reason to believe, from anything that was said by those engineers or by anybody else, that reference of the controversy to the Supreme Court would in any way affect or was intended in any way to affect the upper basin States?

Representative FLETCHER. No, you are raising the question the first time, to my knowledge, and I am glad that you mentioned that. Mr. Arnold, the director of the water department of the city of San Diego, is here, and will testify later, and I wish that you could ask that question of him because I believe it should be clarified.

Senator O'MAHONEY. Thank you very much.

Senator MILLIKIN. We will recess until 2:45.

(Whereupon, at 1:20 p.m., the hearing was recessed until 2:45 p. m., of the same day.)

AFTERNOON SESSION

(The committee reconvened at 2:45 p. m., upon the expiration of the noon recess.)

Senator MILLIKIN. The meeting will come to order.

Mr. Ely, who is the next witness?

Mr. ELY. The next witness for California, Mr. Chairman, will be Mr. James H. Howard, general counsel of the Metropolitan Water District of Southern California.

Senator MILLIKIN. Will you come forward, Mr. Howard?

STATEMENT OF JAMES H. HOWARD, GENERAL COUNSEL, METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, LOS ANGELES, CALIF.

Mr. HOWARD. Mr. Chairman, I am James H. Howard, general counsel, Metropolitan Water District of Southern California.

I may say, Mr. Chairman, that statements were prepared more or less independently by Mr. Ely and myself, and I find that to a degree we have covered the same fields, but in a slightly different way. I will make every effort to shorten the hearing by omitting quotes, and one thing and another, that have already been amply presented.

The Metropolitan Water District of Southern California is a public and municipal corporation, composed of the areas of a group of municipal corporations including the cities of Los Angeles and San Diego, and 20 cities somewhat less in area and population. The District has a rapidly increasing population now approximating 3,200,000, and an assessed valuation of $3,500,000,000.

The district was incorporated in 1928 for the purpose of importing water from the Colorado River for use, primarily municipal and domestic, on the coastal plain of Southern California. To that end, and pursuant to the Boulder Canyon Project Act, the district has entered into contracts with the United States for the delivery of 1,212,000 acre-feet of water per annum from storage at Lake Mead, and has constructed and is operating a $200,000,000 aqueduct and

series of pumps lifting the water 1,617 feet and conveying it 300 miles across the desert to the Pacific coast.

The district's right in the waters of the river is junior to long-established agricultural rights in the Imperial, Palo Verde, and Coachella Valleys. Prior to the execution of water-delivery contracts with California agencies, the then Secretary of the Interior insisted upon a priority agreement establishing the respective positions of the contractors in the scale of priorities. Such an agreement was made under the auspices of the State engineer. The senior agricultural priorities aggregate 3,850,000 acre-feet.

The agreed priority of the district being junior to the agricultural priorities, the district is in an exposed position in the event that the water of the Colorado River available for use in the State of California is inadequate to fully serve the outstanding California contracts.

For that reason the district is vitally interested in securing a determination of the rights of the State of California in the waters of the river and joins forces with the representatives of the State of California in making this presentation.

Getting into the subject of the administrative treatment of the water-rights controversy: The case in support of Senate Joint Resolution 145 appears in sharp focus in the report of the Interior Department on pending legislation to authorize the central Arizona project, S. 1175 and companion bills in the House, H. R. 1598 and 1616. In fact, it is hardly necesasry to look beyond that report to see the occasion for, and the need of, a judicial determination of water rights on the river. However, before commenting more specifically on that report, it is interesting to review some of the background material.

Under date of July 24, 1947, the Secretary of the Interior sent to the Speaker of the House of Representatives his interim report dated July 19, 1947, transmitting his departmental report on the Colorado River dated June 7, 1946, now generally referred to as the "comprehensive report."

Pursuant to section 1 of the Flood Control Act of 1944, the departmental report had been transmitted to the seven affected States and to the Secretary of War, for comment. It was also submitted to the Bureau of the Budget. Comments were made in due course, and the departmental report, together with the interim report containing the comments, was presented to the Congress and appears in House Document No. 419, Eightieth Congress, second session.

In his letter presenting the department report on the Secretary of the Interior, the Commissioner of Reclamation, under date of June 6, 1946, made the following comment, on page 3:

> There is not enough water available in the Colorado River system for full expansion of existing and authorized projects and for development of all potential projects outlined in the report, including those possibilities for exporting water to adjacent watersheds. The formulation of an ultimate plan of river development, therefore, will require selection from among the possibilities for expanding existing or authorized projects as well as from among the potential new projects. Before such a selection of ultimate development can be made it will be necessary that, within the limits of the general allocation of water between upper basin and lower basin States set out in the Colorado River compact, the Colorado River Basin States agree on suballocations of water to the individual States.

In the report of the regional directors of regions III and IV to the Commissioner of Reclamation, which communication appears as part

of the departmental report, the following language appears, on page 13:

* * * There is no final agreement among the States of the Colorado River Basin as to the amount of Colorado River water to be allocated to individual States nor have all of the States made final allocations of water among projects within their boundaries. There is not complete agreement among the States regarding the interpretation of the compact and its associated documents—the Boulder Canyon Project Act, the California Self-Limitation Act, and the several contracts between the Secretary of the Interior and individual States or agencies within the States for the delivery of water from Lake Mead. This report makes no attempt to interpret the Colorado River compact or any other acts or contracts relating to the allocation of Colorado River water among the States and among the projects within the States.

Later, on page 13, it is said:

Before such a selection of projects can be made it will be necessary that the seven Colorado River Basin States agree upon their respective rights to deplete the water supply of the Colorado River or that the courts apportion available water among them.

The regional directors, in the paragraph entitled "Conclusions," page 21, use this language:

There is not enough water available in the Colorado River system for full expansion of the existing and authorized projects and for all potential projects outlined in the report, including the new possibilities for exporting water to adjacent watersheds. The need for a determination of the rights of the respective States to deplete the flow of the Colorado River consistent with the Colorado River compact and its associated documents, therefore, is most pressing.

The second recommendation of the directors' letter, page 12, is—

That the States of the Colorado River Basin determine their respective rights to deplete the flow of the Colorado River consistent with the Colorado River compact.

I would like to call specific attention to the comments of the Bureau of the Budget which were made in connection with the so-called comprehensive report, House Document 419, in which the budget, over the signature of James E. Webb, Director, said, as it is set forth on page 5 of the written memorandum:

* * * Acting under authority of the President's directive of July 2, 1946, I am able to advise you that there would be no objection to submission of the proposed interim report to the Congress, but that the authorization of any of the projects inventoried in your report should not be considered to be in accord with the program of the President until a determination is made of the rights of the individual States to utilize the waters of the Colorado River system.

That is the end of the quote from the Bureau of the Budget.

Throughout all of the foregoing comments it is recognized that the availability of a dependable supply of water is prerequisite to the authorization of any reclamation project in the Colorado River Basin. The same conclusion was reached by the House of Representatives Committee on Irrigation and Reclamation. In reporting on the Gila project, House Report No. 910, to accompany H. R. 1597, July 14, 1947, the committee made the following statement:

These provisions are for the sole purpose of fixing the maximum acreage of the project and shall not be construed as interpreting, affecting, or modifying any interstate compact or contract with the United States for the use of the Colorado River water or any Federal or State statute limiting or defining the right to use Colorado River water of or in any State.

It is the intent of the committee that nothing in this bill is to be construed as affecting the rights of the States of Arizona or California as to the use of the amount of water in the lower Colorado River Basin that each State is entitled

to under the existing compact, contracts, or law. The committee feels the dispute between these two States on the lower Colorado River Basin should be determined and settled by agreement between the two States or by court decision because the dispute between these two States jeopardizes and will delay the possibility of prompt development of any further projects for diversion of water from the main stream of the Colorado River in the lower Colorado River Basin.

Therefore the committee recommends that immediate settlement of this dispute by compact or arbitration be made, or that the Attorney General of the United States promptly institute an action in the United States Supreme Court against the States of the lower basin, and any other necessary parties, requiring them to assert and have determined their claims and rights to the use of the waters of the Colorado River system available for use in the lower Colorado River Basin.

The statements and reports quoted relate to the development of the river in general. No request for immediate authorization of any project was involved.

Now, however, legislation is pending which, if adopted, would authorize the central Arizona project calling for the diversion of 1,200,000 acre-feet per annum from the main stream of the Colorado—S. 1175.

In response to the request of the Senate Committee on Territorial and Insular Affairs, to which S. 1175 was referred, the Department of the Interior has prepared an elaborate report, Report on Central Arizona Project, Project Planning Report No. 3-8b, 4–2, December 1947.

The report has taken the course prescribed by the Flood Control Act of 1944 and is in the hands of the affected States and other Federal departments for comment. The report contains the report of the regional director of region III and a letter from the Commissioner of Reclamation to the Secretary of the Interior, transmitting the report of the regional director and making certain recommendations. The report was approved by the Secretary of the Interior February 5, 1948.

In his letter of transmittal to the Secretary the Commissioner of Reclamation said:

Assurance of a water supply is an extremely important element of the plan yet to be resolved.

May I parenthetically underscore the words "yet to be resolved." [Continuing:]

The showing in the report of the availability of a substantial quantity of Colorado River water for diversion to central Arizona for irrigation and other purposes is based upon the assumption that claims of the State of Arizona to this water are valid. It should be noted, however, as the regional director points out, that the State of California challenges the validity of Arizona's claims. If the contentions of California are correct, there will be no dependable water supply available from the Colorado River for this diversion.

Leaving the quote for the moment, I desire to direct particular attention to the last sentence:

If the contentions of California are correct, there will be no dependable water supply from the Colorado River for this diversion.

This statement is based upon water-supply studies extending over a long period of years, and is undoubtedly correct. The Commissioner further says:

The Bureau of Reclamation and the Department of the Interior cannot authoritatively resolve this conflict. It can be resolved only by agreement among the States, court action, or by an agency having proper jurisdiction.

No indication appears in the report as to what agency other than the Supreme Court has, or could be given, jurisdiction to settle an

interstate dispute. The report makes it clear that the decision of such issues is not within the jurisdiction of the Department of the Interior. The Congress is not vested with judicial powers to determine the conflicting claims of the States. Any administrative or legislative determination would, under our Constitution, be subject to judicial review. The controversy must, sooner or later, be settled by the judicial branch of the Government, and, the parties to the controversy being States of the Union, exclusive jurisdiction is vested in the United States Supreme Court.

As the logical result of the quoted statements, the Commissioner of Reclamation makes a conditional recommendation. He says:

> * * * conditioned upon a settlement of the water-right conflict being secured such that a water supply can be assured for the project, I recommend that the project be authorized for construction. * * *

While the Secretary finds that the central Arizona project has engineering feasibility—a conclusion which California seriously challenges—and his report has been publicized as constituting a recommendation for authorization of the project, it does not, in fact, constitute such a recommendation. He finds that water supply is an important element yet to be resolved; that if California is correct in her compact and contract interpretations, there is no such water supply; that the project is recommended for authorization only on condition that a settlement of the water-right conflict be secured assuring a water supply. It is not to be presumed that the Congress will ignore the condition attached to the recommendation. In the absence of a determination of the rights of the States, development of the lower basin is at a standstill.

The issues between Arizona and California: Representatives of the States of Arizona and California have for years endeavored to settle the water controversy by agreement, but without result. This is not to be wondered at and does not mean that the negotiators have been blind or obstinate. The fact is that there is vastly more land available for development in both Arizona and California than can possibly be supplied with waters of the Colorado River available for use in the lower basin. As the Interior Department points out, if California's contentions are correct, there is no water for diversion to central Arizona.

On the other hand, if Arizona's contentions are correct, there would be less water available for California than could have been had from the unregulated river. Prior to the construction of Hoover Dam, California water users had long-established appropriative rights exceeding in amount the water which, under Arizona's computations, would be available for use in California. Moreover, agencies of the State of California, in good faith and in reliance upon contracts with the United States, have constructed works, and have become obligated to pay vast sums of money exceeding half a billion dollars for the purpose of exercising their contract rights. Under the circumstances, neither party is in a position to yield sufficiently to reach a middle ground.

For these reasons it is my conviction that there is no possibility of settling the controversy by agreement, desirable as that course may be. That leaves the court as the only agency with power to determine the issues.

The controversy between Arizona and California relates to the interpretation of certain documents contractual in character—that is, the Colorado River compact, section 4 (a) of the Boulder Canyon Project Act, and the reciprocal California Limitation Act. The last two documents constitute an agreement or contract. While legislative in form, they are contractual in character. As legislation, the limitation act could be repealed or amended at the will of the legislature. As a contract, it is subject to the ordinary rules of contract law and should be interpreted as contracts are interpreted—that is, in such manner as to give effect to the intent of the parties.

It will not be necessary, in the proposed litigation, to determine any factual issues. Both Arizona and California use the same basic water-supply figures as determined by the United States Bureau of Reclamation and the United States Geological Survey. The differences between the States arise out of the application of the contract documents referred to, as they affect the distribution between the States, of water available for use in the lower basin.

There is no pending controversy between the upper and lower basins or between California and any State in the basin other than Arizona. The States of the upper basin need not be involved in the proposed litigation unless they see fit to participate for reasons of their own.

The negotiators of the Colorado River compact in 1922 first undertook to apportion the water to each of the seven States involved. Information on which to base such allocations was not available. The result was that the compact makes no apportionment to any State, but apportions the use of fixed quantities of water to the upper and lower basins, the division point being at Lee Ferry, a point of measurement on the river lying in Arizona a short distance below the Utah line. The upper basin consists of all territory draining to the river above Lee Ferry. The lower basin consists of all area tributary to the river below that point.

Drainage areas do not coincide with State lines. Generally speaking, the States of the upper basin are Colorado, Utah, New Mexico, and Wyoming. The States of the lower basin are Arizona, California, and Nevada.

The compact treats of the Colorado River system. By definition, the system includes all tributaries in the United States. The Gila is thus brought under the compact.

Article III (a) of the Colorado River compact apportions in perpetuity to the upper basin the beneficial consumptive use of 7½ million acre-feet per annum of water of the Colorado River system and, in like terms, apportions a similar amount to the lower basin. Article III (b) provides that—

> 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.

Article III (c) provides for the service of the then contemplated Mexican treaty, which is now, of course, in effect.

In article III (d) the States of the upper division agree not to cause the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet of water for any period of ten consecutive years reckoned in continuing progressive series. It was estimated that beyond the requirements of article III (a), (b), and (c), there would be excess and surplus water, and provision was made for the further apportionment

of such water after the year 1963, when either basin shall have attained its full beneficial consumptive use under paragraphs (a) and (b) of article III.

The compact was signed at Santa Fe, N. Mex., in 1922, by the commissioners from the seven States. However, its effectiveness depended upon ratification by the State legislatures and approval by the Congress. The Legislature of the State of Arizona declined to ratify the compact. The bill which later became the Boulder Canyon Project Act (45 Stat. 1057) had been pending before the Congress for several sessions. It contained a provision that it should become effective only when the seven States of the basin had ratified the compact, and the President of the United States had so declared. In the light of Arizona's refusal to ratify, an alternative clause was added, providing that in the event all of the seven States should not ratify within 6 months after the adoption of the act, the act would become effective when 6 of the States, including California, had ratified, and California had agreed, by act of its legislature, to limit its use of Colorado River water to—

4,400,000 acre-feet per anum of the waters apportioned to the lower basin States by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact—

and the President had so declared. During the 6-month period the Arizona State Legislature rejected the compact. California and the five States other than Arizona ratified the compact. California also adopted an act in the language required by the project act, known as the California Limitation Act (1929 Stat., p. 38). The Presidential proclamation was made. The result of the reciprocal legislation, that is, the Boulder Canyon Project Act and the California Limitation Act, is a statutory compact.

The controversy between Arizona and California relates to the interpretation of the Colorado River compact and the statutory compact; i e., the Limitation Act. Upon the construction of these depends the availability of water for projects within the State of Arizona.

Using the same water supply figures, the Arizona computation shows availability of water for diversion for the central Arizona project—that is, 1,200,000 acre-feet per annum—while the California computations show a deficit in water supply required to serve authorized and existing projects. The difference in result comes about from three fundamental differences in interpretation of the contractual documents mentioned. In general, these differences are:

(1) Whether or not, under the Limitation Act., California is entitled to participate in the use of the 1,000,000 acre-feet of water per annum referred to in article III (b) of the compact.

(2) Whether or not Arizona is to be charged with "beneficial consumptive use" of the waters of the Gila, as such use is defined in the Boulder Canyon Project Act, or is to be charged only with the amount of depletion of the main stream resulting from uses in Arizona.

(3) Whether or not the 4,400,000 acre-feet of water per annum apportioned by article III (a) of the compact, to which California is limited, is subject to reduction by reason of evaporation losses from reservoirs on the main stream.

There are other related questions of interpretation, but unless Arizona can win on all of the points mentioned, the amount of water as-

sumed to be available for diversion to central Arizona is not present in the river. As the Interior Department report says:

> If the contentions of California are correct, there will be no dependable water supply available from the Colorado River for this diversion.

It is not the purpose of this statement to convince the committee that California is right. Rather, it is our purpose to demonstrate that the controversy is of such substantial nature and so radically affects the development of the river, that it must be determined before further costly developments may properly be authorized. The points herein mentioned are more fully argued in a memorandum re Senate Joint Resolution 145, House Joint Resolutions 225, 226, 227, and 236, and H. R. 4097, authorizing suit concerning rights to water in lower basin, Colorado River, which is a part of the record here. Enough will be said now to establish the substantial and serious nature of the controversy.

It is first argued by Arizona that, under the terms of the Limitation Act, California has renounced any claim to, and excluded herself from participation in the use of, the 1,000,000 acre-feet of water referred to in article III (b) of the Colorado River compact. The argument runs that such water is "apportioned" water, although not covered by article III (a), and that, inasmuch as California limited itself to a certain amount of the water apportioned by article III (a) of the compact, "plus not more than one-half of any excess or surplus waters unapportioned by said compact," III (b) water is excluded from California's claim and is available only to Arizona. California, on the other hand, argues that the only water apportioned by the compact was that referred to in article III (a), that the additional 1,000,000 acre-feet by which the lower basin is authorized to increase its beneficial consumptive use does not constitute an apportionment, but that such water is a part of the excess or surplus, one-half of which would be available to California under the Limitation Act. If, as the word was used by the parties to the statutory compact evidenced by the Limitation Act, III (b) water is apportioned, Arizona is right. If, on the other hand, it is unapportioned, California is right.

I may say that there I am referring to diversion for use in California, and I have no reference to the possibility of evaporation losses affecting excess of surplus. The Limitation Act relates to diversion for use in California. And that is what we are talking about when we speak of use by California—actual diversion.

Arizona and her upper basin allies now assert that there is no substance to California's position; that III (b) water is apportioned water; that all California has to do is comply with the Limitation Act, as written, and all will be well. Such an assertion becomes somewhat absurd when viewed in the light of the position taken by Arizona herself in former litigation. It will be recalled that in 1930 Arizona sued in the Supreme Court to prevent the construction of Hoover Dam and avoid the effect of the Colorado River compact (*Arizona* v. *California et al.* (283 U. S. 423)). Arizona was represented by her then attorney general, K. Berry Peterson; by Dean G. Acheson, former Under Secretary of State; and Clifton Mathews, now judge of the Circuit Court of Appeals, Ninth Circuit. These able

counsel presented a petition to the Supreme Court, in which it was alleged, at paragraph XIV, subdivision 2, page 17:

> Said compact does not attempt to apportion all of the water of the Colorado River system, but attempts to apportion only 15,000,000 acre-feet thereof, and leaves unapportioned the remaining water of said system, aggregating 3,000,000 acre-feet annually.

The 15,000,000 acre-feet referred to is the aggregate of the water apportioned in article III (a) of the compact, 7,500,000 to the upper basin and 7,500,000 to the lower basin. III (b) water is treated as California now treats it; that is, as unapportioned. That such interpretation of the compact was not inadvertent but was the result of careful consideration is shown by the argument submitted to the Court in the brief filed by Arizona "in opposition to a motion to dismiss the bill of complaint." The language used might well have been written to sustain the position consistently maintained by California. The authors of the Arizona brief said, at pages 33 and 34:

> Under the compact, then, the only water of which the right to exclusive beneficial use in perpetuity may be required in the lower basin is the water apportioned to that basin. Such apportionment is limited to 7,500,000 acre-feet of water per annum by article III (a). The Colorado brief, page 40, contends that paragraph (b) of article III operates to increase this apportionment to 8,500,000 for the lower basin. This, we submit, is not the case. If it had been intended to apportion the larger amount, the compact could easily have said so. The difference in language between aparagraphs (a) and (b) is plain, and the difference in meaning is clear. Paragraph (b) does not apportion in perpetuity, as does paragraph (a), any beneficial use of water. It is very careful not to do this. It is to be read with paragraph (c) and relates solely to the method of sharing between the basins any future Mexican burden which this Government might recognize. This burden is to be satisfied first out of "surplus" waters, and surplus waters are defined, not as surplus over quantities "apportioned," but as surplus over quantities "specified in paragraphs (a) and (b)." Any deficiency remaining is to be borne equally by the two basins. Thus the lower basin, which without paragraph (b) might use water in excess of its apportionment without acquiring any exclusive right in perpetuity thereto, is enabled to retain such uses to the extent of 1,000,000 acre-feet per annum against the first incidence of the Mexican burden. Thereafter it is entitled to require the upper basin to share from its apportionment equally in the satisfaction of any deficiency. In other words, all that paragraphs (b) and (c) accomplish is to require the upper basin to reduce its apportionment in favor of Mexico before the lower basin is required to do so, the lower basin being entitled to contribute first, to the extent of 1,000,000 acre-feet, water which it may have used not to which it has no exclusive right in perpetuity—that is, water not apportioned to it. The water apportioned is that to which exclusive beneficial use in perpetuity is given in paragraph (a), less any deductions which may have to be recognized, as provided in paragraphs (b) and (c).

The Arizona counsel might well have added that article III (b) also establishes the time when the lower basin may apply for additional apportionment under article III (f). Otherwise they effectively argued California's position, that is, that III (b) does not apportion any water.

The present Arizona position constitutes a complete about face. She now asserts that the language of article III (b) of the compact constitutes an apportionment, and hence that California, by her Limitation Act, has excluded herself from participation in the use of III (b) water. In the light of the brief submitted by Arizona in 1930, it is sheer bigotry to say now that there is not enough substance to the California position to justify judicial consideration. California is certainly entitled to her day in court on the issue.

The second major point of controversy relates to the method to be used in determining "beneficial consumptive use" under the Colorado River compact. Arizona argues that, on rivers tributary to the Colorado, the correct measure is the depletion of the flow of the tributary at its point of confluence with the main stream, due to salvage and use upstream of the tributary. California measures the beneficial consumptive use by the definition set out in the Boulder Canyon Project Act in which the United States approved the Colorado River compact, i. e., by "diversions less returns to the river."

This was the definition before the California State Legislature when it ratified the compact and enacted the Limitation Act in 1929. It was also before the Arizona Legislature when, in 1944, the act purporting to ratify the compact was adopted.

The matter is of importance because the Gila River is a part of the Colorado River system. Each basin, and logically each State, should be charged with annual beneficial consumptive use for the purpose of determining when the aggregate of such uses allotted to the two basins, respectively, has been reached. All such uses are chargeable under article III (a) of the compact. The more that is charged to Arizona for use on the Gila, the less III (a) water is available to that State from the main stream, and, in turn, the excess and surplus, one-half of which is available to California under the Limitation Act, is increased.

The Gila River, in a state of nature, was a wasting stream. In the lower 100 miles of its course the bed of the river crosses a sandy desert waste involving great evaporation and transpiration losses. The Bureau of Reclamation estimate as to the average annual contribution of the Gila to the Colorado, in a state of nature, approximates 1,300,000 acre-feet.

By man-made works, water otherwise wasted is brought under control and salvaged for beneficial use in the Gila Basin. After making full allowance for certain large overdrafts which have been made within recent years, the average annual beneficial consumptive use of waters of the Gila system, measured by diversions less returns to the river, amounts to about 2,300,000 acre-feet. If Arizona succeeds in applying the depletion theory as the measure of beneficial consumptive use, she will increase her claim to III (a) water from the main stream by 1,000,000 acre-feet per annum.

Another way of posing the question is to ask whether or not the phrase "beneficial consumptive use," as it appears in the compact, includes the use of salvaged water. A very substantial part of California's use is of water salvaged by Hoover Dam. The quantity of water apportioned by the compact would not be available at all without storage and salvage of water which, in a state of nature, wasted to the sea or elsewhere. The compact contemplated a controlled river system. The apportionments relate to utilization of all water of the system, salvaged or not.

On this issue we can again turn to Arizona's allegations made in 1930 to indicate that during the period when the agreements in controversy were made, the phrase "consumptive use" was understood to mean consumptive use measured at the site; in other words, by diversions less returns to the river.

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In her petition heretofore referred to, Arizona, in describing her use of water and the effect of the compact on that State, alleged that (Arizona Petition, par. VIII, p. 8)—

> Of the appropriated water so diverted, used, and consumed in Arizona, 2,900,000 acre-feet are diverted from the Gila.

Arizona now switches her position and sets up a figure of about 1,300,000 acre-feet of Gila water as the "beneficial consumptive use." On this issue also, California is entitled to her day in court.

The third phase of the controversy relates to the treatment of evaporation losses attributable to storage on the main stream. The California Limitation Act, in terms, relates to "diversions from the river" for "use in the State of California." In Arizona's computations of water available for use in that State, the 4,400,000 acre-feet of III (a) water to which California is limited is reduced by a prorated part of main-stream reservoir evaporation losses in the lower basin, particularly at Lake Mead. In the light of the language of the Limitation Act, the 4,400,000 acre-feet is to be measured by the net diversions from the river for use in the State of California, and may not properly be burdened further by evaporation losses. Approximately 600,000 acre-feet per annum are involved in this question, which must ultimately be settled by judicial determination.

There are other points of difference. Those herein mentioned, however, present the main issues of law involved in the controversy. Each one may be resolved without resort to factual evidence. The answers are to be found in the interpretation of the documents involved.

For 15 years after adoption of the Boulder Canyon Project Act and the California Limitation Act, Arizona declined to ratify the Colorado River compact. She was not willing to rely on the interpretation she now urges. Numerous conferences were held in an attempt to work out the difficulties. In 1944 the Arizona Legislature adopted an act purporting to ratify the compact. The effect of this act has not been determined.

At the same time, the Secretary of the Interior made a contract with the State of Arizona which refers to the delivery of 2,800,000 acre-feet of water from Lake Mead for use in that State. The contract itself expressly negatives the idea that the Secretary considered the water so agreed to be delivered as definitely available to Arizona, legally or physically, or to be of any particular class, that is, III (a), III (b), or excess or surplus. The contract, in terms, was made without prejudice to the claims of the several States.

The controversy between the States is one of long standing. Every possible attempt has been made to settle the matter amicably. Inasmuch as the United States is a necessary party, the only way in which California can get into court on the subject is under authority of the Congress. It is urged that the Congress adopt the pending resolution, and thus provide the necessary authority to settle in the proper forum—that is, the Supreme Court of the United States—the issues involved.

Until this is accomplished, there appears to be no possibility of development of new projects on the lower Colorado River.

It must be remembered that sooner or later the clash of interests will reach the courts. We believe that this Congress will give California her day in court.

If, however, the central Arizona project should be authorized without a predetermination of water rights, adjudication will come sometime in the future. California cannot be kept out of court forever. Then, as the Commissioner of Reclamation has so tersely said:

If the contentions of California are correct, there will be no dependable water supply * * * for this diversion.

The United States Treasury would, nonetheless, have $750,000,000 to a billion dollars invested in a project with no dependable water supply.

Senator MILLIKIN. Are there questions?

Senator MCFARLAND. I would like to ask some questions.

Senator MILLIKIN. Go right ahead.

Senator MCFARLAND. Mr. Howard, what do you mean by the language on page 19, "purporting to ratify the compact?" Do you contend that Arizona did not ratify the Colorado River compact?

Mr. HOWARD. Senator, that presents a problem that, if the time permits, I would like to mention. And I may preface what I am going to say by saying that these are merely my personal views on the subject and not the official position of the State of California. I would like to present it more as a question than as giving you any dogmatic opinion with reference to it.

When you trace back over the history of the adoption of the Project Act, you will find, in section 4 (a), that the matter was set up in the alternative. Leaving out unnecessary words, it provides that—

This act shall not take effect * * * unless and until (1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact, mentioned in section 13 hereof, and the President by public proclamation shall have so declared, or—

And note the disjunctive—

(2) if said States fail to ratify the said compact within 6 months of the date of the passage of this act then, until six of said States, including the State of California, shall ratify said compact and shall consent to waive the provisions of the first paragraph of article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and shall have approved said compact without conditions, save that of such six-State approval, and the President by public proclamation shall have so declared, and further, until the State of California—

shall limit herself in the manner that has been repeatedly stated here.

You will notice the reference to the 6 months' period. During the 6 months, the Legislature of the State of Arizona definitely rejected the compact. The State of California waived the seven-State ratification requirement, and unconditionally ratified the compact and adopted an act which had a conditional provision. It was adopted in direct response to section 4 (a) of the Project Act, and opens with the words:

In the event the Colorado River compact—

identifying it—

is not approved within six months from the date of the passage of that certain act of the Congress of the United States known as the "Boulder Canyon Project Act," * * * by the legislatures of each of the seven States signatory thereto, as provided by article 11 of the said Colorado River compact, then when six of said States, including California, shall have ratified and approved said compact—

and waived the seven-State requirement, then California agrees to this limitation.

The effect of that language, both in the Project Act and in the California Limitation Act, gives me the impression, looking at it as a matter of contract law, that in the light of these two alternatives, the States were given 6 months in which to act on the compact, and the Project Act might be put into effect on one of two bases. In fact, if you read section 13 (a) of the Project Act, this position is reinforced.

The 6 months went by, during which, as I say, Arizona definitely rejected the compact. Some of the ratifications occurred earlier, but California, and, I think, Utah adopted ratification acts during that 6 months; whereupon, under date of June 25, 1929, the President issued a proclamation, in which he said this:

Pursuant to the provisions of section 3 (a) of the Boulder Canyon Project Act approved December 21, 1928 (45 Stat. 1057), it is hereby declared by public proclamation:

(a) That the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming have not ratified the Colorado River compact mentioned in section 13 (a) of said Act of December 21, 1928, within six months from the date of the passage and approval of said Act.

In other words, he said, "There is no seven-State compact."

Then he went on, in (b), and said:

That the States of California, Colorado, Nevada, New Mexico, Utah, and Wyoming have ratified said compact and have consented to waive the provisions of the first paragraph of article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and that each of the States last named has approved said compact without condition, except that of six-State approval as prescribed in section 13 (a) of said act of December 21, 1928.

(c) That the State of California has in all things met the requirements set out in the first paragraph of section 4 (a) of said act of December 21, 1928, necessary to render said act effective on six-State approval of said compact.

(d) All prescribed conditions having been fulfilled, the said Boulder Canyon Project Act approved December 21, 1928, is hereby declared to be effective this date.

Well, the result of that was to put the act into effect under the second alternative.

Senator McFARLAND. What act?

Mr. HOWARD. The Boulder Canyon Project Act—to put the Boulder Canyon Project Act into effect on the second alternative; that is, a six-State compact, plus the California Limitation Act.

Senator McFARLAND. Was there anything in there that said that Arizona could not later ratify the compact if she wanted to?

Mr. HOWARD. It presents a very odd contractual situation, Senator. If you take the Colorado River compact to be a contract—and Judge Brandeis referred to it as such in perpetuate testimony case—it should be governed by the law of contracts; that is, by the principles of offer and acceptance, intent of the parties, consideration, and all those other matters that enter into contract law.

Well, let us take it that the seven States offered to make a seven-State compact. Arizona definitely rejected that offer in 1929. And under contract law an offer rejected is an offer withdrawn. That is, dropping back to law-school parlance, if A offers to sell blank acres to B at $25,000 for 10 days, and on the second day B says, "No; I reject the offer," he could not come in and accept it on the ninth day.

Senator McFARLAND. Arizona was not the only State——

Senator MILLIKIN. Senator McFarland, I would like to have the witness go through with his conclusion on this before he is interrupted. Proceed, Mr. Howard.

Mr. HOWARD. Referring, then, to the matter of contract law, it appears to me to be distinctly questionable that Arizona could decline to act on the compact—not only decline but affimatively reject the contract—and by that device force the adoption of a limitation act. California wanted to go ahead with the project. Arizona at that time did not object to delay and wanted to block the project. I am referring now to the Boulder project.

Then, Arizona declining to ratify the compact, the State of California, wanting the project, was forced to adopt the Limitation Act; which says that in the event there be no seven-State compact within 6 months, then California agrees to be bound.

There is no evidence whatever of any intent on the part of California to be a party to a seven-State compact, plus a limitation act. The intent was to be a party to a six-State compact, plus a limitation act. And it seems rather out of line to me, just trying to look at it objectively, just as a matter of cold contract law, that Arizona would be in a position to hold off her ratification until, we will say, 6 months plus 1 day, thereby putting California in the position of throwing the limitation act into effect, and then come in after the expiration of the 6 months and adopt an act ratifying the compact and thereby cut herself in as a party to the compact, with California hung up with the Limitation Act.

Now, don't misunderstand me on this. I am not trying to suggest that California is not bound by the Limitation Act. All I am doing is giving rather briefly the line of thought that occurs to me in trying to figure out what the law of the river is.

It is very important when, looking at it as a judicial problem, whether Arizona is inside or outside the compact. From California's point of view, there may be many advantages in having Arizona a part of the compact set-up. On the other hand, if Arizona can cut herself in by a unilateral act occurring 15 years after the deal was crystallized, as a six-State compact and a limitation act, there might be a change of view over there.

Arizona, as is shown by this record, hasn't been remarkable for consistency in her approach to the problem. Another lawyer might come along a bit later and say, "Well, we came in with a certain interpretation of this Colorado River compact—our own interpretation—and it hasn't been interpreted that way. We don't like it."

If they can come in alone, they could go out alone. That is, there is no mutuality to it. And it impresses me as an unsound position.

Senator MILLIKIN. Is the question which you suggested one that will enter into this litigation if it is had?

Mr. HOWARD. I suspect it will, sir. That is, I don't see how it could be avoided. Because Arizona's status before the court, as was pointed out in that so-called equitable apportionment suit, would be very different if she were a party to the compact, than it would be if she were not.

Senator MILLIKIN. Do you concede that this is a possible case, one that might come before the court?

Mr. ELY. I do, sir; not that California necessarily would raise it in the furtherance of the three issues that we desire to present to the court, but it may very well be that before the case is concluded the court would necessarily inquire whether Arizona, assuming her to be bound for the time being, is irrevocably bound by the Colorado River compact.

Senator MILLIKIN. Are you limiting the issues that you would raise before the court to those which have been mentioned here?

Mr. ELY. Well, if we control the issues to go to the court, we would ask to have these three go.

Senator MILLIKIN. And as to any others? Would you reserve the right to raise others?

Mr. ELY. It would depend entirely upon what position the other States took.

Senator MILLIKIN. Then you are reserving the right to raise any issues in your own interest, as you should.

Mr. ELY. Yes, sir.

Senator MILLIKIN. I want to get another point clear. Does California raise any question as to whether she is bound by the compact?

Mr. HOWARD. Not the slightest.

Senator MILLIKIN. There is no question of that kind here.

Mr. SHAW (Arvin B. Shaw, assistant attorney general of California). May I add a word, please?

I think the answers given you by Mr. Howard and Mr. Ely as to whether Arizona is or is not in the compact should be amplified. That issue may or may not be submitted to the Supreme Court, depending upon the position taken by Arizona in the event the suit is authorized. If there is unequivocal admission on the part of Arizona that she is irrevocably a member of the compact, that presents one situation.

If the position of Arizona is equivocal or is in denial of that proposition, then the issue will probably have to be debated and determined.

I can imagine a situation—and I am only qualifying the statements made by Mr. Ely and Mr. Howard—where that issue may not become an issue at all. All the parties may conceive it to be for their advantage in effect to admit, agree, or stipulate that Arizona has irrevocably bound herself by the compact.

Senator MILLIKIN. Well, I assume that if this were to be submitted to litigation, California and the other States will retain full liberty to raise any issue that they feel is in the protection of their interests; is that correct?

Mr. SHAW. I think they would have to.

Senator MILLIKIN. It is not intended in this hearing for any of the parties here to limit their right to raise issues, is it?

Mr. SHAW. We have stated here, Mr. Chairman, the three issues which we consider to be major and controlling. As to each of those, there are what you might call subissues, collateral issues, details. We have given you, however, the three things which appear to be decisive as to whether or not Arizona or California is entitled to the water supply that is in dispute.

Mr. HOWARD. If I may supplement what Mr. Shaw has just said, Mr. Chairman, the issues that we have attempted to discuss here primarily—that is, those three issues—are those which go to the availability of water. California would be bound by the Limitation Act in any event, probably, whether Arizona is in or Arizona is out, and

it is the interpretation of that Limitation Act and the way it impinges upon the compact that gives rise to these questions.

Arizona's water computations, starting out with the same basic figures of availability of water in the stream system, arrive at different conclusions, almost entirely by reason of conflicts of interpretation on these three points. And we have discussed the matter in that light.

Now, if by any chance there should be any question in the minds of upper basin counsel as to this series of events, as to whether Arizona can come in and be a party to the compact under the circumstances, they would probably have a considerable interest in it. Because if Arizona is outside the compact, she could probably acquire rights adverse to any of the States. That is, she would be entirely in the clear.

And it has impressed me, as I say, trying to lay aside all prejudice and just look at the matter objectively as a question of contract law, that there is a very serious question.

But, as Mr. Shaw points out, we all might decide we had better have Arizona in the fold than out of the fold and have the issue never come up.

Still, in direct response to Senator McFarland's question, I do not, by any statements made before this committee, like to be committed absolutely to the idea that Arizona is a party to the compact. I was putting in a little hedge there, Senator, to let myself out in case it ever seemed important to attack the question.

Senator MILLIKIN. Of course, it should be clear that this committee exercises no judgment on the question, and must be informed as to what the issues are. By suggesting that any State will be at liberty to protect itself, I would not imply that any State will be limited to issues by what it says here. But we necessarily must exercise our own judgment on the statement of issues that is made here.

Senator Watkins?

Senator WATKINS. I was going to suggest, in light of the questions you asked Mr. Howard, that possibly Arizona and California might decide what the issues are in this case, but there will be three other States in that suit at least, in the division of the lower basin waters. And those States might raise the very questions we have been talking about. I do not know what they will do, but there is a possibility. I know if the case develops, usually the lawyers discover something that they have overlooked sometime before, and they usually raise anything and everything that will help their cause. I would anticipate that that would possibly take place in this case.

Mr. HOWARD. If I may, with the chairman's permission, just by illustration summarize the situation with respect to contract law:

Let us assume that seven parties—we will call them A, B, and C, et cetera, for convenience—attempt to negotiate a contract. A decides that he can't go along with the rest of them. So the other six decide that if one of them, we will say C, will undertake additional burdens, the six of them will go right along and make a contract.

The contract is so made by the six parties, with additional burdens on C, and it goes into operation. Then, 15 years later, A decides that after all it might be a pretty good deal, and he decides to sign up. He goes in and, unilaterally, and not by negotiation, signs the document.

The query: Does that make A a party to the contract? That is in brief what I am trying to indicate. And, as I say, I don't know just how the chips would fall on that. It may be very much to California's interest to have Arizona a party to the compact. In fact, under some interpretations, that might be the case. Under another interpretation, it might be that if Arizona is not, as a matter of law, bound by the compact, and exercised an appropriative right on the river independent of the compact, that right might be deemed to be adverse to the States of the upper basin. The question is there; I am not attempting to be dogmatic about it, but I merely mention it as something deserving of study.

Senator McFARLAND. You have not made up your mind, then, as to whether you want Arizona to be a party to the compact or do not want it to be.

Mr. HOWARD. It would not make any difference, Senator, how I felt about it, or how the State felt about it. I am talking just objectively about a question of law, regardless of preference.

Senator McFARLAND. Well, these conditions that you speak about have to do with the effective date of the Boulder Canyon Act; do they not?

Mr. HOWARD. The 6 months began to run after the approval of the Boulder Canyon Project Act, but its effectiveness was brought about by a six-State compact, plus the Limitation Act, and plus a Presidential proclamation.

And let me say that this question is also inherent in it: As of what date does that compact speak? It says, "Rights now perfected," or words to that effect. What does "now" mean? Does that mean the date it is a seven-State compact; that is, sometime in 1944? Or does it relate to 1929, when the Presidential proclamation was made? As of what dates does the compact speak, if Arizona is at liberty to cut into it in 1944? That is one of the questions that is inherent in the proposition.

Senator MILLIKIN. Senator McFarland, I would like to suggest now that we have notice that this question may enter into the matter and some incidental questions.

Let me suggest that Arizona, when her turn comes, be prepared to make whatever showing it wishes to the point as to whether it is or is not a member of the compact.

Senator McFARLAND. I would like, if I might, Mr. Chairman, to ask one or two more questions.

Senator MILLIKIN. Go ahead; I am not foreclosing you.

Senator McFARLAND. I do not want to go into it in detail, because this is the first time anyone has ever suggested that Arizona is not a party to the compact.

Senator MILLIKIN. I think you are entitled to explore what is in the gentleman's mind, so that you can prepare an adequate answer.

Senator McFARLAND. Now, Mr. Howard, would you have any objection if legislation were proposed to clear this matter up entirely? Would you have any objection to that? Making Arizona without any question a party to the compact?

Mr. HOWARD. I don't think that is a matter for legislation, Senator. It seems to me that it is a contract matter. We would have to have ratification of a new seven-State compact by the seven legislatures.

Senator McFARLAND. Then I take it that regardless of what the Congress might say, or the committee might think, you would oppose any legislation in regard to the Colorado River, of any nature whatsoever.

Mr. HOWARD. I think you have vastly stretched the answer to the question. I would not make that statement. All I am saying is that I don't believe it is the function of Congress to make interstate compacts. That is a function of the States. It takes the approval of the Congress, of course, but the ordinary principles of contract law are applicable as between the States.

Senator McFARLAND. Well, Arizona has an interest in the subject matter of the contract as to whether she is in or out, does she not?

Mr. HOWARD. Quite definitely.

Senator McFARLAND. And would you go this far: Would you say that your interpretation here might question the validity of Arizona's contract for water?

Mr. HOWARD. You are quite right.

Senator McFARLAND. In other words, you question whether Arizona has any rights in the Colorado River at all.

Mr. HOWARD. No; I do not question that. That was settled by Judge Brandeis in 1930. If Arizona is out of the compact, she still has an interest and can take any water she can properly appropriate from the river.

Senator McFARLAND. In other words, I take it from your statement that you question whether Arizona has any right to any water in the Colorado River that she is not today actually using.

Mr. HOWARD. No; I would not say that. It is a question, as Judge Brandeis said in 1930 or 1931, or whenever that case was decided, that if Arizona is outside the compact, her rights to appropriate water are unaffected by the compact. She can go ahead and appropriate everything she can use.

Senator McFARLAND. But if she has not appropriated water, you in the first place state that this might affect Arizona's contract for water?

Mr. HOWARD. It might; yes.

Senator McFARLAND. And then, if she has no contract for water, you question, if she has not actually appropriated the water, whether she has any rights to that above what she has actually appropriated.

Mr. HOWARD. She would have the right to the water where the appropriations had been made, and she would have the right to authorize additional appropriations.

Senator McFARLAND. Oh, yes. But you would fight any additional appropriations.

Mr. HOWARD. I do not know how we could.

Senator McFARLAND. Well, you have been; have you not?

Mr. HOWARD. I don't know of any that have been made. We don't get into Arizona, under Arizona law, to fight appropriations.

Senator McFARLAND. Oh, I am talking about Colorado River water.

Mr. HOWARD. Well, the appropriation of the Colorado River water would be made under the laws of the State of Arizona.

Senator McFARLAND. But you would fight any appropriations for the purpose of appropriating water.

Mr. HOWARD. You refer to congressional appropriations? Yes; if we felt that they were in conflict with prior uses of water.

Senator McFARLAND. Your past record has been that; has it not?

Mr. HOWARD. Yes.

Mr. ELY. Well, now——

Senator McFARLAND. I want to pursue these questions without any interruption from Mr. Ely.

Senator MILLIKIN. Go ahead.

Senator McFARLAND. In other words, your position here before the Congress, is that you propose that unless Arizona can get the money and can in some way get the water out of the river, you will fight her every step of the way. You propose to question, first, whether she is a party to the compact. You further propose to question the validity of her contract. And third, you propose to fight every move on the part of Arizona to appropriate one drop of Colorado River water.

Mr. HOWARD. I do not know whether you got the full effect of my statement, Senator.

Senator McFARLAND. I think I have.

Mr. HOWARD. When the appropriation begins to conflict with established uses on the river, on both the Arizona and the California side, I think then we would have to oppose it.

You will recall that on the Gila project—not referring to the Gila River, but that project on the lower Gila, to take water out of the Colorado River—it was conceded by California that if there should be a limit of 600,000 acre-feet the project would not be opposed; and they proceeded with that deal, which went ahead after considerable discussion. But the take of water for that Gila project from the main stream was limited by terms of the act to 600,000 acre-feet a year. And under the terms of that limitation California interposed no objection to it.

Senator McFARLAND. That was where an appropriation had already been made.

Mr. HOWARD. Yes. The bill as written, though, pending in that session of Congress—I think it was the last session—broadened the use of water considerably. It increased the quantity; not as finally limited, but as introduced. The estimates were that the consumption of water would be considerably greater than the 600,000 acre-feet originally considered.

Senator McFARLAND. I do not want to quarrel with you on that. That was the estimate of California; not Arizona.

Mr. HOWARD. I think it was the estimate of the Bureau of Reclamation, and, I think, of Arizona's engineers.

Senator McFARLAND. We do not care to get into that. But anyway, the bill that was authorized was within the appropriation of water which has already been made.

Mr. HOWARD. That puzzles me. The word "appropriation" is being used in two senses. And as far as I know, there is no filing on the Arizona side, under the laws of appropriation, for that Gila project. There may be, but I do not know of any.

Senator McFARLAND. Well, that was before the committee. It was conceded that there had been an act authorized and approved for that amount of water; and in the hearings. But I do not think that that is material to the point.

Senator MILLIKIN. The committee is primarily interested, I will say for the benefit of all parties, in finding out what are the points of issue, and in getting the facts on those points of issue, so that it may deter-

mine whether they have enough weight to warrant litigation. I hope we can all confine ourselves to that main inquiry.

Senator McFARLAND. Yes. I beg the chairman's pardon. The record in the other case will speak for itself.

But I think that the committee will be interested in knowing what California's contention as to Arizona's rights here is. And they go far beyond anything that they have ever asserted thus far, or ever suggested.

Now, in order that we may know also how much further they expect to go, I want to call attention to the fact that on page 22, Mr. Howard says: "There are other points of difference."

I would like for you, Mr. Howard, to state for the benefit of the committee what the other points of difference are.

Mr. HOWARD. The one I had particularly in mind there, and which I did not mention in this prepared statement, is the attempt on Arizona's part to identify the 75,000,000 acre-feet every 10-year period with the water apportioned to the lower basin. I think that may come up. That is the only one that occurs to me now as a real possibility.

As I say, in setting up these three points of controversy, what I attempted to do was to take the Arizona computations as to availability of water, which come out with a surplus, and the California computations, which come out with a deficit, and see just wherein the differences were that gave rise to those differences in computation.

Senator McFARLAND. Are there any other points of difference that you had in mind when you made that statement?

Mr. HOWARD. No; I do not have any in mind at the moment.

Senator McFARLAND. That is all that you care to assert, then?

Mr. HOWARD. Yes.

Senator McFARLAND. Now, Mr. Chairman, Mr. Howard pretty well covered this same testimony in the hearing on S. 1175, and I cross-examined him on some of that. And there are other matters which we have contradicted in those hearings.

This is a matter as to there being consumptive use in Arizona of 2,300,000 acre-feet of water. That was contradicted by engineering data, even under California's theory, that nothing like that has been appropriated and used.

I want to ask the committee a question as to whether we may be able to refer to those parts of the other hearings and make them a part of this hearing by reference, or by incorporating them in the record of the hearing, and thereby shorten these hearings.

Senator MILLIKIN. Is there any objection to that?

Senator DOWNEY. I would have no objection, as one of the Senators from California, Mr. Chairman.

Mr. SHAW. We would have no objection, Mr. Chairman, if the portions of the record mentioned by Senator McFarland are identified.

Senator McFARLAND. We will identify them in the course of the hearings. I just thought it would save us a lot of time in putting in engineering data.

You see, Mr. Chairman, these are all mere conclusions by a lawyer, and not testified to by an engineer. The fact that I am not cross-examining on them does not mean that I admit them. And I feel that probably we ought to have evidence, maybe, to contradict them; although they may not, as stated conclusions, be material in these hearings.

But we can materially shorten these hearings if, rather than minutely cross-examining these witnesses on every part of it, we just pass over it, and incorporate those same questions from the other hearings.

Senator MILLIKIN. Senator Watkins?

Senator WATKINS. I take it for granted that as a member of the committee, I would have a right to read all of the records of that proceeding if I wanted to, and get information anywhere I can get it. This is not a court, in other words. You are not held down to the hard and fast rules of evidence of a court. The lawyers seem to get into that habit. But as I understand it, these committees get information wherever they can, on and off the record.

Senator MCFARLAND. I understand that, Senator Watkins. But if that was not going to be done, it would be necessary for us to bring witnesses here and go over the same territory a second time.

Senator MILLIKIN. As I understand it, the question is whether any of the parties may refer to other hearings held on a similar subject matter. There is no objection to that, and it may be done.

Senator MCFARLAND. And we may incorporate parts of those hearings.

Senator MILLIKIN. Yes.

Mr. ELY. May we have the portions designated, Mr. Chairman?

Senator MCFARLAND. We will designate them from time to time.

Mr. ELY. We would like to have that done, so that we may know to what we should respond in rebuttal.

Senator MILLIKIN. That will be done.

Senator O'MAHONEY. Mr. Chairman, before Mr. Howard leaves:

I am sorry I was detained, Mr. Howard, and did not have the opportunity of listening to your statement. I have before me a typewritten transcript of it. I have not had the opportunity to read it.

But I note that you have a heading in this statement, on page 9, "Issues Between Arizona and California."

Are there any other issues which would be involved if this resolution were adopted?

Mr. HOWARD. So far as California is concerned, I think the answer is "No." We have no controversy with any of the upper basin States that requires any judicial examination. Both Arizona and California concede that Nevada should have 300,000 acre-feet, and a fraction of excess or surplus, whatever it is, set up in their contract. So that the real battle is between Arizona and California.

If the States of the upper basin conceive that they have any interest in any of those issues between the States, they would probably seek to come in as amicus curiae, or possibly as intervenors.

Senator O'MAHONEY. Well, it is in order to determine what the issues are, so that that determination may be answered, but I am addressing this inquiry to you now.

Mr. HOWARD. As Mr. Ely said a few minutes ago, so far as California is concerned, we would be willing to submit the case to the court on a stipulation just calling for the interpretation of those three issues.

Now, if it is broadened beyond that——

Senator O'MAHONEY. Let me suggest to you, Mr. Howard, that this committee has before it the language of the resolution. We must interpret that. I have handed you a copy of it.

I call your attention to the first clause, which reads:

Whereas the development of projects for the use of water in the lower Colorado River Basin is being hampered by reason of long-standing controversies among the States in said basin * * *.

I assume the phrase "in said basin," means the lower basin.

Mr. HOWARD. That is the way it was intended, I think.

Senator O'MAHONEY. So that it is a ligitimate conclusion from this clause that whoever drafted this resolution had in mind "long-standing controversies among the States in the lower Colorado."

Mr. HOWARD. I think that is correct.

Senator O'MAHONEY. And therefore you were not thinking of any other controversies that may or conceivably might develop?

Mr. HOWARD. I think that is correct. The States of the upper basin so far, I think, are using a shade less than a third of their apportioned water. And so far as I am aware, we have no controversy with any of the Upper Basin States as to the projects; that is, any controversy, certainly, on the question of water rights.

Senator O'MAHONEY. Then let us proceed in reading this preliminary clause—

as to the meaning and effect of the Colorado River Compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act, the California Limitation Act (Stats. Cal. 1929, ch. 16), various contracts executed by the Secretary of the Interior with States, public agencies, and others in the lower basin of the Colorado River, and other documents * * *.

What does that phrase "and other documents" refer to? Anything outside of the lower basin?

Mr. HOWARD. Not that I am aware of. There may be other contract documents involved other than these listed. But the controversy is distinctly a lower basin controversy.

Senator O'MAHONEY. Then, continuing: "and as to various engineering, economic, and other facts" the question there being: Was it intended, or do you think it should be intended, to embrace any issue outside of the lower basin.

Mr. HOWARD. I don't believe it was intended to cover any issue outside the lower basin, sir.

Senator O'MAHONEY. And on page 2, in lines 7 and 8, we find that the authority that you are requesting is for a suit against the States of Arizona, California, Nevada, New Mexico, and Utah, but it then proceeds to say, "and such other parties as may be necessary or proper to a determination."

What other parties in your opinion might be necessary or proper?

Mr. HOWARD. The States of Wyoming and Colorado might conceivably be held to be necessary parties.

I want to be perfectly candid with you, Senator. The States of the upper basin are interested, by reason of the Mexican Treaty provisions, in the quantity of excess or surplus available for the service of the Mexican Treaty; and the controversy between Arizona and California does not affect the method of computing that surplus.

If the upper-basin States were content to let California and Arizona battle it out in the lower basin, the upper States would not necessarily be involved; but if they do feel that they have a sufficient interest in the interpretation of these documents, which do affect the excess or surplus available to serve Mexico, it might be that they would be proper parties to such litigation.

Senator O'MAHONEY. Is there in your opinion any reason why the Congress cannot determine the issues that are involved here?

Mr. HOWARD. Yes, there is. I consider it a matter for judicial determination. I think any judicial or legislative determination would be subject to review in the courts; involving, as it does, vested rights.

Senator O'MAHONEY. Well, if there are vested rights involved in this controversy, why can you not go into court without a resolution?

Mr. HOWARD. Because the court has held that the United States is a necessary party, by reason of the fact that the United States has assumed control of the river, and provided that no rights shall exist to the use of Lake Mead water without contracts with the Secretary of the Interior. All of the contract documents we are talking about here are contracts involving the United States.

Take the Limitation Act, for instance. That is a statutory contract or compact between the United States and the State of California, made for the benefit of the other States of the basin. But the contracting parties were the United States and the State of California.

I do not think we could litigate—in fact, the Supreme Court has said that those issues cannot be litigated—without the presence of the United States as an essential party. So I do not believe that it would be possible to adjudicate these questions in the absence of the United States as a party to the litigation.

Senator O'MAHONEY. Well, if this case did go to the court, would there be any judgment against the Government of the United States?

Mr. HOWARD. Not a judgment, necessarily, against the Government. The Government might have its position on the river clarified by judicial determination. I think the judgment should be binding on the United States, but by that I do not mean to say that there would be a judgment rendered against the United States.

The United States is in the position here of the custodian, we will say, of a fund of water. There are conflicting claims on that fund. The United States also has, or may be held to have, a property interest in that water, once it is reduced to possession. So in this bill, instead of using the word "interpleader"—as you well know, straight interpleader is one in which the stakeholder has no interest in the property involved, but merely throws it into the lap of the court to find out who does have the interest.

So it was intended to follow the language of the court's views in instances in which the stakeholder also has an interest in the property.

Senator O'MAHONEY. May I ask Mr. Wehrli, who is an attorney representing the State of Wyoming, and who appeared in the Supreme Court in the Wyoming-Nebraska case:

How did the Department of Justice get into that suit?

Mr. W. J. WEHRLI (Casper, Wyo.) The United States intervened in that case.

Senator O'MAHONEY. There was no legislation on it?

Mr. WEHRLI. There was no legislation; no, sir.

Senator O'MAHONEY. In what capacity did it intervene?

Mr. WEHRLI. It intervened for the purpose of claiming that it had certain rights as an appropriator which were not represented by the State of Wyoming, where the reservoirs were located, and where it was appropriating the water.

Senator O'MAHONEY. Is there any distinction between the two, do you think?

Mr. HOWARD. Yes; I think there may be a distinction, in this:

If I remember correctly—and I would be subject to correction if I am in error—in presenting its case in *Nebraska* v. *Wyoming*, the United States went in as a proprietor; not in its sovereign capacity, but in its capacity as an owner of appropriated water.

On the Colorado River the United States has gone in in its sovereign capacity, under the commerce clause, building a dam in aid of navigation and flood control, and so forth.

So it comes into the Colorado River situation in that respect in a different capacity; that is, in its capacity as sovereign, rather than in its capacity as a proprietor—as is the case in many of the reclamation cases, in which the United States appropriates water for use on public lands and, under the Reclamation Act, section 8 I think it is, comes in under State law, just as any other appropriator comes in. And I think there is a difference in the functions of the United States.

Senator O'MAHONEY. All of these questions, Mr. Howard, are leading up to this question: whether or not in your judgment it would be possible so to amend this resolution as to set forth specifically and clearly the precise issues which are sought to be determined?

Mr. HOWARD. That might be done. I would want to do some work on the exact language before speaking with any finality. But I will say this: That anything we can do to limit the controversy to the real parties in interest—that is, to the States in the lower basin—and to leave the upper basin in the clear, we would certainly cooperate in. And in any way in which we can delimit the issues, so long as we maintain a position that will enable us to settle these basic points of controversy, we will, I think, cooperate.

And speaking off the cuff, and without consultation with my associates: So far as I personally am concerned, I would.

Senator O'MAHONEY. If you will look at line 4, page 2, you will see that it is stated to be the purpose of this act to avoid a multiplicity of actions, and to expedite the development of the Colorado River Basin—which means the whole basin. But the language of the resolution itself is so broad that all the States in the Colorado River Basin could be involved. And there is no means of determining from this language what issues might be raised; and therefore no possible way of even approximating when the litigation would come to a conclusion.

Mr. HOWARD. Specifically do you have any suggestions in mind, sir, to consider?

Senator O'MAHONEY. No; I am just listening to the testimony and trying to find out what the controversies between Arizona and California really are.

Mr. HOWARD. I had thought you possibly were going to insert the word "lower" before the words "Colorado River Basin", in line 4, page 2.

Senator O'MAHONEY. As I say, I want to see the Colorado River developed, and I want to see these developments undertaken and carried through as rapidly as possible. I recognize the fact that there is not water enough in the river to supply all of the claimants in the river. I admire the great energy and ability of California and its various municipalities in undertaking the development of this water for the benefit of California. And I would not want to see this matter become involved in controversy that would prevent us, in the upper

basin States or, in fact, in any other State, from proceeding, because of prolonged litigation.

Therefore, I am asking these questions merely to determine to what extent the issues can be made explicit.

Mr. HOWARD. That is a matter that I think we will be very pleased to give study to; and if we can make some constructive suggestion along that line, we will do it. There may be some device by which we can delimit the issues, and limit the area of controversy, so that we would not involve the upper basin. But as to whether or not that can be done, considering this surplus question, I am not too sure.

Senator O'MAHONEY. After we receive the specific and written answers to the questions which I directed to Mr. Ely this morning, perhaps the members of the committee will be in a better position to judge. (See p. 447 for answers by Mr. Ely.)

Senator MILLIKIN. As a generality, is it not perfectly clear that we cannot sit here, nor can the Congress, to limit the jurisdiction of the Supreme Court, once the jurisdiction has attached?

Mr. HOWARD. That is the thought I have in mind, Senator. I think it would be a very difficult thing to do. But if there is any device by which it could be done, we would be glad to suggest it. We have no thought whatever of interfering with the work of the States of the upper basin in arriving at a four-State compact. We have kept ourselves strictly out of that. We have not put our noses into upper State compact work at all.

May I just add, Mr. Chairman, that not only does Congress not have the power to limit the jurisdiction of the Supreme Court, but they cannot make any jurisdiction for the Supreme Court. That is given by the Constitution of the United States.

And no matter what we do here, or what we say here, we cannot have any effect on it in any manner whatsoever.

Senator WATKINS. All the resolution attempts to do it seems to me is to direct the Attorney General to do certain things. It has no reference whatever to what the Attorney General can do.

Mr. HOWARD. If the Supreme Court should decide that there was not any justiciable controversy, that is something that they can settle themselves.

Senator WATKINS. The authorization, as I understand it, is directing the Attorney General to commence the suit?

Mr. HOWARD. That is correct.

Senator WATKINS. The bill relates only to some duty to be imposed on the Attorney General?

Mr. HOWARD. We are not attempting to amplify or reduce the jurisdiction of the Supreme Court. The thought developed in this fashion; we felt that the United States was a necessary party to any adjudication that would be binding, and the fairest way to get the matter settled and put all of the States on a parity would be to have the United States initiate the action in the nature of an interpleader. That was the basis of our thought, it was merely to put the States on a parity before the Court.

Senator O'MAHONEY. As you say, Mr. Howard, the Court might, if we pass this resolution, decide that there is no justiciable controversy involved, and therefore I am very anxious to have you define your issues explicitly and clearly so that the Congress may know whether, in its opinion, there is a justiciable controversy involved.

Mr. HOWARD. For that purpose, Senator, let me come back to the three points of controversy that are outlined here. I have them outlined in this written statement on page 14, and they are amplified later, but the basic elements of controversy are on page 14.

So far as I am individually concerned, if the Congress can find some way of limiting the Supreme Court consideration to a settlement of those three questions, that is all that I would ask.

As I said, in speaking earlier, Mr. Chairman, I do not conceive it to be my duty here to convince this committee that California's position is right. All I am trying to show is that there is a deep-seated, long-standing controversy of a justiciable character that has to be settled one way or the other before the further work on new projects can go forward on the lower river.

Senator WATKINS. Mr. Howard, you made a reference to Nevada's rights in connection with this proposed resolution, and what have you to say about the rights of Utah and New Mexico in this controversy that might be brought into court?

Mr. HOWARD. So far as the lower basin is concerned, the rights of New Mexico and Utah are quite small. I think that they aggregate something in the nature of 130,000 acre-feet per annum. I am quoting that figure from memory. And so far as California is concerned, we would be willing to stipulate them out on a provision of that sort.

Senator WATKINS. How were those figures arrived at? There is no compact, as I understand it.

Mr. HOWARD. The figures are derived from the Bureau of Reclamation's work on the so-called comprehensive report. I think that they say that the potential uses in those States would aggregate about 131,000 acre-feet per annum. Am I correct there?

Senator WATKINS. You would be willing to stipulate these States and the quantity of water out of the matter, if we could settle on the issues you mentioned?

Mr. HOWARD. So far as California is concerned, I am sure that we would have no trouble in arriving at a figure for those States based on the Bureau of Reclamation estimates.

Senator WATKINS. That estimate is based on the possible use of the water, that could be put to use on any feasible project from an engineering standpoint?

Mr. HOWARD. I think that that is true.

Senator MILLIKIN. I think from the standpoint of Nevada and California, it might be well to get something into the record that any stipulation as to issues could or could not be broadened by the Supreme Court itself. I may say that I am under the tentative impression that there is no technique that can limit the Supreme Court's consideration of the issues. If there is any contrary opinion here, I would like to see it explored.

Mr. SHAW. We will stipulate that there is no appeal from the Supreme Court of the United States, and when there is a decision, that is the law.

Senator MILLIKIN. I am talking about how it arrived at the decision.

Senator MCFARLAND. I would like to ask you this question——

Senator MILLIKIN. I would like to add that the Congress can sometimes reverse the Supreme Court.

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Senator McFARLAND. We are asked to in the tidelands case.

Mr. Howard, you say that you are willing to stipulate that 131,000 acre-feet claimed by Utah and New Mexico. Are you willing to stipulate that that would come out of the water that California claims?

Mr. HOWARD. No.

Senator McFARLAND. You want it to come out of Arizona's water?

Mr. HOWARD. Lower basin water.

Senator McFARLAND. Are you willing to stipulate any part of it would come out of the water that you claim?

Mr. HOWARD. The matter is so trivial, Senator, that it would not radically affect the controversy between California and Arizona. I do not think the engineering estimates of water can be computed within that degree of accuracy.

Senator MILLIKIN. I would suggest that that would be more appropriate for private negotiation.

Senator McFARLAND. The generosity of California so long as it doesn't affect California is very great.

Mr. HOWARD. Let me make my position clear there. I say that a part of Utah is in the lower basin. To the extent that there are established uses there, whatever water they use will be chargeable against the lower basin under article III (a) of the compact, and to that extent it affects both Arizona and California. But I think the effect of that use of water is so inconsequential that it will not materially affect the outcome of the controversy between the two States.

Senator McFARLAND. Well, there is an interest there, though, even though to a smaller degree, of New Mexico and Utah.

Mr. HOWARD. Unquestionably there is.

Senator McFARLAND. And any definition of the words "consumptive use," once made by the Supreme Court, would be just as binding upon Wyoming and Utah and Colorado as it would be on Arizona.

Mr. HOWARD. The figure that I am using, of 131,000, is a consumptive-use figure.

Senator McFARLAND. I am getting away from that 131,000. I am talking about any interpretation that the Supreme Court might give of the words "consumptive use"; that it would be just as binding upon Colorado, Utah, and Wyoming as it would be upon Arizona, California, and New Mexico and Nevada.

Mr. HOWARD. Of course, the decisions of the Supreme Court are binding, as matters of law. If you go on that theory, the matter has already been determined in *Wyoming* v. *Nebraska*. The Supreme Court defined consumptive use. But you are not willing to be bound by that definition.

Senator McFARLAND. I am willing to be bound by the definition which I think Congress has made of these terms, but you are begging the question. Any definition in regard to the use of words in the Colorado River compact would be binding upon every State in the compact, would it not?

Mr. HOWARD. I think for practical purposes, you are correct, I think it would.

Senator McFARLAND. Now, I have one more question, or I have a couple of questions, and then I will not delay longer.

Does California have any objection to any transmountain diversions by Utah?

Mr. HOWARD. Under the compact, transmountain diversions are lawful in the upper basin.

Senator MCFARLAND. And you expect to offer no objection to them any time in the future?

Mr. HOWARD. Certainly not on the basis of water rights.

Senator MCFARLAND. I am sure they will be glad to know that. And now, as to Wyoming and Colorado——

Mr. HOWARD. Of course, that is all within the upper basin use under the compact, so long as the upper basin stays within its beneficial consumptive use measured by diversions and returns to the river, that is all right.

Senator MCFARLAND. That is on tributaries?

Mr. HOWARD. I am talking about the river system.

Senator MCFARLAND. I know; but the diversions less return flow to the tributary and not to what would reach the main river.

Mr. HOWARD. I think the word "river" is used in the abstract. It means any river.

Senator MCFARLAND. Of course, in other words, you take the Green River in Wyoming, you heard the testimony of Mr. Ely here, you agree with Mr. Ely that that interpretation might limit Wyoming the same as it would limit Arizona in the use of the Gila water?

Mr. HOWARD. Well, if there is the opportunity in Wyoming, I don't know enough about the situation up there to say whether it is true or not, but if there is the opportunity in Wyoming to salvage water which in a state of nature would be wasted by transpiration or evaporation, and Wyoming goes ahead and conserves and salvages that water and uses it beneficially, it is a beneficial consumptive use that would be chargeable under the compact.

Senator MILLIKIN. The Chair would like to know whether he is correct. Are the upper-basin States all represented here?

It is to be assumed that those States, when it comes their turn, with the issues defined as they have been, will advise the committee how they feel about those issues.

Mr. HOWELL. That is correct. I am speaking for the Colorado Basin States Committee. We will present the opposition to this resolution. My name is J. Howell, and I reside in Ogden, Utah.

Senator MCFARLAND. Then there is the additional interest in the matters as they may be affected by the Mexican Treaty. I believe you or Mr. Ely explained that these interpretations might affect the Mexican Treaty and the amount of water which the upper-basin States might be required to supply, and the lower-basin States.

Mr. HOWARD. Inasmuch as the controversy may be reflected in the determination of the amount of excess or surplus which is first to be used to supply the Mexican Treaty, the upper States are interested in the computations and the definitions that will result in the determination of that quantity of water, there is no question about that.

Senator MCFARLAND. So when you come right down to it, Mr. Howard, there is not any issue here that does not affect both basins; even though it may affect them in a less degree, the upper basin in a less degree, they are affected by every issue that you have outlined.

Mr. HOWARD. Whether they will be affected seriously enough to let them feel that they should participate in the litigation is, of course, up to them. I have been told by engineers that, so far as the upper

basin is concerned, there is no appreciable difference between consumptive use measured the way we want to measure it, by diversions less returns to the river, and consumptive use measured by depletion, interpreted as of Lee Ferry; but I understand indirectly that other engineers have contrary opinions on that. And now, whether the upper-basin States feel that their interests are enough to justify them coming in, I do not know.

Senator McFARLAND. But they would be bound by the interpretations?

Mr. HOWARD. I think that they would, for all practical purposes.

Senator McFARLAND. I think, Mr. Chairman, that those are all of the questions that I care to ask at this time, except to put in the record the questions and answers of questions at the other hearings, which I will later refer to.

Senator MILLIKIN. All right.

Who is the next witness?

Mr. SHAW. My statement will be of about the same length as Mr. Howard's. The question is as to your convenience, whether you would desire to proceed.

Senator MILLIKIN. Let us go right ahead, Mr. Shaw.

STATEMENT OF ARVIN B. SHAW, JR., ASSISTANT ATTORNEY GENERAL OF THE STATE OF CALIFORNIA

Mr. SHAW. My name is Arvin B. Shaw, Jr. I am assistant attorney general of the State of California, and I have been in that position since 1939.

I am assigned specifically to advise the Colorado River Board of California, which is the State agency set up to protect the interests of the State in the Colorado River.

I have also been for something over 25 years, attorney for one or more irrigation districts in the Colorado River desert of southeastern California.

It is now desired to put before the committee information which will tend to answer two questions: First, why should the United States be interested; and second, has the Supreme Court jurisdiction?

Before discussing the two questions the attention of the committee is pointed to just what the pending resolution does and does not propose.

The resolution recites that the development of water projects in the lower basin is hampered by interstate controversy as to the meaning and effect of the disputed documents. It then states that its purpose is to avoid a multiplicity of actions and to expedite the development of the basin.

Senator MILLIKIN. When we are bringing something into this record that has been in some other record let us not only identify it but see that it is incorporated in this record, so that we will not have to turn back and forth between a number of records.

Senator McFARLAND. We will be glad to do that, Mr. Chairman.

Senator MILLIKIN. Let us proceed.

Mr. SHAW. That development has been hampered and would be expedited by a prompt decision of the issues is, we submit, amply demonstrated by the departmental and bureau reports which have been referred to in this record.

The resolution then directs the attorney general to commence in the Supreme Court a proceeding against the five States of the lower basin and any other parties found necessary or proper. Incidentally, that expression, I think, can pretty naturally be ascribed to a desire not to limit the attorney general too rigidly in the selection of his parties and pleadings.

The proceeding is described as "a suit or action in the nature of interpleader."

The parties defendant are to be required—

to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the lower Colorado River Basin.

Thus, the focal point of the proposed suit is the determination of the rights of the lower-basin States among themselves, under, and not in derogation of, the disputed documents which constitute the law of the river. There is no need to go further. No disputes or problems requiring present disposition are believed to exist between the upper basin and the lower basin. There is no need to determine the division of water among the upper-basin States. They have for nearly 2 years been engaged in negotiation of a compact for that purpose, and it is believed that this effort will be effectual.

Now, may I revert to one clause to which Senator O'Mahoney directed attention without a specific question? The last clause, I believe, on the first page of the resolution is involved, "and as to various engineering, economic, and other facts."

Frankly, that clause was not added with any specific intent on the part of California, but with the desire, again not to limit too rigidly what the other parties to the case might feel to be essential. So far as we are concerned, as has been stated by prior witnesses, the questions in which we are interested are legal questions which can be determined without factual evidence. If other parties or other States feel that it is indispensable that factual questions be gone into, which we do not know at this time, I do not know that we should attempt to circumscribe their choice. I think that I could say in frankness that if the suit is authorized and commenced it would be obviously to the interest of all of the States in the basin that the litigation be proceeded with and completed as promptly as possible so that the objective of the resolution, the expediting of development in the basin, could then commence.

I cannot see any obvious necessity that other States would broaden the field of inquiry to the point where factual determinations would have to be made.

Senator MILLIKIN. The Supreme Court itself might want facts or information.

Mr. SHAW. Certainly.

The three major issues discussed by Mr. Ely and Mr. Howard directly relate to the division of the lower-basin water. Hence, the upper-basin States are not directly concerned and need not be made parties. If they feel that they are indirectly concerned and should intervene or appear as friends of the court in support of one side or the other, the issues will remain the same and the presence of the additional parties should not, therefore, unduly complicate the case.

First, why should the United States be interested? The United States has a variety of interests which would be advanced by a de-

termination of the controversy. Most of these interests have, as corollaries, responsibilities which would be clarified and defined. The interests and responsibilities mentioned include the following:

(*a*) General interest in development of lower basin: As parens patriae, the United States has both direct and indirect interests in the prudent and sound development of the lower-basin States. It is the duty of the United States under the general-welfare clause of the Constitution to provide for the advancement of the interests of the States and of all its citizens and residents. As shown by the last five censuses, the States of the lower basin have increased in population at a far greater rate than any other portion of the United States. As is a matter of common knowledge, this trend has been accentuated since the taking of the last census. The trend is not occasioned by unusually high birth rate, or by immigration from foreign countries. It is the result of voluntary movement of millions of people of the United States toward what they choose to accept as desirable living and working conditions in the Pacific Southwest. Wherever they may choose to settle, in Arizona, Nevada, or California, it is the concern of the United States to aid them, in the exercise of its constitutional authority, by providing and protecting the water supplies which are indispensable to their domestic needs and irrigation requirements.

The projects required to furnish domestic and irrigation water and incidental hydroelectric power are so vast in scope and cost as to require in large part financing by the Federal Government. No other agency is competent to that end. Planning and construction of most of the projects can best be accomplished by experienced Federal agencies. It is, therefore, a responsibility of the United States to see that such projects are prudently planned and so distributed as to advance the long-term welfare of the Nation. By such planning and development, areas of desert waste can be brought into productivity and the Nation's supply of food and fiber can be enhanced to help meet the needs of our Nation's growing population. More directly important, the tax revenues of the United States can be permanently augmented as the result of agricultural and industrial production.

The United States has, through the Department of the Interior, assumed control over the Colorado River, which is an interstate, international, navigable stream. It has constructed and is constructing great dams and power plants on the river. The need for integrated operation of these works forbids future development of any part of the river by States or local public or private agencies. On this account, the United States has come under responsibility to see that the development of the river proceed as rapidly as may be warranted by economic rules. Particularly, the United States is as much under responsibility as the States and local communities to use such means as are available to avoid the stalemate on the river which has been found by the Secretary of the Interior to result from the existence of interstate controversy.

(*b*) Proprietary interests in development of public lands: The United States holds as a proprietor immense areas of public lands in the lower-basin States. Some of these public lands are suitable and available for development with water of the Colorado River, although it must be recognized that the possibilities of development of public lands in the lower basin are more limited than was once thought. To such extent as the public domain may be improved by irrigation, the

United States has a direct interest in seeing to it that such development is orderly and permanent and is not subjected to undue risk of failure of water supply.

The United States has already, in furtherance of the improvement of the public domain, as well as private lands, constructed great projects such as the Yuma project, in Arizona and California, the All-American Canal project in California and the Salt River project in Arizona. The Gila project in Arizona is under construction. The United States is under an impressive moral obligation to protect these projects, and its investment in them, by taking such measures that it can make certain that the lower-basin water supply will not be spread too thin. A determination of rights is the most obvious such measure.

(*c*) Trust interest in Indian lands: A number of important areas in the lower basin, aggregating in excess of 100,000 acres, consist of lands held in trust by the United States for Indians. Such areas are now for the most part undeveloped and unproductive, but are so situated and are composed of such suitable soils as to be eligible for development by irrigation from the Colorado River. In some cases major works have already been constructed for irrigation.

The obligations of the United States to Indian tribes are recognized by article VII of the Colorado River compact which provides:

> Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes.

Under this provision and the decision in *Winters* v. *United States* (207 U. S. 564), and other cases, it is understood that the Indian lands have a paramount right to adequate water supply. These paramount rights are, however, to be accounted for in any division of the waters of the river among the States, so that each State will be chargeable for the waters required for Indian lands within its borders.

It is the duty of the United States to see to it that no developments in the lower basin so consume the available water as to encroach upon, or embroil in controversy, the water supply needed for Indian lands. Considering the uncertainties which exist as to total dependable water supply of the lower basin, the United States can best discharge its duty to Indians by causing a determination of aggregate water rights of each State to be made. When such determination has been made, the protection of Indian rights against encroachment is made simple. Without such determination, overlapping claims to water may at the least create friction, controversy, and difficulty in protecting the Indian projects.

(*d*) Interest under international obligations: The United States has another concern in the waters of the Colorado River, consisting of its obligation to deliver water to the United Mexican States under the treaty of February 3, 1944 (Ex. A, 78th Cong., 2d sess.). This Mexican right is paramount, probably even superior to Indian rights, under the treaty power, which is committed by the Constitution to the President, with the advice and consent of the Senate. Clearly, the United States should not commit itself to States, nor communities, to deliver to them water which may be required to satisfy the treaty. Nor should it risk public moneys on construction of water projects which, because the water supply which is supposed to serve them must be applied to satisfy the treaty, may turn out to be monuments to mistaken judgment. It must first be ascertained what water is available, beyond treaty demands, before authorization of such projects is in order.

(*e*) Interest in protection of Federal Treasury: It is quite apparent that by political determinations, either in the Congress or in the executive departments, projects may be authorized and constructed with Federal funds which, unless a determination of water rights in the lower basin is made, may turn out to be fruitless. The projects under contemplation involve huge expenditures of money. For illustration, cost estimates on the ultimate completion of the central Arizona project exceed $1,000,000,000. Whether or not the pending resolution is adopted by this Congress, it is evident that some day the determination of water rights in the lower basin must be made by the Supreme Court. The aggregate water supply probably available to the lower basin is not sufficient to provide in full the needs of projects now constructed and under construction, and those for which commitments exist in Nevada, Utah, and New Mexico. The essential question between Arizona and California, therefore, is whether something in excess of a million acre-feet of water per annum shall be used on projects now constructed and in course of construction in California, or whether that quantity shall be diverted to serve a new project in Arizona which has not yet been authorized. Whenever a determination is made by the Supreme Court, it will follow, either that works in California now existing, built at a cost of $200,000,000, will be without water, or that the proposed works in Arizona which would cost from $700,000,000 to $1,000,000,000, will be dry. In either case, an investment of hundreds of millions of public money, Federal or local, will be demonstrated to have been a mistake.

It is obviously to the interest of the United States to protect its taxpayers and its Treasury by arranging for the adjudication which will, it is believed, obviate an important financial risk.

(*f*) Interest in administration of water under Project Act: By section 5 of the Boulder Canyon Project Act, it is provided that the Secretary of the Interior may contract for the storage of water in Lake Mead and for delivery thereof, and it is further provided that—

> No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated.

Acting under this authority, the Secretary of the Interior has made a number of contracts with public agencies in California and with the States of Nevada and Arizona. The possibility exists and is not fully obviated by the terms of the contracts, taken as a group, that the quantities of water specified in these contracts exceed the water supply available to the lower basin.

The Secretary of the Interior has, for all practical purposes, taken possession of the river. He is under the duty of administering the river and the water supply in Lake Mead under the contracts. Conflicting claims are made against him for delivery of water. The Secretary has, of course, no true judicial authority. He cannot decide the momentous issues which exist among the States in the lower basin. By his letter contained in the interim report on the Colorado River (H. Doc. 419, 80th Cong., 1st sess.) and by his report on the central Arizona project, Secretary Krug is on record that his hands are tied, until a determination is made. The Director of the Budget has made the same statement. Secretary Ickes' statement in his official memo-

randum on signing the Arizona water contract may also be recalled. He said of the contract:

> It expressly reserves for future judicial determination any issue involving the intent, effect, meaning, and interpretation of the compact and act.

In addition to his functions of contracting for and distributing water from Lake Mead, the Secretary was charged with the duty of formulating a comprehensive plan of development of the Colorado River Basin by section 15 of the Project Act, which reads:

> The Secretary of the Interior is authorized and directed to make investigation and public reports of the feasibility of projects for irrigation, generation of electric power, and other purposes in the States of Arizona, Nevada, Colorado, New Mexico, Utah, and Wyoming for the purpose of making such information available to said States and to the Congress, and of formulating a comprehensive scheme of control and the improvement and utilization of the water of the Colorado River and its tributaries * * *.

By section 2 (d) of the Boulder Canyon Adjustment Act of July 19, 1940, this authorization was extended to include California. The Colorado River (H. Doc. 419, 80th Cong., 1st sess.) is an interim report which inventories possible projects throughout the basin.

As has been noted, the Secretary has recently declared in his interim report that until the water rights of the basin States are determined he cannot perform his statutory duty to prepare a comprehensive plan. The completion of the comprehensive plan is a matter of supreme importance to all the States of the Colorado River Basin and they have, accordingly, bent every effort to promote its completion for nearly 20 years.

To enable the Secretary to carry out his functions under the Boulder Canyon Project Act correctly and promptly, both as to water administration and the comprehensive plan, the United States should seek the adjudication provided in the pending resolution.

(g) Interest under commerce power: Under the commerce clause of the Constitution, the United States has privileges and functions in respect of flood control and navigation. If, and insofar as, these privileges and functions may be infringed on by certain types of water and power development project, the United State is under duty to maintain its interests against the claims of the States. This is an element which may, and should, be protected in the proposed litigation.

The foregoing list of interests and obligations of the United States in the waters of the lower basin is not intended to be all-inclusive. It is sufficiently extended, however, to show that the United States is concerned with so many facets of the problem that it should, willingly, take the lead in putting to rest the contentions which have vexed the States of the lower basin for the last generation. Nothing less will free the hands of the executive departments, clarify the carrying out of the Federal constitutional powers and the protection of the Indians, and promote the speedy development of the lower-basin States and the public lands therein for the general benefit of the Nation and the specific enhancement of its tax revenues.

We turn to the question of the Court's jurisdiction.

May I digress to give you a few words from the decision in the last case of *Arizona* v. *The United States*, which is not in my prepared

memorandum. I wish to illustrate how nearly the Supreme Court in the last case, at page 570, was thinking along the lines which have just been discussed. The Court says:

> Without more detailed statement of the facts disclosed, it is evident that the United States, by congressional legislation and by acts of its officers which that legislation authorizes, has undertaken, in the asserted exercise of its authority to control navigation, to impound and control the disposition of the surplus water in a river not already appropriated.

A little later the Court said:

> The decree sought has no relation to any present use of the water thus impounded which infringes rights which Arizona may assert subject to superior but unexercised powers of the United States. (Citing cases.) The prayer is for a decree of equitable division of the privilege of future appropriation. The relief asked, and that which upon the facts alleged would alone be of benefit to Arizona, is a decree adjudicating to petitioners the unclouded * * * rights to the permanent use of the water. Such a decree could not be framed without the adjudication of the superior rights asserted by the United States. The "equitable share" of Arizona in the unappropriated water impounded above Boulder Dam could not be determined without ascertaining the rights of the United States to dispose of that water in aid and support of its project to control navigation, and without challenging the dispositions already agreed to by the Secretary's contracts with the California corporations, and the provision as well of section 5 of the Boulder Canyon Project Act that no person shall be entitled to the stored water except by contract with the Secretary.

The Court goes on, at page 571, to say:

> Every right which Arizona asserts is so subordinate to and dependent upon the rights and the exercise of an authority asserted by the United States that no final determination of the one can be made without a determination of the extent of the other. Although no decree rendered in its absence can bind or affect the United States, that fact is not an inducement for this Court to decide the rights of the States which are before it by a decree which, because of the absence of the United States, could have no finality.

I bring that to your attention as illustrating the point of view which we have, that not only is the United States as a technical matter a necessary party and a proper party, but it is an indispensable party because it has interests and duties and functions.

For example, no decree could or should be entered into in an interstate case of the type we are thinking of, without due provision for the rights of the United States to control floods and to control navigation under the commerce power. They might be things which the State could think of and concede, and they might be necessarily things which the United States should protect for itself.

We turn to the question of the Court's jurisdiction.

Categorically, of course, no one but the Supereme Court can determine whether it will take jurisdiction of a particular case. Enough landmarks exist in the Court's recent decisions, however, to justify reasonable confidence that it has, and will exercise, jurisdiction over the proposed suit.

(*a*) The Supreme Court has jurisdiction of traditional chancery remedies: As a part of its exclusive original jurisdiction over controversies between States, the Court takes jurisdiction of the traditional chancery remedies. For example, in the second case of *Arizona* v. *California* (292 U. S. 341), which was a bill to perpetuate testimony, Mr. Justice Brandeis, for a unanimous Court, held (p. 347):

> First: No bill to perpetuate testimony has heretofore been filed in this Court; but no reason appears why such a bill may not be entertained in aid of litigation pending in this Court, or to be begun here. Bills to perpetuate testimony have

been known as an independent branch of equity jurisdiction before the adoption of the Constitution.

To take a more common illustration, the Supreme Court has repeatedly exercised its original jurisdiction over bills to quiet title. Thus, in *United States* v. *Utah* (283 U. S. 64), the United States filed a bill to quiet its title to certain portions of the beds of the Colorado, Green, and San Juan Rivers in Utah. The Court rendered a decree quieting the title of the United States to those portions of the river beds where the rivers were found to be innavigable.

Again, in *United States* v. *Oregon* (295 U. S. 1), the United States filed its bill to quiet title to lands below the meander lines of certain lakes in Oregon. The Court took jurisdiction and rendered a decree for plaintiff.

Of still more familiar occurrence in the original jurisdiction of the Court are the cases in which one State sues another to determine a disputed boundary. Such cases are the most frequent interstate cases which the Court has decided. Among them are *Rhode Island* v. *Massachusetts* (12 Pet. 657) and *Virginia* v. *West Virginia* (11 Wall. 39), two of the earlier, and *Wisconsin* v. *Michigan* (295 U. S. 450) and *Arkansas* v. *Tennessee* (310 U. S. 563), two of the more recent. Such cases are, in most essentials, closely akin to suits to quiet title, although they involve the confirmation of State rights of sovereignty and jurisdiction, rather than the ownership of ordinary real or personal property.

(*b*) Interpleader and bills in nature of interpleader are traditional chancery remedies: Interpleader is aptly described in 48 Corpus Juris Secundum 38:

Interpleader is an ancient and well-established equitable remedy, which was in existence before the enactment of interpleader statutes, and which is maintainable independently of statute under general equity jurisdiction.

Interpleader is distinguished from a bill in the nature of interpleader, in that in the former the plaintiff disclaims any interest to the fund or thing in controversy, whereas in the latter he does not necessarily do so. A proceeding in the nature of interpleader is described in 48 Corpus Juris Secundum 42:

A bill in the nature of a bill of interpleader is distinguished from a bill of interpleader proper, as discussed, supra, sections 2–4, in that there are grounds of equitable jurisdiction other than the mere right to compel defendants to interplead, and complainant may seek some affirmative equitable relief. In other words, although personal interest deprives complainant of a right to a strict bill of interpleader, as considered, infra, section 16, it does not defeat the right to a bill in the nature of interpleader, and where there are two or more claimants to the fund or property, complainant may have recourse to the bill to ascertain and establish his own rights, even though, at the same time, he seeks to defeat all of the claims against himself. * * *

Ordinarily, a bill in the nature of a bill of interpleader and a bill of interpleader, aside from the distinction as to the interest of plaintiff, are governed by the same general principles.

In the important case of *Texas* v. *Florida* (306 U. S. 398) the Supreme Court held that it had jurisdiction of a bill in the nature of interpleader among States under its exclusive original jurisdiction. The case arose by reason of the claims of four States to impose death taxes on the same estate. The Court says at page 405—and notice that this has the same ring as the last-mentioned case:

Before the Constitution was adopted, a familiar basis for the exercise of the extraordinary powers of courts of equity was the avoidance of the risk of loss

ensuing from the demands and separate suit of rival claimants to the same debt or legal duty.

The Court further says, on page 406:

The peculiarity of the strict bill of interpleader was that the plaintiff asserted no interest in the debt or fund, the amount of which he placed at the disposal of the court, and asked that the rival claimants be required to settle in the equity suit the ownership of the claim among themselves. But as the sole ground for equitable relief is the danger of injury because of the risk of multiple suits when the liability is single [citing cases], and as plaintiffs who are not mere stakeholders may be exposed to that risk, equity extended its jurisdiction to such cases by the bill in the nature of interpleader. The essential of the bill in the nature of interpleader is that it calls upon the court to exercise its jurisdiction to guard against the risks of loss from the prosecution in independent suits of rival claims where the plaintiff himself claims an interest in the property or fund which is subjected to the risk.

The Court holds, at pages 407–408:

When, by appropriate procedure, a court possessing equity powers is in such circumstances asked to prevent the loss which might otherwise result from the independent prosecution of rival but mutually exclusive claims, a justiciable issue is presented for adjudication which, because it is a recognized subject of the equity procedure which we have inherited from England, is a "case" or "controversy" within the meaning of the constitutional provision; and when the case is one prosecuted between States, which are the rival claimants, and the risk of loss is shown to be real and substantial, the case is within the original jurisdiction of this Court conferred by the judiciary article.

The Court concludes, on page 411:

We think that the special master's finding of jeopardy is sustained; that a justiciable "case" between the States is presented; and that a cause of action cognizable in equity is alleged and proved. The fact that no relief by way of injunction is sought or is recommended by the special master does not militate against this conclusion. While in most causes in equity the principal relief sought is that afforded by injunction, there are others in which the irreparable injury which is the indispensable basis for the exercise of equity powers is prevented by a mere adjudication of rights which is binding on the parties. This has long been the settled practice of this Court in cases of boundary disputes between States [citing cases]. In the case of bills of peace, bills of interpleader, and bills in the nature of interpleader, the gist of the relief sought is the avoidance of the burden of unnecessary litigation or the risk of loss by the establishment of multiple liability when only a single obligation is owing. These risks are avoided by adjudication in a single litigation binding on the partes.

Before I pass that, may I ask particular attention to the language of the Court as to the essential character of such actions as boundary disputes, bills of peace, and bills of interpleader. In these cases the essential nature of the case, just as in a bill to quiet title, is an ascertainment of rights and a determination of rights. I do not, if the committee please, undertake any discrimination between these statements of the Court and statements which have been made that it will not render advisory opinions or declaratory judgments. It is for the Court to reconcile those statements, and not necessarily for me to do so. The fact is that throughout its history, the Court has entertained actions of this type, and has made its decisions determining rights, and then in other cases has said that it does not render declaratory judgments.

It is settled that the Supreme Court has original jurisdiction of a bill in the nature of interpleader maintained by one State against other States. It is also established that the Court has original jurisdiction of a case brought by the United States against a State or States, which jurisdiction is in all respects similar to that of the jurisdiction in interstate cases and controversies (*U. S.* v. *Texas*, 143 U. S. 621).

No reason appears, therefore, why the Court does not have jurisdiction of a bill in the nature of interpleader brought by the United States against a State or States.

(*c*) United States is stakeholder of fund of water in Lake Mead: The United States has in its physical possession and is administering through the Secretary of the Interior a large and constantly replenished fund of water contained in the reservoir, Lake Mead, impounded by Hoover Dam. That the magnitude of this store of water may be grasped, it may be noted that the capacity of the reservoir, 32,500,000 acre-feet, is equivalent to over 75,000 gallons of water for each of the 140,000,000 people in the United States. It is provided in section 6 of the Boulder Canyon Project Act:

> The title to said dam, reservoir, plant, and incidental works shall forever remain in the United States, and the United States shall, until otherwise provided by Congress, control, manage, and operate the same * * *.

By section 5 of the act, as heretofore shown, the Secretary of the Interior is authorized to contract for the storage of water in the reservoir and for the delivery thereof to such points on the river and on the All-American Canal as may be agreed upon, for irrigation and domestic uses, and so forth. The same section provides:

> No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated.

Thus, the Secretary of the Interior is charged with the duty of (1) operating the dam and (2) making contracts for the delivery of water from Lake Mead, in accordance with the act. His contractees, to whom he will deliver water by the operation of the gates at the dam, are the only persons who may be entitled to use the stored water. The Secretary has made, as heretofore shown, contracts for use of water stored in Lake Mead in each of the States of Arizona, California, and Nevada. As shown by the Secretary's memorandum on signing the most recent of these contracts—the Arizona contract—the Secretary did not attempt in making that contract to decide the issues between California and Arizona as to the interpretation of the disputed documents, but expressly indicated that those issues were reserved for future judicial determination.

The States of California and Arizona are now making inconsistent and conflicting demands upon the Secretary for water stored in Lake Mead. Specifically, Arizona, claiming to be authorized thereto by its secretarial contract, is asking the Secretary to approve S. 1175, which would entail delivery of over a million acre-feet of water from Lake Mead. California, relying on the secretarial contracts of its agencies, asks him not to do so. The Secretary, acting for the United States, is, therefore, precisely in the position of a stakeholder upon whom cross demands are made for the same quantities of the property held by him. His dilemma is shown by his reports to congressional committees on S. 1175.

The resolutions now pending in Congress call for the commencement of a suit or action in the nature of interpleader, rather than a strict interpleader. This course is taken in recognition of whatever interests the United States may assert in the subject matter, including, of course, its paramount rights and authority under the commerce clause of the Constitution over navigation and flood control and its obligations under the treaty clause, as to the Mexican supply. In view

of these and other possible Federal interests in the subject matter, it is not conceived that strict interpleader would be an appropriate remedy.

The proposal in the resolution that the United States commence the action and require the States to interplead is designed to put the States in as fair and equal a position as possible with respect to burden of proof and otherwise. Since each State, upon interpleading, would be both cross-complaint and cross-defendant, none of them would in this respect have any superiority of position. Further, since the United States would control the litigation, unnecessary delays, which the parties migh consider to be to their advantage, could be minimized.

I suggest, Mr. Chairman, that both of those elements are worthy of serious attention; that it ought to be realized that the States, in dealing with these matters which are in controversy, should not, either or any of them, be placed under any artificial burden as to moving the inertia of the Court. I suggest also that if the Department of Justice has the control of the lawsuit, it will to a considerable extent guide the timing of the procedure and prevent what apparently is a fear that endless years of time must elapse before the case is decided. That fear we do not partake of, and if I may digress just a word on that subject, we have a little experience to be guided by in this matter. We have had three tussles in the Supeme Court between Arizona and the other six States in the basin. Arizona in each instance commenced the action.

In the first case, the Boulder Dam injunction case, it took 8 months for the Supreme Court to reach its decision.

In the second case, it took 3 months from the filing to the decision.

In the third case, it took 5 months.

Now, those cases were all cases in which issues of law were presented and in which the Court dismissed the case without answer; and I will grant, I think anyone should grant, that the decisions were perhaps arrived at more speedily than would be likely in the case that we are thinking about. Nevertheless, those cases do illustrate that the Supreme Court can handle an interstate water case which does not involve factual isues, which is one pretty well involved in legal considerations, within a very short time, much shorter than the average lawsuit in the average State court ever gets to trial and decision.

Senator McFARLAND. These did not get to trial and decision.

Mr. SHAW. They were decided, Senator.

Senator McFARLAND. Did they get to trial and decision?

Mr. SHAW. No. We do not think that any trial is necessary in the case proposed, because what is thought of as a trial is generally an examination of factual matters.

(*d*) A justiciable cause of action exists: This is possibly a question which is raised by the Attorney General's report, to which I think a little further attention and comment should be devoted than we are able to do this afternoon. We would like to take a little time to analyze it and present comments in the morning. But this happened to be a part of the statement that was prepared, and I would like to complete it, if you wish.

A justiciable cause of action exists: Putting aside entirely, for the moment, the type of the proposed suit—i. e., interpleader—and its analogy to quiet title and boundary determination, as the basis for the Court's jurisdiction, the question may be posed whether, under

general principles, the issues existing among the States of the lower basin are sufficient to present a justiciable cause of action. This question is answered by the most recent of the interstate water cases. *Nebraska* v. *Wyoming and Colorado* (325 U. S. 589). In that case, Colorado moved to dismiss. The Court says, at page 608:

> * * * The argument is that the case is not of such serious magnitude and the damage is not so fully and clearly proved as to warrant the intervention of this Court under our established practice (*Missouri* v. *Illinois*, 200 U. S. 496, 521; *Colorado* v. *Kansas*, 320 U. S. 383, 393–394). The argument is that the potential threat of injury, representing as it does only a possibility for the indefinite future, is no basis for a decree in an interstate suit since we cannot issue declaratory decrees (*Arizona* v. *California*, 283 U. S. 243, 462–464, and cases cited).
>
> We fully recognize those principles. But they do not stand in the way of an entry of a decree in this case.
>
> The evidence supports the finding of the special master that the dependable natural flow of the river during the irrigation season has long been overappropriated. A genuine controversy exists. The States have not been able to settle their differences by compact. The areas involved are arid or semiarid. Water in dependable amounts is essential to the maintenance of the vast agricultural enterprises established on the various sections of the river. The dry cycle which has continued over a decade has precipitated a clash of interests which between sovereign powers could be traditionally settled only by diplomacy or war. The original jurisdiction of this Court is one of the alternative methods provided by the framers of our Constitution (*Missouri* v. *Illinois*, 180 U. S. 208, 241; *Georgia* v. *Tennessee Copper Co.*, 206 U. S. 230, 237).

Now, I will ask the committee's attention to each sentence of that paragraph. It seems to me to describe aptly the condition of things on the lower Colorado River just as well as it describes the conditions on the North Platte involved in the Nebraska case.

The Court says further, at page 609:

> * * * The claim of Colorado to additional demands may not be disregarded. The fact that Colorado's proposed projects are not planned for the immediate future is not conclusive in view of the present overappropriation of natural flow. The additional demands on the river which those projects involve constitute a threat of further depletion.

Finally, the Court holds at page 610:

> What we have then is a situation where three States assert against a river, whose dependable natural flow during the irrigation season has long been overappropirated, claims based not only on present uses but on projected additional uses as well. The various statistics with which the record abounds are inconclusive in showing the existence or extent of actual damage to Nebraska. But we know that deprivation of water in arid or semiarid regions cannot help but be injurious. That was the basis for the apportionment of water made by the Court in *Wyoming* v. *Colorado*, supra. There the only showing of injury or threat of injury was the inadequacy of the supply of water to meet all appropriative rights. As much if not more is shown here. If this were an equity suit to enjoin threatened injury, the showing made by Nebraska might possibly be insufficient. But *Wyoming* v. *Colorado*, supra, indicates that where the claims to the water of a river exceed the supply a controversy exists appropriate for judicial determination. If there were a surplus of unappropriated water, different considerations would be applicable. (Cf. *Arizona* v. *California*, 293 U. S. 558.) But where there is not enough water in the river to satisfy the claims asserted against it, the situation is not basically different from that where two or more persons claim the right to the same parcel of land. The present claimants being States, we think the clash of interests to be of that character and dignity which makes the controversy a justiciable one under our original jurisdiction.

And the decision is stated at page 611: "Colorado's motion to dismiss is accordingly denied."

It takes practically no change of language, if you please, to apply this statement to the situation existing between Arizona and Cali-

fornia. There is no question that the natural flow of the Colorado has long been over appropriated. The factual situation as between Colorado and Nebraska in the case under discussion and that between Arizona and California in the proposed suit is so strikingly parallel as to need no elaboration. The existence of purely prospective demands upon the flow of an overappropriated river, says the Supreme Court, is enough to make a cause of action.

It will be brought to your attention by someone that this decision was a 5-to-3 decision, one Justice not acting. I hardly think that these days that alters very much the weight of a decision of the Supreme Court of the United States. It is not very common that we get unanimous decisions any more.

In conclusion, it has been shown that there has existed for the last generation between Arizona and California a controversy over a water supply of vast economic importance to the States. This controversy is of a character which, were the States independent sovereigns, would likely to lead to war. The States have on innumerable occasions devoted their efforts to a disposal of the controversy by the negotiation of a compact. These efforts have failed, not because of lack of willingness or sincerity in the negotiations, but because the water supply of the lower basin is so limited that it cannot serve the economic aspirations of both States, and neither can voluntarily sacrifice its claims to the point necessary to consummate a compromise.

The controversy depends upon the interpretation of a series of documents, statutory and contractual in character. The issues, of which three major points have been analyzed herein, being issues regarding interpretation of documents, are legal in nature and determinable by the Court within a reasonable time without the necessity of factual evidence.

The United States is a necessary party to any adjudication. It is in manifold ways concerned with the development of the lower basin of the Colorado River, of which it has taken charge. In addition, the United States is specifically and directly concerned with the use of water of the Colorado River in connection with its constitutional functions respecting navigation and flood control, treaty obligations, development of public lands and of Indian lands. The United States is further chargeable with a high degree of responsibility for the sound and prudent investment of the funds of its taxpayers in public works for utilization of water. The Secretary of the Interior has publicly stated that the existing uncertainty as to division of the waters of the lower basin among the States precludes him from approving the authorization of projects, and even from formulating the comprehensive plan of development which Congress required him in section 15 of the Project Act to formulate.

The litigation proposed by the pending resolution is within the original jurisdiction of the Supreme Court. A justiciable cause of action exists.

The considerations above summarized lead to the conclusion that it is to the interest of the United States, as well as the States in the lower basin, that the water rights of the States of the lower basin of the Colorado River be determined by such a suit as is proposed in the pending resolution.

May I say this, that in giving you certain time periods for the Arizona-California cases, those time periods were computed from the date of the filing of the bill to the date of the filing of the opinion, including preparation of papers, oral argument, and decision.

I believe the one period I gave you as 3 months was actually 3½ months. That is the second case.

Senator MILLIKIN. Are there any questions?

Senator MCFARLAND. I have just a few questions, and then I might have some more in the morning.

Mr. Shaw, there is going down to the Gulf of California some 8,000,000 acre-feet of water.

Mr. SHAW. I thought it was around 7,000,000, but that is a rough estimate.

Senator MCFARLAND. In your opinion, is the introduction of S. 1175 a political threat or a real threat?

Mr. SHAW. To what?

Senator MCFARLAND. To the taking of the water, provided in the bill.

Mr. SHAW. Could that question be read? I did not get all of it, I am afraid.

(Question read.)

Senator MCFARLAND. In your opinion, is the introduction of the bill, S. 1175, a political threat to take this water as referred to in the case which you have just read, or is it a real threat to take the water?

Mr. SHAW. Obviously both.

Senator MCFARLAND. If it is not a real threat, then there is not a justiciable cause of action at this time, is there?

Mr. SHAW. That, sir, is your statement. My statement was that it is both, it could be a real threat. You are assuming that it is not either one of them.

Senator MCFARLAND. If it is not a real threat, if it is merely a political threat, and that would be the judgment of the committee, you would admit, would you not, that there is not a justiciable cause of action at this time?

Mr. SHAW. No, sir.

Senator MCFARLAND. That, of course, is something that we will want to present, Mr. Chairman, and we contend, of course, that unless and until a bill is passed, there is no real threat under the law and no justiciable cause of action exists.

Mr. SHAW. I would like to comment on that, if I may be permitted. The suggestion, if I understand it, made by Senator McFarland, is that the Congress, not knowing whether there is a water supply for this central Arizona project, should nevertheless proceed to authorize the construction of that project and the expenditure of, say $738,000,000 or more of taxpayers' money in the project, in order to form a technical foundation for a lawsuit which would then be in order to determine the right to the water.

That seems, if you please, to be putting the cart before the horse in rather obvious fashion. Authorization bills, if I understand them, are regarded as mandates to appropriations committees to appropriate money, and they are followed by appropriations in many cases, in most cases perhaps. Thereby we would reach the point that the

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United States was putting out its money blindly and not knowing whether there was any water supply for the project or not, trusting, perhaps, that someone would come along and litigate the question if Congress would then permit it to be litigated, and determine whether the expenditure was a wise one or was not.

Within the framework of the Nebraska-Wyoming decision, the prospective plans of Arizona to use 1,200,000 or more acre-feet of water are the threat, of themselves, without any bill being introduced, just as the prospective plans of Colorado not immediately to be executed but to be executed sometime in the future were taken by the Court as being the threat necessary to make up a justiciable controversy.

At least that is what the Court says, and we can only assume that they meant just what they said.

Senator McFarland. Mr. Chairman, in the cases where projects were authorized, I think the cases will clearly show that our position is correct, that there is not a justiciable issue, regardless of whether it is a good position to be in or a bad one. It is the only way that you will ever get a justiciable issue.

Of course, Congress will have to first find that the water is available for a project, or will find in their opinion that it is available, before they authorize the project. But until a project is authorized, there is no threat under the law, and we will present authorities to that effect.

Senator Millikin. Are there any questions?

Senator McFarland. I believe that by introduction in the record of the cross-examinations in the hearings on S. 1175, we can shorten this materially.

Senator O'Mahoney. May I ask this question, Mr. Shaw, merely for the purpose of getting the information: Is there any present use of water that deprives California of any right it claims under any of these documents?

Mr. Shaw. No, sir. May I explain that, please? As Senator McFarland indicated, a substantial quantity of water is now flowing into the Gulf of California. There is no present interruption of service to California in any respect. The important thing to observe in that connection however, is that the upper basin is now using, we will say, roughly 2½ million acre-feet of its 7½ million acre-feet, from which it follows that 5 million acre-feet annually of the water which is now flowing into the Gulf is upper basin water which the upper basin can take up tomorrow or next year or 20 years or 50 years from now, and thereby reduce the supply that much.

The additional 2 million, roughly, which is now flowing into the Gulf, is water which is required for the ultimate use of projects now in existence or commited in the lower basin.

I use the word "committel" as being slightly different from the projects now in existence or under construction. Besides the constructed projects, there are projects in southern Utah and in New Mexico on the upper reaches of the Gila, and on the Puerco and the Zuni Rivers, there are uses in Nevada which are committed by contract of the Secretary to the extent of 300,000 acre-feet, and those must all be taken as requirements which must be met, and they are not fully utilized.

Senator O'Mahoney. You say 5 million acre-feet of water belonging to the upper basin States now flows into the Gulf of California, and

which the upper basin States may claim in the future, when it is necessary to utilize it.

Now, is there any water of the upper basin States which is being used in any lower basin project presently constructed, which the upper basin can take back?

Mr. SHAW. I think not, because I think that the aggregate diversion and consumptive use in the lower basin is less, probably, than its maximum entitlement. Unquestionably it is less than the 7½ million acre-feet, so that if I may clarify just what I said, we are not using the full 7½ million acre-feet by present consumptive use, and some portion of that is going to the Gulf, in addition to the 5 million acre-feet of upper basin water.

Senator O'MAHONEY. Are there any projected plans or contemplated plans in any of the lower basin States of such size as to enable them to utilize water of the upper basin States which the upper basin States might under the compact later on claim?

Mr. SHAW. If the central Arizona project were authorized and constructed and put to use, then, in the judgment of our engineers—and I am speaking solely as to what I have been told by them—that would be a use necessarily exceeding in quantity the entitlement of the lower basin, because, if you please, the existing constructed works, those under construction and those which I mentioned as having commitments, take up all of the lower basin water, as we see it, and leave a small deficit, 250,000 acre-feet a year.

Senator MILLIKIN. What is the present diversion out of the Colorado River in the lower basin?

Mr. SHAW. I am afraid that that will have to await the answer which Mr. Ely was to give for that same question.

If the Arizona project were constructed on top of the presently authorized and constructed works, those under construction and those for which commitments have been made, it could only be served by taking water which belongs to the upper basin.

Senator O'MAHONEY. How about the California projects?

Mr. SHAW. The California projects are within the group of constructed projects that I have mentioned.

Senator O'MAHONEY. Then am I correct in drawing the conclusion that the controversy which you see here between Arizona and California depends wholly upon future authorizations by Congress for future construction in the lower basin?

Mr. SHAW. I think that that is a practical answer—it may not be a technical answer—yes.

Senator O'MAHONEY. In other words, the purpose of this resolution is to get a determination by the Supreme Court before Congress should act upon this Arizona bill?

Mr. SHAW. The purpose of it is to present to the Court the issue as to water rights and have a determination before the United States commits itself to the construction of a project which may not have a water supply if we happen to be correct.

Senator O'MAHONEY. That is a question. Thank you.

Senator MCFARLAND. And that points it up, Mr. Chairman, very plainly that one of the issues here which we will go into, and I may have some more questions to ask Mr. Shaw tomorrow, which will show clearly that this resolution was introduced for the purpose of delaying

the authorization of S. 1175, and that the Supreme Court would not and could not have jurisdiction under the circumstances, because no project has been authorized and no threat under the decisions has been made.

Mr. SHAW. The answer to that, Mr. Chairman, of course, is that the Secretary of the Interior has made the determination that no project should be authorized because of the uncertainty of water supply. We are proposing a method by which the development of the basin can be expedited and carried through. Otherwise, as the Secretary has told you in his reports, there is a blockade in his mind against further development.

Senator MCFARLAND. I do not care to argue this matter with Mr. Shaw, but it is our contention that the resolution was introduced solely for the purpose of delaying action, and that that is the only purpose it could have, because there is not at this time a justiciable issue and there will not be unless a project is authorized which threatens to take some of the water which California claims is its water.

Senator KNOWLAND. Even though you may not care to argue it with Mr. Shaw, I wish to say that that is not the case. In the judgment of the authors of this resolution, it is a means of expediting the decision so that we can have a common development of the water resources on the lower Colorado River which I think will be beneficial both to your State of Arizona and to my State of California, and indeed to the entire reclamation problem in the West.

Senator MCFARLAND. Well, I see nothing to be gained by arguing the point. The fact remains that the resolution was introduced on the last day of the hearings on S. 1175.

Senator ECTON. I think that we should not discuss motives on this resolution, and in the absence of the chairman I prefer to recess the hearing until 10:15 tomorrow morning.

Mr. SHAW. May it be understood that we may present comments as to the reports of the two Departments if the report is ready?

Senator ECTON. Yes; you may.

Mr. SHAW. I would like to reserve that privilege.

Senator ECTON. We will reconvene tomorrow morning at 10:15.

(Whereupon, at 5:30 p. m., the hearing was recessed until 10:15 a. m., Tuesday, May 11, 1948.)

COLORADO RIVER WATER RIGHTS

TUESDAY, MAY 11, 1948

UNITED STATES SENATE,
SUBCOMMITTEE ON IRRIGATION AND
RECLAMATION OF THE COMMITTEE
ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met at 10:15 a.m., pursuant to recess, in room 224 of the Senate Office Building, Senator Eugene D. Millikin (chairman of the subcommittee) presiding.

Present: Senators Millikin, Watkins, Ecton, O'Mahoney, and McFarland.

Also present: Senators Knowland, of California, and Thomas, of Utah.

Senator MILLIKIN. The meeting will come to order, please. Will you proceed, Mr. Shaw.

STATEMENT OF ARVIN B. SHAW, JR., ASSISTANT ATTORNEY GENERAL OF THE STATE OF CALIFORNIA—Resumed

Mr. SHAW. Is it appropriate to have the report of the Interior Department read? I assume it has been received.

Senator MILLIKIN. The report has not as yet been received, but I have asked that the report be submitted not later than tomorrow morning. When that report comes in, Mr. Shaw, if that involves some readjustment of time, that will be easy to handle.

Mr. SHAW. Thank you very much.

Senator MILLIKIN. Both parties will be protected in this hearing so far as that report is concerned.

Mr. SHAW. I believe Senator McFarland indicated that he might have further questions on cross-examination.

Senator MCFARLAND. I do not believe that I have any further questions at this time.

Mr. SHAW. Then, with the chairman's permission, I would like to make a brief observation at the conclusion of the testimony of two witnesses, which will be very, very short. Congressman Fletcher, you will recall, indicated that he would like to have Mr. Arnold present a very short statement. I believe it is only a page or two, and I think that that is probably in order next.

STATEMENT OF G. E. ARNOLD, DIRECTOR OF THE WATER DEPARTMENT, SAN DIEGO, CALIF.

Senator MILLIKIN. Will you state your name, your business, and address, to the reporter, please?

Mr. ARNOLD. My name is G. E. Arnold. I am the director of the Water Department of the City of San Diego, Calif.

Mr. Chairman and gentlemen of the committee, the city of San Diego and the area embraced by the San Diego County Water Authority have now annexed to the Metropolitan Water District of Southern California and have merged their water rights in the Colorado River with those of the district. An aqueduct, started as a war measure and completed by the San Diego County Water Authority, is now serving the San Diego area with Colorado River water. This aqueduct is now in use to its full capacity but is still inadequate to serve the needs of the area. The construction of this aqueduct as a war measure has been recently ratified by the Congress.

Senator MILLIKIN. What is the course of the aqueduct, where does it connect with the main aqueduct or the Colorado River?

Mr. ARNOLD. It connects with the main aqueduct of the Metropolitan Water District of Southern California at the west portal of the San Jacinto tunnel, which is not far from the city of Riverside, and then pursues a southerly course for about 71 miles, discharging into San Vicente Reservoir of the San Diego water system, near the city of San Diego.

Senator MILLIKIN. Physically speaking, is it an aqueduct?

Mr. ARNOLD. It is a closed pipe line throughout its length. It was constructed at a cost of about $15,000,000 to serve the San Diego area.

Senator MILLIKIN. I remember the project as a war project.

Mr. ARNOLD. That is right, it was started just before the close of the war by the Navy, as an emergency supply to San Diego, in order to supply the Navy needs in that area. At the termination of hostilities, it became necessary to make other arrangements for the completion of the aqueduct under the War Powers Act, and the city at that time signed a contract with the Government to repay to the Government the full cost of the construction of that aqueduct. It was completed and placed in operation early in December of 1947, and since that time has operated at full capacity.

Senator MILLIKIN. Will you explain to us in the course of your statement, what is the water-right relationship of this San Diego project to the whole Colorado River problem?

Mr. ARNOLD. The city of San Diego made filings on the Colorado River early in the 1920's. They were confirmed, and included as a part of California's filings early in the 1930's. San Diego's right at that time was designated as 112,000 acre-feet. It was in the fifth priority of the California allotments.

At that time it was contemplated that San Diego would take its water supply through the All-American Canal to the west side of the Imperial Valley, and then by a series of pumps and tunnels take the water over the Coast Range to the San Diego area.

Between that time and 1942, the need for the water was not evident in San Diego, in that it was a project for future development, but the impact of the war on San Diego created a need for the aqueduct earlier than had been anticipated. Due to a series of dry years and the terrific impact of the war load on San Diego, which incidentally more than doubled the population of the city——

Senator MILLIKIN. What is the present population?

Mr. ARNOLD. It is estimated in excess of 400,000; the population in 1940 was 200,000. It became necessary at that time to import this Colorado River water to the San Diego area as a war emergency, due

to the tremendous concentration of war activities and airplane activities in San Diego.

At that time the President appointed a commission to make a study of the necessity and feasibility of the project, and that commission reported to the President, recommending that the aqueduct be built as a war emergency, and that instead of coming through the All-American Canal and over the mountains, that the connection be made with the Metropolitan water district aqueduct near Riverside, for two primary reasons: One was the lesser amount of critical materials required by the Metropolitan water district connection, and the other was the much shorter time of construction. It was estimated that 4 years' construction time would be required to complete the aqueduct from the All-American Canal.

Senator MILLIKIN. Can you satisfy your priority out of your present arrangement?

Mr. ARNOLD. Not entirely. The present connecting line between Metropolitan water district and the San Diego area is built to only one-half of the ultimate capacity, only one-half of the water rights which San Diego had on the Colorado River.

Senator MILLIKIN. Are you in a position to say now that it is your intention to enlarge that particular aqueduct, or do you still intend to go around the other route that you mentioned?

Mr. ARNOLD. The plans are to enlarge the present aqueduct. That, however, is contingent upon there being a satisfactory water supply for it.

Senator MILLIKIN. Would it be accurate to say that your fate is tied up with the fate of the main aqueduct; is that correct?

Mr. ARNOLD. That is correct. The Metropolitan water district rights are now merged with ours, and we share in the full Metropolitan rights, which include those formerly owned or filed on by San Diego.

Senator MILLIKIN. What is the order of priority of the Metropolitan rights?

Mr. ARNOLD. Their rights are 550,000 acre-feet.

Senator MILLIKIN. And the order of priority?

Mr. ARNOLD. That is in the fourth priority, and the 550,000 acre-feet in the fifth priority, plus the 112,000 acre-feet which San Diego formerly held in the fifth priority.

Senator MILLIKIN. So that you are tied up with the fifth priority?

Mr. ARNOLD. Both the fourth and fifth. Merging with the metropolitan water district, we became entitled to the full share of the metropolitan water district in both the fourth and the fifth priority classifications.

Senator MILLIKIN. Thank you very much.

Mr. ARNOLD. Continuing with my statement. If, for any reason, the water rights of the metropolitan water district are reduced, the San Diego area will be the first to feel the impact of an inadequate water supply.

San Diego is the most important naval base on the Pacific coast. The protection and development of this military installation is dependent on the full utilization of Colorado River water. Forty percent of the full water supply of San Diego is used by the United States Government.

The population of San Diego has more than doubled since 1940. This population of more than 400,000 is today almost entirely dependent on Colorado River water.

San Diego is an imporant aircraft manufacturing center, there being four major aircraft plants operating there. San Diego made more aircraft during World War II than any other city in the world.

I might digress at that point and say in view of the present international situation, it appears that San Diego will again be a city of utmost importance in the production of aircraft and as a military center.

San Diego has developed facilities for obtaining Colorado River water with the expectation that she will be able to use her full share of the waters of that river.

Senator MILLIKIN. Do you have any local source of water?

Mr. ARNOLD. Yes; we have impounding reservoirs in the mountains to the east and southeast of San Diego.

Senator MILLIKIN. The reason I asked the question, at the time we had the Mexican water treaty up, we were then discussing surveys to be made of your local water facilities, and entirely aside from the immediate dispute, I was curious to know what was going on in that matter.

Mr. ARNOLD. San Diego has diligently developed her local water supplies since her beginning, and has always just kept ahead of growth with the development of local supplies. But those supplies are definitely limited, and with this impact of the war, it became necessary to reach out and import this Colorado River water—which, incidentally, is 20 years ahead of its planned schedule. The planned development of the city of San Diego, continuing the normal growth, would have made this water necessary about 1967. It was brought in in 1947.

Senator MILLIKIN. In other words, if you utilize to the maximum your local water sources, you would still have need for getting outside help?

Mr. ARNOLD. That is correct. And with the full development of all of the local supplies that can ever be developed in San Diego County, plus the full importation of all of the water to which San Diego is entitled from the Colorado River, there will still be vast areas of fine land in San Diego County that cannot be developed, and the ultimate development of that city will perhaps somewhat be hampered by inadequate water supply.

Senator MILLIKIN. Are there any questions?

Senator MCFARLAND. I have no questions.

Mr. SHAW. I will ask Col. Rex Hardy to present certain resolutions and statements.

Mr. REX HARDY (assistant city attorney of Los Angeles, Calif). Mr. Chairman, Mr. Congressman Gearhart expected to be here this morning, and he is unable to be here, and he has asked me to present to the committee a statement on his behalf.

Senator MILLIKIN. Would you read it?

Mr. HARDY. My name is Rex Hardy, and I am assistant city attorney for water and power for the city of Los Angeles.

STATEMENT OF HON. BERTRAND W. GEARHART, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA (READ BY REX HARDY)

Mr. HARDY. The statement of Congressman Gearhart is as follows:

Mr. Chairman, I should like to give the committee one or two reasons why I have joined in proposing the legislation now being considered.

For more than 25 years two States, California and Arizona, have been unable to settle a controversy between them which is a menace to their economy. Water—that is, dependable water—is the foundation of progress and development in the Southwest and in California. My State and Arizona cannot agree over their claims to the waters of the lower Colorado River. And that river system is the chief source of water for southern California and Arizona.

After a quarter of a century of conferences a solution has not been found. Not even a course which might conceivably open the way to a settlement has been agreed upon. This is an extremely serious situation. As it stands now, there is no hope that further negotiations would produce results. Arbitration proposed by California has been refused by Arizona.

What alternative is there? I see none, with the single exception of litigation. This legislation proposes that the entire case be placed before the Supreme Court for final adjudication. I see no other way to resolve this conflict.

Nor do I believe these issues to be insurmountable. But only a court of law can render the necessary decisions. For these are questions of interpretation of contracts. After all these years, it seems to me, it is obvious that neither Arizona nor California will give ground. Therefore, gentlemen, I strongly urge that this committee report favorably on this vital legislation.

STATEMENT OF REX HARDY, ASSISTANT CITY ATTORNEY OF LOS ANGELES, CALIF.

Mr. HARDY. Now, sir, I would like to offer for the record, and I will not read it unless the Chair desires, a resolution by the Legislature of California in joint session.

Senator MILLIKIN. Unless there is new matter in it, I suggest that we dispense with the reading.

Mr. HARDY. It is chapter 34 of resolutions, 1948 Statutes, jointly adopted by the senate and assembly of the State of California.

Senator MILLIKIN. If there is no objection, we may take these resolutions and put them at the end, out of order, rather than have them come in in the main course of the business. If there is no objection, we will hold them all and put them all in at the end.

(The document above referred to appears on p. 508.)

Mr. HARDY. Next, sir, is a resolution by the Irrigation Districts Association of California, to the same effect. I may say in passing that the Irrigation Districts Association of California comprises 120 public agencies of the State of California, engaged in water distribution.

Senator MILLIKIN. All over the State?

Mr. HARDY. Yes, sir.

The next one is a resolution adopted by the Twenty-ninth Annual Convention of the American Legion, held August 28 to 31, 1947, to the same effect.

The next one, sir, is a resolution adopted by the American Federation of Labor at its national convention held in San Francisco, Calif., in October of 1947.

Senator MILLIKIN. Do all of these matters urge litigation?

Mr. HARDY. Yes, sir.

The next one, sir, is a resolution by the National Grange to the same effect (on p. 510).

(The documents above referred to appear at the conclusion of the record of proceedings.)

Mr. HARDY. The last one that I desire to present, a letter that I have received from the Honorable Fletcher Bowron, mayor of the city of Los Angeles, with your permission I would like to read.

Senator MILLIKIN. All right.

Mr. HARDY (reading):

OFFICE OF THE MAYOR,
Los Angeles 12, Calif., May 6, 1948.

To the Subcommittee of the Senate Interior and Insular Affairs Committee, Washington, D. C.:

Mr. Chairman and members, the city of Los Angeles is vitally interested in the waters of the Colorado River. As a part of the area of the metropolitan water district of southern California, the population of which approaches 3½ million, the city has relied upon the contracts made under the authority of the Boulder Canyon Project Act by the Secretary of the Interior with the metropolitan water district of southern California, to insure a dependable domestic water supply for the millions of people this city is destined to receive within the foreseeable future. The city, now with a population estimated at 2,000,000 people, has reached the practical limit of its other supplies, and must in orderly fashion provide additional supplies for the people yet to make their homes and establish their businesses within its boundaries. Participation in the organization and financing of the metropolitan water district of southern California, which now holds Government contracts for 1,212,000 acre-feet of water from the storage behind the great Hoover Dam, for which a $200,000,000 aqueduct has been constructed without governmental subsidy, was believed by our citizens to represent such insurance.

Rights and claims of rights of the various States in the lower basin of the Colorado River, particularly the States of Arizona and California, are in grave controversy, without the settlement of which none of the States may safely plan for the future. This controversy is recognized by various of the Federal agencies concerned with the administration of the river and of the national reclamation law.

Authorization of the central Arizona project, also pending before the Congress, is predicated upon the validity of Arizona's claims and conditioned upon a determination of the controversy between the States of Arizona and California. California challenges the claims of Arizona, and all persons and agencies studying the matter, including the Bureau of Reclamaton and the Department of the Interior, are in accord that there is not sufficient water available to the lower basin States to meet the demands of existing projects in both States together with those presently authorized.

The State of California, joined by the State of Nevada, has fostered the introduction of legislation in the Congress designed to secure a judicial determination by the Supreme Court of the United States of the rights and claims of the contesting States. That legislation—Senate Joint Resolution 145—is now before you for hearing and report.

The city of Los Angeles supports the pending legislation and urges your favorable consideration. The city council of the city has unanimously resolved in favor of the legislation, and a certified copy of the resolution is enclosed. Water is indeed life to all of the southwestern area of the United States. It has always been so. Submission of controversies to judicial determination is now a proper procedure in accordance with American fairness and justice. The States of California and Nevada seek and urge such a determination. The future of the great industrial area within the city and the very life of its citizens, present and potential, are involved in the unfortunate interstate controversy over the right to use the waters of the Colorado River. This is true, also, with the great State of Arizona, especially as to its agricultural stability.

That the peoples of the contending States may live together in peace and harmony, each progressing within its respective economic sphere in the fulfillment of their respective destinies, the controversy must be determined. Your favorable consideration and support of Senate Joint Resolution 145 is earnestly solicited.

Yours very truly,

FLETCHER BOWRON, *Mayor.*

Mr. HARDY. Attached to the letter is a certified copy of a resolution to like effect, by the city council of the city of Los Angeles.

(The resolution is as follows:)

Whereas the city of Los Angeles has overcome the handicap of a limited local water supply and has created in the heart of a semiarid region the Nation's fourth largest city; and

Whereas this remarkable feat was made possible by united, aggressive, and courageous action on the part of Los Angeles citizens in authorizing two great aqueduct systems as insurance for present and future domestic, industrial, and commercial needs; and

Whereas a serious threat to the long-range plans of the city and its citizens has arisen through the possible reduction in allocation of Colorado River upon which Los Angeles has counted for 25 years and on the strength of which it, together with its neighboring cities, has invested more than $500,000,000 in water and power supply facilities; and

Whereas it is unthinkable that this city's future should be jeopardized by prolonged uncertainties resulting from controversial claims to Colorado River water rights: Now, therefore, be it

Resolved, That the Los Angeles City Council state its endorsement of Senate Joint Resolution 145, which, by giving congressional authorization for a United States Supreme Court suit, affords the basis for final and fair settlement of water rights claimed by the States of California and Arizona; and be it further

Resolved, That this body express its firm conviction that, pending Supreme Court action, no new projects requiring additional diversions of water from the lower Colorado River should receive congressional approval; and be it further

Resolved, That a copy of this resolution be sent to each Senator, and to each Representative in Congress from California.

LLOYD G. DAVIES.
HAROLD A. HENRY.

DECEMBER 23, 1947.

CERTIFICATION

STATE OF CALIFORNIA,
County of Los Angeles, ss:

I, Walter C. Peterson, city clerk of the city of Los Angeles and ex officio clerk of the city council of the city of Los Angeles, do hereby certify and attest the foregoing to be a full, true, and correct copy of the original resolution attached to city council file No. 31316 in the matter appertaining thereto on file in my office, and that I have carefully compared the same with the original.

In witness whereof I have hereunto set my hand and affixed the seal of the city of Los Angeles, this 7th day of May, 1948.

WALTER C. PETERSON,
City Clerk of the City of Los Angeles.
By A. MANVEZA, *Deputy.*

Senator MILLIKIN. We have a rather curious message from the Interior Department. It is:

Mr. Slaughter, of the Interior Department, advises this morning that the Secretary just received the brief of the upper-basin States a few days ago, and he will probably be unwilling in any event to take sides upon a matter of interstate controversy. The Secretary will, if you wish, submit a report, which, of course, would not be a decision as to either side in the controversy. Mr. Slaughter is in the room, if you would like to talk with him further.

Where is Mr. Slaughter?

STATEMENT OF HERBERT A. SLAUGHTER, OFFICE OF THE SOLICITOR, DEPARTMENT OF THE INTERIOR

Mr. SLAUGHTER. Right here, Senator.

Senator MILLIKIN. We asked the Secretary of the Interior for a report on this resolution. Why have we not received one?

Mr. SLAUGHTER. The answer, I think, is in the message that you just read. The Secretary has been considering the matter at considerable length, and he spent a good part of yesterday on it, and came in early this morning and spent more time on it.

Senator MILLIKIN. But his consideration seems to lead to no report rather than to a report.

Mr. SLAUGHTER. That is perhaps true; but the Secretary, I think, feels rather strongly that the Congress has in the past committed this matter to the States for decision between themselves, and that the Department of the Interior, as an agency of the Government charged with carrying out reclamation programs, is not a proper party to attempt to decide the matter by submitting a recommendation in a form which would take either definitely a position for the enactment of this legislation or a position against the enactment of this legislation.

Senator MILLIKIN. It would be well to have that in a report. You might advise the Secretary that this committee asked for a report; that it is the duty of the Secretary to supply reports when requested by this committee, and that we suggest that he perform his duty.

Mr. SLAUGHTER. As pointed out in this message, the Secretary will submit a report if you wish him to.

Senator MILLIKIN. That is what we have asked for, and that is what we would like to receive.

STATEMENT OF ARVIN B. SHAW, JR., ASSISTANT ATTORNEY GENERAL OF THE STATE OF CALIFORNIA—Resumed

Mr. SHAW. We have observations to submit on two subjects, which will be very brief.

The first is a very tentative preliminary comment on the Department of Justice report. I have reduced that to writing so that it will be easily usable.

California submits these general observations on the report of the Department of Justice on Senate Joint Resolution 145:

The Department expressly agrees with California on these points:

1. There is a controversy between California and Arizona.

(An investigation of the situation discloses that at the present time there seem to be conflicting interests or claims, at least between the States of California and Arizona, with respect to rights to the use of the waters of the Colorado River in the lower basin.)

2. That controversy involves the interpretation of the compact, Project Act, and so forth.

(That conflict, among other things, would involve interpretation of the Colorado River compact, the Boulder Canyon Project Act, and related statutory enactments.)

3. The controversy cannot be litigated without the United States, consent to be a party to the suit.

(The decision of the Supreme Court in *Arizona* v. *California* made it clear that the type of relief desired by the States in a suit between them cannot be had in the absence of legislation giving the required consent.)

By implication, the Department does not object to either:

(*a*) The litigation of the controversy; or,

(*b*) The joining of the United States as a party to the suit.

The Department does not say that no litigation of any kind should be authorized. Instead, leaving that question to be answered by the Congress, it seems to assume that some kind of suit will be authorized and restricts itself to suggesting three amendments. These amendments relate solely to the technical procedure which the Department believes should be followed in the suit.

California will give prompt study to the details of procedure suggested by the Department of Justice, but is not able at this moment to state its conclusions.

Senator MILLIKIN. When these conclusions are arrived at, will we be furnished with a copy?

Mr. SHAW. Certainly, Mr. Chairman. I think the discussion you just had with Mr. Slaughter points up the fact that we could not properly comment on the conclusions of the Department of Justice without knowing what the conclusions of the Department of the Interior are.

Unless there is a question on this statement——

Senator MCFARLAND. Mr. Chairman, of course I do not get the interpretation that Mr. Shaw does, but I think that the report speaks for itself, and I think nothing can be gained by our quarreling about what it means. I think every member of the committee can interpret it just as well as I can.

Mr. SHAW. Mr. Chairman, I have an observation to make, with a little diffidence. The Department of Justice, and the Department of the Interior, and the Bureau of the Budget, have stated in their reports at one time or another that there is a controversy here. In approaching the presentation of California's and Nevada's views at this hearing, we were rather uncertain to what extent the issues in the proposed litigation should be argued before the committee.

It came to be our conclusion that we should give the committee sufficient information in the way of legal material to indicate that there was a substantial controversy, to indicate its nature and some of the supporting evidence.

Obviously we could have spent the rest of this week submitting legal material, argument, and detailed interpretation and authority, and so on. We did not feel that was in order.

I do wish to point this out: Assuming, as is most natural, that Senator McFarland proposes to present the opinions of lawyers from other States as to the merits of the issues raised by the three California witnesses, the mere statement of conflicting opinions by them simply points up the fact that there is a controversy, that there is that difference of opinion among lawyers which makes a lawsuit——

Senator MCFARLAND. If I may interrupt you, I can relieve your mind of any thought that I am going to present any opinions from

other States. If the other States have any opinions, they will present them themselves, and I am not going to present any opinions or present the evidence here. It will not be in my charge at all.

Senator MILLIKIN. I would like to add that California and Nevada will have rebuttal time, and I assume that in that time you will be at liberty to develop points similar to the one that you are now developing.

Mr. SHAW. I do not want to labor the matter at all or present any particular request or recommendation. I only bring it to your attention that the hard fact of the matter is that there is a controversy; and that that controversy according to the decisions of the Secretary of the Interior and the Bureau of the Budget, has been such as to preclude authorization of projects.

Senator MILLIKIN. Are there any further witnesses for the proponents?

Mr. SHAW. Nevada and California will now complete their showing, reserving the remaining time for rebuttal.

Senator MILLIKIN. Are the opponents ready? If so, will you proceed?

STATEMENT OF J. A. HOWELL, REPRESENTING THE COLORADO RIVER BASIN STATES COMMITTEE, OF OGDEN, UTAH

Mr. HOWELL. Mr. Chairman and gentlemen of the committee, my name is J. A. Howell, I reside at Ogden, Utah, where I have practiced law for many years. I am one of the legal advisers of the State engineer of the State of Utah, who, under the law of the State is designated as the official representative of the State as to all interstate stream matters.

After this resolution now before the committee had been introduced and similar proposals made in the House of Representatives, the Colorado River Basin States Committee, an organization composed of official representatives of all of the Colorado River Basin States, from which California and Nevada had previously withdrawn, at a meeting in Salt Lake City adopted the following resolution, which I should like to read into the record, "Resolution re McCarran bill adopted by Colorado River Basin States Committee at Salt Lake City, Utah, October 1, 1947:

Be it resolved by the Colorado River Basin States Committee representing the States of Arizona, Colorado, New Mexico, Utah, and Wyoming, and open to the States of California and Nevada, in meeting assembled in Salt Lake City, Utah, this 1st day of October 1947, That whereas, after thorough discussion, this committee is of the opinion that the resolution introduced in the Senate of the United States by Senators McCarran, Downey, Malone, and Knowland, Senate Joint Resolution 145, which purports to be intended to authorize litigation over Colorado River waters is unwise, in that no litigation is necessary for the reason that California's rights to waters of the Colorado River are clearly defined and forever limited by the California Limitation Act (ch. 16, California Statutes, 1929) to 4,400,000 acre-feet of apportioned water, plus not more than one-half of the surplus: Now, therefore, be it

Resolved, That this committee opposes Senate Joint Resolution 145 and urges its defeat; and be it further

Resolved, That the chairman and secretary of this committee are requested to send copies of this resolution to the chairman of the Subcommittee on Irrigation and Reclamation of the Public Lands Committee—

this committee was intended, I assume—

of the Senate of the United States, and also to send copies of this Resolution to the chairman of the Judiciary Committee of the House of Representatives of the United States, to the Secretary of the Interior, to the Commissioner of the Bureau of Reclamation, and to our congressional delegations, and to take any and all means necessary or advisable to bring to the attention of any committees which may consider said Senate Joint Resolution 145, or any similar resolution the action taken by this committee.

Senator MILLIKIN. Judge, if I may interrupt, unless there is objection, all communications addressed to the Public Lands Committee or all communications to which there is reference to the Public Lands Committee, we will assume that they are addressed also to the successor of that committee, now known as the Committee on Interior and Insular Affairs. We have lifted our face.

Senator MCFARLAND. I believe, Mr. Chairman, that was done after the resolution was adopted, so it was properly directed that time.

Mr. SHAW. Is it proper to inquire whether there are copies of this statement available?

Mr. HOWELL. I have some copies. I may not have enough to satisfy everybody, but I will give such as I have.

At the same time, the following statement was made by the committee:

The Colorado River Basin States Committee representing the States of Arizona, Colorado, New Mexico, Utah, and Wyoming, and open to the States of California and Nevada, in meeting assembled in Salt Lake City, Utah, this 2d day of October 1947.

After full discussion declares its firm opinion that California by her own statutory irrevocable agreement is limited forever to 4,400,000 acre-feet of the water of the Colorado River apportioned to the lower basin by the Colorado River compact plus not more than one-half of the excess or surplus water unapportioned by the compact, and that—

Any waters of the Colorado River system which are unapportioned by the Colorado River compact are subject to further apportionment by agreement of all seven States of the Colorado River Basin after 1963, and no State can gain permanent right to the use of any part of such surplus waters until after such agreement shall have been made; and that—

The million acre-feet of water mentioned in article III (b) of the Colorado River compact is water apportioned to the lower basin; and that—

Under the Colorado River compact, and subject to the obligations thereunder, which apportions 7,500,000 acre-feet of beneficial consumptive use to the upper basin and 8,500,000 acre-feet of beneficial consumptive use to the lower basin, the upper basin is entitled to deplete the virgin flow of the river at Lee Ferry by an average of 7,500,000 acre-feet per annum and the lower basin is entitled to deplete the virgin flow of the river at the international boundary by an average of 8,500,000 acre-feet per annum; and that—

Evaporation reservoir losses should be divided on a ratable and proportionate basis among projects served from such reservoirs; water stored for future use is on the same basis as diverted water.

Senator MILLIKIN. Do we have statistics on estimated evaporation losses?

Mr. HOWELL. I do not know that there are any that will be definite enough to be of any particular value, because, of course, the amount of evaporation in Lake Mead will vary from time to time as the amount of water varies in Lake Mead, but I understand that there have been some figures furnished, and I have read, for instance, that California claims that the total at the present time is 1,000,000 acre-feet.

Senator MILLIKIN. May I ask someone from California what is the magnitude of the evaporation problem in terms of acre-feet of water?

Mr. M. J. DOWD (consulting engineer, Imperial irrigation district of California). I am an engineer from California, and according to the Bureau of Reclamation estimates, the net evaporative loss from reservoirs in the lower basin will be approximately 900,000 acre-feet, and the net evaporation loss from hold-over storage reservoirs in the upper basin will be in the neighborhood of 800,000 acre-feet per year.

Mr. HOWELL. Those are estimates as to the future.

Senator MCFARLAND. We can get that information. That was gone into in the hearings on 1175, and we can lift it out and put it in this record.

Senator MILLIKIN. One of the principal points has to do with this evaporation loss, and it would be a good thing, I suppose, to get something in the record on the subject.

Senator MCFARLAND. We will take that part of the record and put it in.

Senator WATKINS. I have a suggestion that the Bureau of Reclamation might have some additional studies that might help us. I understand that certain projects in my State may not be feasible simply because of the heavy evaporation loss.

Senator MILLIKIN. We will ask the clerk to ask the Bureau of Reclamation to submit to the committee any data which it has not already submitted, which bear on the question of evaporation on the Colorado River.

(Letter from Bureau of Reclamation on this point follows:)

DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
OFFICE OF THE COMMISSIONER,
Washington 25, D. C., May 25, 1948.

Hon. EUGENE D. MILLIKIN,
Chairman, Subcommittee on Irrigation and Reclamation of the Committee on Interior and Insular Affairs, United States Senate.

MY DEAR SENATOR MILLIKIN: In connection with the hearings now being held on Senate Joint Resolution 145, you have asked that this Bureau furnish you any information which it may have in regard to evaporation losses from potential reservoirs in the Colorado River Basin, in addition to information which has been made a part of the records at the present hearings or at the hearings held in connection with S. 1175 on S. 483.

On May 11, during the course of the hearings on Senate Joint Resolution 145, Mr. Jean Breitenstein, counsel for the Colorado Water Conservation Board, read into the record the estimates of evaporation losses in potential reservoirs of the Colorado River Basin, as contained in the Department of the Interior inventory report on the Colorado River, House Document 419, Eightieth Congress.

Since the publication of House Document 419, this Bureau has undertaken more detailed studies of evaporation losses which would occur if the various reservoirs shown in that document were constructed. These studies are not yet completed. I regret, therefore, that I must advise that we are not in any position to furnish your subcommittee with information additional to that which you already have in your record on this subject.

Sincerely yours,

MICHAEL W. STRAUS, *Commissioner.*

Mr. HOWELL. The statement continues:

The chairman and secretary are requested to furnish copies of this statement to the chairman of the Subcommittee on Irrigation and Reclamation of the Public Lands Committee of the United States Senate and to the chairman of the subcommittee of the Public Lands Committee of the House of Representatives of the United States, to the Secretary of the Interior, the Commissioner of the Bureau of Reclamation, and to the members of our congressional delegations.

Signatures of the representatives of the five Colorado River Basin States are attached hereto:

Wyoming, L. C. Bishop, H. Melvin Rollins; Colorado, Clifford H. Stone, Frank Delaney; Utah, G. A. Giles, William R. Wallace; Arizona, Charles A. Carson, Nellie T. Bush; New Mexico, Fred E. Wilson, John H. Bliss.

I understand that this will be made a part of the record, the same as the resolution itself.

Senator MILLIKIN. It will be incorporated as you have given it.

Mr. HOWELL. At a meeting of the Colorado River Basin States held at Denver, Colo., a subcommittee of representatives of the five States was appointed to take such measures as were proper to carry out the purpose and intent of the foregoing resolution of the committee.

This presentation in opposition to the adoption of Joint Resolution 145 is made in behalf of the States of Colorado, New Mexico, Arizona, Wyoming, and Utah, pursuant to the foregoing action taken by the Colorado River Basin States Committee, by the subcommittee so appointed. The presentation will consist of a printed brief, five copies of which have been filed with the committee, which I will now ask be made a part of the record in the same way that the brief in behalf of California and Nevada were made a part.

Senator MILLIKIN. The brief will be incorporated in the record at this point.

(It is as follows:)

BRIEF OF THE COLORADO RIVER BASIN STATES COMMITTEE, REPRESENTING THE STATES OF WYOMING, COLORADO, NEW MEXICO, ARIZONA, AND UTAH, IN OPPOSITION TO SENATE JOINT RESOLUTION 145, NOW PENDING IN THE SENATE, AND TO HOUSE JOINT RESOLUTIONS 225, 226, 227, AND 236, AND H. R. 4097, NOW PENDING IN THE HOUSE OF REPRESENTATIVES OF THE EIGHTIETH CONGRESS

(The Colorado River Basin States Committee: State of Colorado, Clifford H. Stone (chairman), Frank Delaney; State of Wyoming, L. C. Bishop, H. Melvin Rollins; State of Utah, W. R. Wallace, Grover A. Giles; State of New Mexico, Fred E. Wilson, John H. Bliss; State of Arizona, Nellie T. Bush, Charles A. Carson)

I. INTRODUCTORY STATEMENT OF FACTS

On July 3, 1947, there was introduced in the Senate of the Eightieth Congress by Senator McCarran, for himself and the other Senator from Nevada and the Senators from California, Senate Joint Resolution 145, which reads as follows:

[S. J. Res. 145, 80th Congress, 1st Session]

"IN THE SENATE OF THE UNITED STATES

"July 3 (legislative day, April 21), 1947

"Mr. McCarran (for himself, Mr. Downey, Mr. Knowland, and Mr. Malone) introduced the following joint resolution, which was read twice

"July 8 (legislative day, July 7), 1947

"Referred to the Committee on Public Lands

"JOINT RESOLUTION To authorize commencement of an action by the United States to determine interstate water rights in the Colorado River

"Whereas the development of projects for the use of water in the Lower Colorado River Basin is being hampered by reason of long-standing controversies among the States in said basin as to the meaning and effect of the Colorado River compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act, the California Limitation Act (Stats. Cal. 1929, ch. 16), various contracts executed by the Secretary of the Interior with States, public agencies, and

others in the Lower Basin of the Colorado River, and other documents and as to various engineering, economic, and other facts: Now, therefore, be it

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of avoiding a multiplicity of actions and expediting the development of the Colorado River Basin, the Attorney General is hereby directed to commence in the Supreme Court of the United States of America, against the States of Arizona, California, Nevada, New Mexico, and Utah, and such other parties as may be necessary or proper to a determination, a suit or action in the nature of interpleader, and therein require the parties to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the Lower Colorado River Basin."

Similar proposals were made in the House of Representatives.

It will be observed that although the Resolution purports at the beginning thereof only to *"authorize"* the commencement of the action, it winds up by "directing" the commencement of the action. In other words, the proponents of the Resolution realized that a mere authorization would not suffice, because if the Attorney General is convinced that the rights of the United States in the Colorado River are being jeopardized by the lower basin states of the Colorado basin, or any of the States of the Basin, the Attorney General is not only authorized to bring such an action, but it is his duty to do so, which duty it is presumed he will perform, and consequently there would be no necessity for a mere authorization. The effect of the Resolution, then, is to direct the Attorney General to bring the action irrespective of whether he determines there is any legal basis for it or not. This poses the question as to whether the legislative branch of the Government should substitute its judgment as to the necessity for legal action for that of the executive officer charged with the responsibility of determining such matters.

It will also be observed that the recitals of the Resolution, the basis of fact for it, state that the reason for the bringing of the suit or action is not that there is any long-standing, or any, controversy between the United States and the States of the lower basin States, or any of the States of the Basin, but that there are long-standing controversies only among the States in the lower Colorado River Basin as to the meaning and effect of the Colorado River Compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act, the California Limitation Act, various contracts executed by the Secretary of the Interior with States, public agencies, and others in the lower Basin of the Colorado River, and other documents, and as to various engineering, economic, and other facts. What would be the conclusion from this statement of facts, assuming them all to be true? Obviously, no other than that the meaning and effect of these documents should be judicially determined.

But those responsible for this Resolution were well aware of the fact that the Supreme Court of the United States, in the exercise of its original jurisdiction, will not render declaratory judgments, and, accordingly, the Resolution goes beyond the Recitals upon which it is based and directs that the Attorney General shall bring an action against the States of "Arizona, California, Nevada, New Mexico, and Utah, and such other parties as may be necessary or proper," which would include, though not specifically named, the other States of the Basin, namely, Colorado and Wyoming, not that the meaning and effect of the recited documents and other "facts" be determined, but that the rights to the use of water of the Colorado River system available for the lower Colorado River Basin be determined.

In order to make that determination, it would, of course, be necessary to determine the rights of all of the Basin States to the use of the water of the Colorado River, and so the necessary effect of the Resolution and the contemplated suit or action would be to throw the entire river into litigation before the Supreme Court, and, as specifically stated in the Resolution, to "require" all of the Basin States named in the Resolution, as well as those included without being named to "assert" and have determined their rights to the use of the water of the River.

It will further be observed that not only does the Resolution direct that a suit or action be brought against the States named and those necessarily included, but it directs the form of action that the Attorney General shall bring. It is not an interpleader action, because those responsible for the Resolution were aware that such a suit or action could not be brought. They knew full well that in such an action the moving party—that is, the United States—would have to allege that it has no interest in the fund in its possession, in this case

the River, and the United States could not allege that it has no interest in the River, and so it is to be, not a real interpleader action, but a suit or action "in the nature of an interpleader action." This raises the question as to why all this circumlocution? Is it because California and Nevada realize they have no real genuine present controversy between themselves, or either of them, against the other Basin States, or any of them, which would enable them to bring a suit or action in the Supreme Court of the United States, in the exercise of its original jurisdiction, as they have a constitutional right to do if they, or either of them, have such a controversy, and seek by means of "a suit or action by the United States against the States named or contemplated in the nature of an interpleader action" to give color to jurisdiction by the Court, which it would otherwise not have? In other words, if California or Nevada has a real genuine presently existing controversy with any of the Colorado River Basin States, why does not that State, or the two jointly, bring a suit or action in the Supreme Court of the United States to determine such controversy? Why do they, or either of them, request that the United States be required to bring suit or action against them and the other States?

Finally, it will be observed that the Resolution is for the purpose of avoiding a multiplicity of suits and expediting the development of the Colorado River Basin. Why its adoption and the bringing of the action or suit contemplated will avoid a multiplicity of suits and how such action will expedite the development of the Colorado River Basin (by which it must be assumed is meant the entire Basin, not merely the lower Colorado River Basin) is not stated. The assertion that a multiplicity of suits will be avoided is undoubtedly made because those who are responsible for the Resolution have in mind that some equitable ground must be stated to give color to the claim that the Court would have jurisdiction of the suit or action in the nature of an interpleader since they concede that a real interpleader action cannot be brought. This poses the question, what are the multiple suits that are to be avoided? And the statement that the action proposed will expedite the development of the Colorado River Basin raises the question as to whether in fact it will have that effect.

After this Resolution had been introduced and similar proposals made in the House of Representatives, the Colorado River Basin States Committee, an organization composed of official representatives of all the Colorado River Basin States, but from which California and Nevada had previously withdrawn, at a meeting held at Salt Lake City adopted the following Resolution:

"RESOLUTION RE M'CARRAN BILL ADOPTED BY COLORADO RIVER BASIN STATES COMMITTEE AT SALT LAKE CITY, UTAH, OCTOBER 1, 1947

"*Be it resolved*, by the Colorado River Basin States Committee representing the States of Arizona, Colorado, New Mexico, Utah, and Wyoming, and open to the States of California and Nevada, in meeting assembled in Salt Lake City, Utah, this first day of October 1947 that:

"WHEREAS, after thorough discussion, this Committee is of the opinion that the Resolution introduced in the Senate of the United States by Senators McCarran, Downey, Malone, and Knowland, S. J. Res. 145, which purports to be intended to authorize litigation over Colorado River Waters is unwise, in that no litigation is necessary, for the reason that California's rights to water of the Colorado River are clearly defined and forever limited by the California Limitation Act (chapter 16, California Statutes, 1929) to 4,400,000 acre-feet of apportioned water, plus not more than one-half of the surplus;

"*Now, therefore, be it resolved*, That this Committee opposes S. J. Res. 145 and urges its defeat; and

"*Be it further resolved*, That the Chairman and Secretary of this Committee are requested to send copies of this Resolution to the Chairman of the Sub-Committee on Irrigation and Reclamation of the Public Lands Committee of the Senate of the United States, and also to send copies of this Resolution to the Chairman of the Judiciary Committee of the House of Representatives of the United States, to the Secretary of the Interior, to the Commissioner of the Bureau of Reclamation, and to our Congressional delegations, and to take any and all means necessary or advisable to bring to the attention of any Committees which may consider said S. J. Res. 145, or any similar resolution, the action taken by this Committee."

Subsequently at a meeting of the Committee held at Denver, Colorado, a subcommittee of representatives of the five states was appointed to take such measures as are proper to carry out the purpose and intent of the foregoing

Resolution of the Committee. This Brief, then, in opposition to the adoption of Joint Resolution 145 (and similar proposals in the House of Representatives) is written in behalf of the States of Colorado, Wyoming, New Mexico, Arizona, and Utah, pursuant to the foregoing action taken by the Colorado River Basin States Committee, and to answer the questions developed by the foregoing analysis of the Resolution and in answer to the Brief of the States of California and Nevada in support of the Resolution heretofore filed in the Department of Justice, hereinafter referred to as the "California-Nevada Brief."

Before proceeding further with argument with respect to these matters, for the sake of clarity, we deem it proper to state certain physical facts connected with the Colorado River, and briefly to state the contents of certain of those documents recited in the Resolution, and commonly spoken of as the law of the river.

The Colorado River rises in the State of Colorado, flows through the northwestern portion of that State into the Southeastern part of Utah, where it is joined by the Green River, one of its principal tributaries, which rises in the State of Wyoming, and by the San Juan River, another of its principal tributaries, which rises in Colorado and flows through the Northwestern part of New Mexico. The Colorado River then flows into the Northern part of the State of Arizona, thence in a westerly direction until it reaches and forms the boundary between the States of Arizona and Nevada, continues in a southerly direction, still forming the boundary between these two states, thence still in a southern direction, forming the boundary between the States of Arizona and California, where it is joined by the Gila River, another of its principal tributaries, then in a southerly direction into Mexico and there empties into the Gulf of California. The River has many other tributaries which it is not deemed necessary to mention here.

Although the documents, which it is commonly said constitute the law of the Colorado River, are named in the Resolution, their contents are not disclosed so as to make it evident what controversies of long standing, or otherwise, it could be claimed exist as to their meaning and effect. For that reason, and the reason that their summarization will go far, as we conceive, to determine whether there is or can be any doubt as to their meaning, we deem it proper briefly to state their contents.

The Colorado River Compact is, of course, the fundamental document, because all subsequent legislation, compacts, and contracts relating to the River are necessarily limited by its provisions, whether therein expressly so stated or not, and generally they expressly so state. It had three prime purposes, (1) to make an equitable division and apportionment of the use of the water of the Colorado River System, defined in the Compact to be that portion of the River and its tributaries within the United States of America, so as "to remove causes of present and future controversies" (2) "to establish the relative importance of different beneficial uses of water," and (3) to protect the rights of the United States as to the River. It defines the term Colorado River Basin as "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." It divides the States of the Basin into two Divisions, the States of the "Upper Division," namely, Colorado, New Mexico, Utah, and Wyoming, and the States of the "Lower Division," namely, Arizona, Nevada, and California, and the States of the Basin are divided in another way as between the "Upper Basin" which includes "those parts of the States of Arizona, Colorado, New Mexico, Utah, and Wyoming within and from which waters naturally drain into the Colorado River System above Lee Ferry, and also all States located without the drainage area of the Colorado River System which are now or shall hereafter be beneficially served by waters diverted from the system above Lee Ferry." (The crossing of the Colorado River known as Lee Ferry is in Arizona and is defined in the compact as "a point in the main stream * * * one mile below the mouth of the Paria River," one of the tributaries of the Colorado River, and the "Lower Basin" which includes "those parts of the States of Arizona, California, Nevada, New Mexico, and Utah within and from which waters naturally drain into the Coloradio River System below Lee Ferry, and also all parts of said states located without the drainage area of the Colorado River System which are now or shall hereafter be beneficially served by waters diverted from the system below Lee Ferry.")

It is further provided that the term "domestic use" shall include the use of water for household, stock, municipal, mining, milling, industrial, and other like purposes, but shall exclude the generation of electrical power.

The Compact then proceeds in Article III to divide the water and is quoted in full, except in subparagraph (g), which merely provides the method for the further apportionment provided in subparagraph (f), and it is not deemed necessary to state its contents herein, as follows:

"Article III

"(a) There is hereby apportioned from the Colorado River system in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.

"(b) In addition to the apportionment in paragraph (a), the Lower Basin is hereby given the right to increase its beneficial consumptive use of such waters by one million acre-feet per annum.

"(c) If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River System, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be equally borne by the Upper Basin and the Lower Basin, and whenever necessary the States of the Upper Division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provided in paragraph (d).

"(d) The States of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact.

"(e) The States of the Upper Division shall not withhold water, and the States of the Lower Division shall not require the delivery of water which cannot reasonably be applied to domestic and agricultural uses.

"(f) Further equitable apportionment of the beneficial uses of the waters of the Colorado River System unapportioned by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October first, 1963, if and when either Basin shall have reached its total beneficial consumptive use as set out in paragraphs (a) and (b)."

It is not deemed essential for the purposes of this Brief to quote any of the other provisions of the Compact, except to say that Subparagraph (a) of Article IV recites that the Colorado River has ceased to be navigable for commerce, and the reservation of its water for navigation, would seriously limit the development of its basin, the use of its waters for purposes of navigation shall be subservient to the uses of such waters for domestic, agricultural, and power purposes, and Subparagraph (b) of that Article, which reads as follows:

"Subject to the provisions of this compact, water of the Colorado River System may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricutlural and domestic purposes and shall not interfere with or prevent use for such dominant purposes."

Article VII, which reads as follows:

"Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes."

and Article VIII which reads as follows:

"Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact. Whenever storage capacity of 5,000,000 acre-feet shall have been provided on the main Colorado River within or for the benefit of the Lower Basin, then claims of such rights, if any, by appropriators or users of water in the Lower Basin against appropriators or users of water in the Upper Basin shall attach to and be satisfied from water that may be stored not in conflict with Article III.

"All other rights to beneficial use of waters of the Colorado River System shall be satisfied solely from the water apportioned to that basin in which they are situate."

It is important to note that because of the topographical situation and because of the obligations of delivery of the water at Lee Ferry, a distinction is drawn between the "Upper Division" and the "Lower Division" of States, and between the "Upper" and "Lower" Basn States, with the result that a part of Arizona is in the Lower Basin and a part thereof in the Upper Basin, and a part of New Mexico is in the Upper Basin and a part in the Lower Basin, and a part of Utah is in the Upper Basin and a part in the Lower Basin.

The Colorado River Compact has now been ratified by the Congress and by all of the Basin States, and is binding alike upon the United States and each and all of said States. Indeed, so far as the United States is concerned, the Congress, before it was approved, was fully cognizant of all its interests involved. Herbert Hoover (who represented the United States on the Compact Commission, and who was its Chairman), in his letter of transmittal of the Compact to the Speaker of the House of Repreesntatives, fully set forth the interests of the United States in the River as follows:

"(1) Its interest in the Colorado River as a navigable stream.

"(2) Its relation with the Republic of Mexico.

"(3) Its interest as proprietor of public lands and as owner of irrigation works.

"(4) Its duties in relation to Indian tribes.

"(5) Its interest under the Federal water power act."

and discussed them at length, concluding with his opinion that the Compact does not adversely affect any interest of the United States. When Congress ratified the Compact, then, with full knowledge of its interests involved, it must be presumed to have determined that all of its interests were amply protected by the Compact.

Recently, and postdating all the documents referred to in the Resolution, the Mexican Treaty which the Compact contemplated would be entered into, as above set out, has been entered into.

It is not necessary to set out all the terms thereof because in the California and Nevada brief, those States explicitly make no claim that the whole or any part thereof affects their rights in the river; it is only necessary to state the amount of water to which Mexico is entitled to receive from the Colorado River. In that regard the treaty in article 10 allots to Mexico:

(*a*) A guaranteed annual quantity of 1,500,000 acre-feet (to be delivered in accordance with certain conditions and specifications as to point and rate).

(*b*) Any other quantities arriving at the Mexican points of diversion, with the understanding that in any year in which, as determined by the United States section, there exists a surplus of waters of the Colorado River in excess of the amount necessary to supply users in the United States and the guaranteed quantity of 1,500,000 acre-feet annually to Mexico, the United States undertakes to deliver to Mexico * * * additional waters of the Colorado River system to provide a total quantity not to exceed 1,700,000 acre-feet a year. Mexico shall acquire no right * * * by use of the waters of the Colorado River System for any purpose whatsoever, in excess of 1,500,000 acre-feet annually.

In the event of extraordinary drought or serious accident to the irrigation system in the United States, thereby making it difficult for the United States to deliver the guaranteed quantity of 1,500,000 acre-feet a year, the water allotted to Mexico under subparagraph (a) of this article will be reduced in the same proportion as consumptive uses in the United States are reduced.

The Boulder Canyon Project Act is the next document referred to in the Resolution (act of December 21, 1928, c. 42, 45 Stat. 1057, U. S. C. A. 43, paragraph 617 and succeeding subdivisions thereof). That act authorizes the construction of the dam now called the Hoover Dam (act of April 30, 1947, c. 46, 61 Stat. 561, see note, U. S. C. A. 43, paragraph 617), and the reservoir created thereby, since known as Lake Mead, and a main canal located entirely in the United States, connecting the Laguna Dam, or other suitable diversion dam, which diversion dam is now known as Imperial Dam, and which canal is now known as the Imperial Canal, with Imperial and Coachella Valleys. In addition to providing for the dam's construction and the reservoir created thereby, so far as is material here, it provided that the act should not take effect until the State of California by act of its legislature, "shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of the act that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of the Act, and all water necessary for the supply of any rights which

may now exist (December 21, 1928) shall not exceed four million four hundred 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 water unapportioned by said compact, such uses always to be subject to the terms of said Compact."

The act further provides that—

"The Secretary of the Interior is hereby authorized, under such general regulations as he may prescribe, to contract for the storage of water in said reservoir and for the delivery thereof at such points on the River and on said canal as may be agreed upon, for irrigation and domestic uses, and generation of electrical energy and delivery at the switchboard to States, municipal corporations, political subdivisions, and private corporations of electrical energy generated at said dam," * * *

It is not deemed necessary to recite the terms of the Boulder Canyon Project Adjustment Act, next referred to in the Resolution, because it does not affect any of the matters herein discussed, nor is it necessary to set out any of the provisions of the California Limitation Act (Stats. California 1929, Ch. 16), except to say that it complies precisely with the conditions set out in the Boulder Canyon Project Act, nor is it necessary to set out any of the various contracts executed by the Secretary of the Interior and referred to in the Resolution, except to say that each and all of them are specifically made subject to the terms of the Coorado River Compact, and the Boulder Canyon Project Act, and to state that the contract entered into between the Department of the Interior and the State of Arizona limits the amount of consumptive use of the Colorado River by Arizona to 2,800,000 acre-feet per annum, and the contract with the State of Nevada limits its consumptive use to 300,000 acre-feet per annum, the total aggregate of which, together with the 4,400,000 acre-feet per annum to which California is limited by the Boulder Canyon Project Act, and her acceptance of that limitation by the California Limitation Act, is the amount of water allocated to the Lower Basin States by the above quoted Article III, Subparagraph (a) of the Colorado River Compact.

These statements are pertinent and will become more pertinent as we proceed, as bearing upon the administrative construction of the Colorado River Compact by the United States through the Department of Interior, particularly with relation to the 1,000,000 acre-feet of water per annum referred to in Article III (b), as being additional to the 7,500,000 acre-feet per annum allocated by Article III (a) to the Upper and Lower Basin States. In other words, the question arises as to why this total is 7,500,000 feet if in administering the Act the Secretary of the Interior construed that any of the Lower Basin States other than Arizona had any interest in the 1,000,000 acre-feet mentioned in Article III (b) commonly spoken of as "III (b) water."

It is not necessary for the purposes of this Brief to state any other facts, except to say that at the present time none of the Colorado River Basin States, including the States of Nevada and California, have approached the consumptive use of the water of the Colorado River apportioned to it by the Colorado River Compact. In fact, so far as the State of California is concerned, it is not now using in excess of 3,000,000 acre-feet, and the State of Nevada is using only a very small portion of the 300,000 acre-feet allocated to it. And there is flowing into Mexico a large amount of water in excess of the 1,500,000 acre-feet of water per annum to which it is entitled, indeed, the total is approximately 8,000,000 acre-feet per annum.

II. ARGUMENT

1. The jurisdiction of the Supreme Court, in the exercise of its original jurisdiction, so far as material for our consideration, extends only to justiciable controversies between the United States and one or more States, and to controversies between two or more States

Article III Section 2 of the Constitution of the United States provides, so far as material here, "The judicial power shall extend to * * * controversies to which the United States shall be a Party;—to controversies between two or more States." That section further provides "In all cases * * * in which a State shall be a party, the Supreme Court shall have original jurisdiction."

The Supreme Court of the United States has had occasion frequently to pass upon the meaning of the foregoing constitutional provisions in suits or actions between States, and to fix the limits of its jurisdiction thereunder. It has held that it will not grant relief against a state unless the complaining state shows

an existing or presently threatened injury of serious magnitude. (*Missouri* v. *Illinois* (200 U. S. 496, 521); *New York* v. *New Jersey* (256 U. S. 296, 309); *North Dakota* v. *Minnesota* (263 U. S. 365, 374); *Connecticut* v. *Massachusetts* (282 U. S. 660, 669); *Alabama* v. *Arizona* (291 U. S. 286, 291); *Washington* v. *Oregon* (297 U. S. 517, 528).)

A potential threat of injury is insufficient to justify an affirmative decree against a state. The Court will not grant relief against something feared as liable to occur at some future time. (*Alabama* v. *Arizona* (291 U. S. 286, 291).)

The rule that judicial power does not extend to the determination of abstract questions has been announced in numerous cases. (*Ashwander* v. *Tennessee* (297 U. S. 288, 324); *New York* v. *Illinois* (274 U. S. 488); *U. S.* v. *West Virginia* (295 U. S. 463).)

For there to be a justiciable controversy it must appear that the complaining state has suffered a loss through the action of the other state, furnishing a claim for judicial redress, or asserts a right which is susceptible of judicial enforcement according to the accepted principles of jurisprudence (*Massachusetts* v. *Missouri* (308 U. S. 1, 16). The mere fact that a state is plaintiff is not enough. (*Florida* v. *Mellon* (273 U. S. 12, 16).) An injunction will issue to prevent existing or presently threatened injuries but will not be granted against something merely feared as liable to occur at some indefinite time in the future. (*Connecticut* v. *Massachusetts*. (282 U. S. 660, 674).) The Court has repeatedly said that it will not issue declaratory decrees. (*Arizona* v. *California* (283 U. S. 423, 473); *United States* v. *West Virginia* (295 U. S. 463, 474); *Alabama* v. *Arizona* (291 U. S. 286, 291); *Massachusetts* v. *Missouri* (308 U. S. 1, 15).) Inchoate rights dependent upon possible future development furnish no basis for a decree in an interstate suit. (*Arizona* v. *California* (283 U. S. 423, 462).)

In discussing this constitutional provision the Court said in *Texas* v. *Florida* (306 U. S. 398, 405, 59 S. Ct. 536):

"So that our constitutional authority to hear the case and grant relief turns on the question of whether the issue framed by the pleadings constitutes a justiciable 'case' or 'controversy' within the meaning of the constitutional provision, and whether the facts alleged and found afford an adequate basis for relief according to the accepted doctrines of the common law or equity systems of jurisprudence, which are guides to decision of cases within the original jurisdiction of this Court."

Many years earlier in *Louisiana* v. *Texas* (176 U. S. 1, 15, 20 S. Ct. 251), the Court declared:

"But it is apparent that the jurisdiction is of so delicate and grave a character that it was not contemplated that it would be exercised save when the necessity was absolute and the matter in itself properly justiciable."

The Court will not grant relief against something feared as liable to occur at some future time. In *Alabama* v. *Arizona* (291 U. S. 286, 291, 54 S. Ct. 399), it was said:

"This Court may not be called upon to give advisory opinions or to pronounce declaratory judgment * * *. Its jurisdiction in respect of controversies between states will not be exerted in the absence of absolute necessity."

In the New River Case (*U. S.* v. *Appalachian Electric Power Co.* (311 U. S. 377, 432)) the Court said:

"To predetermine, even in the limited field of water power, the rights of different sovereignties, pregnant with future controversies, is beyond the judicial function."

So far we have cited all the leading cases between States decided by the Supreme Court of the United States, in which the question of the existence of a justiciable controversy within the Court's jurisdiction was raised, except four, of which three will now be considered, and the fourth, *Arizona* v. *California* (298 U. S. 558), which is cited in the last of the three cases will be considered later herein. The first is the case of *Kansas* v. *Colorado* (206 U. S. 46), in which the Court said "that the appropriation of the waters of the Arkansas by Colorado, for purposes of irrigation, has diminished the flow of water into the state of Kansas; that the result of that appropriation has been the reclamation of large areas in Colorado, transforming thousands of acres into fertile fields, and rendering possible their occupation and cultivation when otherwise they would have continued barren and unoccupied; that while the influence of such diminution has been of perceptible injury to portions of the Arkansas Valley in Kansas, particularly those portions closest to the Colorado line, yet, to the great body of the valley it has worked little, if any, detriment, and regarding the interests of both states, and the right of each to receive benefit through irrigation and in any other manner from the waters of this stream, we are not satisfied that Kansas

has made out a case entitling it to a decree. At the same time it is obvious that if the depletion of the waters of the river by Colorado continue to increase there will come a time when Kansas may justly say that there is no longer an equitable division of benefits, and may rightfully call for relief against the action of Colorado, its corporations and citizens, in appropriating the waters of the Arkansas for irrigation purposes."

The bill of Kansas was dismissed without prejudice to its right to institute new proceedings "whenever it shall appear that through a material increase in the depletion of the waters of the Arkansas by Colorado, its corporations, or citizens the substantial interests of Kansas are being injured to the extent of destroying the equitable apportionment of benefits between the two states resulting from the flow of the river." In other words, the Court said that at the time of bringing the suit, Kansas had failed to show any existing substantial injury, and that there must be, to give the Court jurisdiction, and that the fact that there might come a time when there would be such injury is not sufficient, but when that time came, and then only, could Kansas bring her suit.

Subsequently Colorado brought a suit against Kansas (320 U. S. 383) to protect it and its citizens in the beneficial use of the waters of the Arkansas River as determined by the former decree of the Court. Kansas answered, and in its answer claimed that Colorado users had largely increased their appropriations and diversions and threatened to increase them, "to (as the Court put it) the material damage of Kansas' substantial interests." The Court said:

"In such disputes as this, the court is conscious of the great and serious caution with which it is necessary to approach the inquiry whether a case is proved. Not every matter which would warrant resort to equity by one citizen against another would justify our interference with the action of a state, for the burden on the complaining state is much greater than that generally required to be borne by private parties. Before the court will intervene the case must be of serious magnitude and fully and clearly proved. And in determining whether one state is using, or threatening to use, more than its equitable share of the benefits of a stream, all the factors which create equities in favor of one state or the other must be weighed *as of the date when the controversy is mooted.*" [Italics ours.]

The Court concluded that Kansas had not sustained her allegation that Colorado had materially increased her use of the River and that such increase had worked a serious detriment to the substantial interests of Kansas.

The case of *Nebraska* v. *Wyoming* (325 U. S. 588), involving the North Platte River, is the latest case in which the question of jurisdiction was raised. Colorado in that case claimed that she was not injuring Nebraska, because there was a surplus of water in the River, but the Court denied the motion, and in doing so said:

"What we have then is a situation where three States assert against a river, whose dependable natural flow during the irrigation season has long been over appropriated, claims based not only on present uses but on projected additional uses as well. The various statistics with which the record abounds are inconclusive in showing the existence or extent of actual damage to Nebraska. But we know that deprivation of water in arid or semiarid regions cannot help but be injurious. That was the basis for the apportionment of water made by the Court in *Wyoming* v. *Colorado supra* (259 U. S. 419). In that case no jurisdictional question was raised. 'There the only showing of injury or threat of injury was the inadequacy of the supply of water to meet all appropriative rights. As much if not more is shown here. If this were an equity suit to enjoin threatened injury, the showing made by Nebraska might possibly be insufficient. But *Wyoming* v. *Colorado, supra,* indicates that where the claims to the water of a river exceed the supply a controversy exists appropriate for judicial determination. If there were a surplus of unappropriated water, different considerations would be applicable.' Cf. *Arizona* v. *California* (298 U. S. 558, 80 L. Ed. 1331, 56 S. Ct. 848). But where there is not enough water in the river to satisfy the claims asserted against it, the situation is not basically different from that where two or more persons claim the right to the same parcel of land. The present claimants being States we think the clash of interests to be of that character and dignity which makes the controversy a justiciable one under our original jurisdiction."

Three judges dissented, because they did not consider that the facts disclosed any present injury which would justify the court assuming jurisdiction.

We have considered these cases in detail, not that any new principle is announced in them. On the contrary, the same principle is reaffirmed in them all, including this latest decision, namely, there must be a present existing controversy

between the parties. If that exists, it suffices, although it may be strengthened if in addition there is a threatened additional injury, as in the last case, the construction of the Kendrick dam in Wyoming, which had been authorized by Congress.

The question, then, is whether the facts as to the Colorado River bring it within the case of *Nebraska* v. *Wyoming* or *Kansas* v. *Colorado;* in other words, whether there is any present controversy of such a character relating to the river that the Supreme Court will assume jurisdiction of it.

It will be observed that all the cases cited involve claimed controversies between States except one, namely, the *United States* v. *West Virginia, cited supra.* However, the language in the Constitution is precisely the same with respect to the jurisdiction of the Court in suits between States and those between the United States and a State, and consequently the Court holds precisely the same in both classes of suits. The following language from the case is pertinent:

"But there is presented here, as respects the State, no case of an actual or threatened interference with the authority of the United States. At most, the bill states a difference of opinion between the officials of two governments, whether the rivers are navigable and, consequently, whether there is power and authority in the federal government to control their navigation, and particularly to prevent or control the construction of the Hawks Nest dam, and hence whether a license of the Federal Power Commission is prerequisite to its construction. There is no support for the contention that the judicial power extends to the adjudication of such differences of opinion. Only when they become the subject of controversy in the constitutional sense are they susceptible of judicial determination. See *Nashville, C. & St. L. R. Co.* v. *Wallace* (288 U. S. 249, 259 77 L. ed. 730, 733, 53 S. Ct. 345, 87 A.L.R. 1191). Until the right asserted is threatened with invasion by acts of the State, which serve both to define the controversy and to establish its existence in the judicial sense, there is no question presented which is justiciable by a federal court. See *Fairchild* v. *Hughes* (258 U. S. 126, 129, 130, 66 L. Ed. 499, 504, 505, 42 S. Ct. 274); *Texas* v. *Interstate Commerce Commission* (258 U. S. 158, 162, 66 L. ed. 531, 537, 42 S. Ct. 261); *Massachusetts* v. *Mellon, supra* (262 U. S. 483, 485, 67 L. ed. 1083, 1084, 43 S. Ct. 597); *New Jersey* v. *Sargent, supra* (269 U. S. 328, 339, 340, 70 L. ed. 289, 294, 295, 46 S. Ct. 122).

"General allegations that the State challenges the claim of the United States that the rivers are navigable, and asserts a right superior to that of the United States to license their use for power production, raise an issue too vague and ill-defined to admit of judicial determination. They afford no basis for an injunction perpetually restraining the State from asserting any interest superior or adverse to that of the United States in any dam on the rivers, or in hydroelectric plants in connection with them, or in the production and sale of hydroelectric power. The bill fails to disclose any existing controversy within the range of judicial power. See *New Jersey* v. *Sargeant, supra* (339, 340)."

The Resolution, as heretofore herein pointed out, not only instructs the Attorney General to bring a suit, but it specifies the particular form of the suit. It is to be one in the nature of an interpleader, thus expressly conceding as is done in the Nevada-California Brief, that a bill in interpleader would not lie, because the United States cannot say it has no interest in the Colorado River. As shown by the Nevada-California Brief, the proponents of the Resolution seized upon the decision of the Supreme Court in the case of *Texas* v. *Florida* (306 U. S. 398). The proponents, we think, have done exactly what Justice Frankfurter in his dissenting opinion, in which Justice Black concurred, predicted would be done. He said:

"The authority which the Constitution has committed to this Court over 'Controversies between two or more States, serves important ends in the working of our federalism. But there are practical limits to the efficacy of the adjudicatory process in the adjustment of interstate controversies. The limitations of litigation—its episodic character, its necessarily restricted scope of inquiry, its confined regard for considerations of policy, its dependence on the contingencies of a particular record, and other circumscribing factors—often denature and even mutilate the actualities of a problem and thereby render the litigious process unsuited for its solution. Considerations such as these have from time to time led this Court or some of its most distinguished members either to deprecate resort to this Court by states for settlement of their controversies (see *New York* v. *New Jersey* (256 U. S. 206, 313, 65 L. ed. 937, 945, 41 S. Ct. 492) or to oppose assumption of jurisdiction (see Mr. Chief Justice Taney in *Pennsylvania* v. *Wheeling & B. Bridge Co.* (13 How. 518, 579, 592, 14 L. ed. 249, 274, 280) in connection with the Act of August 31, 1852 (10 Stat. at L. 112, Chap. 112) and *Pennsylvania* v. *Wheeling & B. Bridge Co.* (18 How. 421, 15 L. ed. 435; Mr.

Justice Brandeis in *Pennsylvania* v. *West Virginia* (262 U. S. 553, 605, 67 L. ed. 1117, 1135, 43 S. Ct. 658, 32 A. L. R. 300))."

He further said:

"Jurisdictional doubts inevitably lose force once leave has been given to file a bill, a master has been appointed, long hearings have been held, and a weighty report has been submitted. And so, were this the last as well as the first assumption of jurisdiction by this Court of a controversy like the present, even serious doubts about it might well go unexpressed. But if experience is any guide, the present decision will give momentum to kindred litigation and reliance upon it beyond the scope of the special facts of this case. To be sure, the Court's opinion endeavors to circumscribe carefully the bounds of jurisdiction now exercised. But legal doctrines have, in an odd kind of way, the faculty of self-generating extension. Therefore, in pricking out the lines of future development of what is new doctrine, the importance of these issues may make it not inappropriate to indicate difficulties which I have not been able to overcome and potential abuses to which the doctrine is not unlikely to give rise."

In that case the State of Texas, claiming the right to impose death taxes on the estate of the decedent Green because of his domicile in that State, brought a suit against the States of Florida, New York, and Massachusetts, alleging that each of them made similar claims to that of Texas, the total of which would exceed the assets of the estate after paying the Federal estate tax, and that suits might be brought in the other states which would be binding upon the estate, and bring about the entire depletion of the estate thereby. The Court itself raised the question as to whether the Court had jurisdiction of the cause and answered its own query as follows:

"The peculiarity of the strict bill of interpleader was that the plaintiff asserted no interest in the debt or fund, the amount of which he placed at the disposal of the court and asked that the rival claimants be required to settle in the equity suit the ownership of the claim among themselves. But as the sole ground for equitable relief is the danger of injury because of the risk of multiple suits when the liability is single, *Farley* v. *Blood* (30 N. H. 354, 361); *Bedell* v. *Hoffman* (2 Paige, 199, 200); *Mohawk & H. River R. Co.* v. *Clute* (4 Paige, 384, 392); *Atkinson* v. *Manks* (1 Cow. 691, 703); *Story, Eq.* (Pl. 10th ed. Secs. 291, 292), and as plaintiffs who are not mere stakeholders may be exposed to that risk, equity extended its jurisdiction to such cases by the bill in the nature of interpleader. The essential of the bill in the nature of interpleader is that it calls upon the court to exercise its jurisdiction to guard against the risks of loss from the prosecution in independent suits of rival claims where the plaintiff himself claims an interest in the property or fund which is subjected to the risk. The object and ground of the jurisdiction are to guard against the consequent depletion of the fund at the expense of the plaintiff's interest in it and to protect him and the other parties to the suit from the jeopardy resulting from the prosecution of numerous demands, to only one of which the fund is subject. While in point of law or fact only one party is entitled to succeed, there is danger that recovery may be allowed in more than one suit. Equity avoids the danger by requiring the rival claimants to litigate before it the decisive issue, and will not withhold its aid where the plaintiff's interest is either not denied or he does not assert any claim adverse to that of the other parties, other than the single claim, determination of which is decisive of the rights of all." (Citing cases.)

"When by appropriate procedure, a court possessing equity powers is in such circumstances asked to prevent the loss which might otherwise result from the independent prosecution of rival but mutually exclusive claims, a justiciable issue is presented for adjudication which, because it is a recognized subject of the equity procedure which we have inherited from England, is a 'case' or 'controversy' within the meaning of the Constitutional provision; and when the case is one prosecuted between states, which are the rival claimants, and the risk of loss is shown to be real and substantial, the case is within the original jurisdiction of this Court conferred by the Judiciary Article." (Citing cases.)

It is impossible to conceive how there could from any point of view under the situation presented as to the Colorado River be a multiplicity of suits which is the only ground upon which the jurisdiction of the Court was predicated in the case of *Texas* v. *Florida*. Whatever suit be brought, and by either the United States or a State, any State whose rights are affected would either be parties or would have to voluntarily appear to protect their interests therein, and so there would only be the one suit. But we prefer to rest our opposition to the resolution upon a more fundamental basis, namely, that there is no existing justiciable controversy between the United States and the States of the Lower Colorado Basin, or any State in it or in the entire Basin, which would enable the

Attorney General to invoke the original jurisdiction of the Supreme Court, because if there is no such controversy that fact would prevent the bringing of the suit, whatever the form of action.

2. There is no present justiciable controversy between the United States and the Colorado River Basin States, or any of them, or between any of said States

It will not be disputed that the adoption of the resolution by the Congress will not give the Court jurisdiction which the Constitution does not vest in the Court, for as illusrated in the opinion in the case of *Texas* v. *Florida, supra*, the Court itself will determine whether it has jurisdiction.

We may assume, we take it, that the California-Nevada Brief, states the case as strongly for the proponents of the Resolution as it could be stated, and the only claim made herein is that "Arizona is asking the Secretary of the Interior to approve S. 1175 (the Central Arizona Project, which would entail the delivery of over 1,000,000 acre-feet of water from Lake Mead) now pending before the Congress."

Well, what of it? Suppose the Secretary of the Interior is of opinion S. 1175 should be enacted, or that it should not be, or is doubtful about the matter, or has no opinion at all. Does that opinion rise to the dignity of an existing justiciable controversy? Obviously not, and his opinion is precisely in the same category as the opinions in the case of *United States* v. *West Virginia*, which the Court held did not rise to the dignity of a controversy, because whatever be his opinion, he can take no action until the Congress acts. It may act unfavorably on the bill, then there could be no controversy even at that time, much less now. Suppose it should act favorably, and the bill should become law, would the United States then want to become the moving instrumentality by which California might assert that Congress should not have passed the law? We submit not. It should require California to move to assert its right by bringing an action against Arizona, and assert that it was being injured in its rights by virtue of the authorized project. In view of the fact that California is not now suing, and will not probably at that time be using the entire quantity of water, the right to which is allocated to her by the Colorado River Compact, the Boulder Canyon Project Act, and the California Limitation Act, namely, 4,400,000 acre-feet per annum, it is doubtful that California could state a justiciable controversy between her and the State of Arizona, but if she could then there is no reason why she should not bring the action. But California will say, as is said in the California-Nevada Brief, that she can't bring such an action, because the United States would be an indispensable party to the suit and without its consent, the United States cannot be sued, and in support of that contention relies upon the case of *Arizona* v. *California, et al.* (298 U. S. 558).

In that case Arizona sought to file a bill of complaint against California and the other basin states to have "the quantities of Arizona's equitable share of water flowing in the Colorado River fixed * * * and that petitioner's title thereto be quited." All of the defendants filed motions to dismiss upon the ground, amongst others, that the United States was an indispensable party. The Court, however, did discuss the question as to whether the bill, which asked that Arizona's share in the future of the unappropriated water of the River be determined, stated a justiciable controversy, which is the reason why the Court in the case of *Nebraska* v. *Wyoming, supra*, referred to this case in the above-quoted portion of the opinoln as follows:

"If there were a surplus of unappropriated water, different consideration would be applicable." Cf. *Arizona* v. *California*.

In other words, in the case of *Nebraska* v. *Wyoming*, the sole basis of the Court's decision that it had jurisdiction to determine the rights of the States in the North Platte River was that there was not enough water in the River at the time the suit was brought to satisfy the existing rights of the interested States in the River—that is what made a justiciable controversy, but where, as in the case of the Colorado River there is at this time a surplus over and above the present rights of the users, there cannot now be a justiciable controversy.

But the reason why this case is important, in this particular phase of our discussion is whether, assuming that the Central Arizona Project has been authorized, and assuming that at that time California and Nevada could state a justiciable controversy in a suit against Arizona, would the United States be in an indispensable party? It will be noted that in such a suit the issues would be limited to whether Arizona on the one side and California and Nevada on the other have as between them certain rights in the River, and under such

circumstances it would not seem that the United States would be an indispensable party, as the Court held was the case in the cited case, because in that case to determine what her future rights would be as against all the other States and the United States, all the States and the United States would be indispensable parties. But if it should be determined otherwise, all that California would be entitled to ask at that time is that the United States consent to be sued, not that in advance of those contingencies the United States initiate litigation that would throw the whole River in litigation.

On April 5th of this year the Supreme Court of the United States rendered a decision in the case of *Peggy Shade*, a full-blood Cherokee Indian, Roll No. 14147, v. *Lucy Downing, Now Foster; Nancy Downing, Now Taylor; and Polly Downing, Now Williams* (68 S. Ct. 702), which clearly points out the circumstances under which the United States is an indispensable party. This case was before the Court on Certificate from the United States Circuit Court of Appeals from the Tenth Circuit, and was an action to determine the heirship of a Cherokee Indian. In that case the Supreme Court referred to a case entitled "*United States* v. *Hellard*" (322 U. S. 363, 365), as follows:

"We held in *United States* v. *Hellard*, *supra*, that the United States is a necessary party to partition proceedings brought under Section 2 of that Act. That holding was based upon the direct and important interests of the government in the course and outcome of partition proceedings, interests flowing from the statutory restrictions on alienation of allotted lands. Lands partitioned in kind to full-blood Indians remain restricted under Section 2. Thus the United States, as guardian of the Indians, is directly interested in obtaining a partition in kind, where that course conforms to its policy of preserving restricted lands for the Indians, or, if a sale is desirable, in insuring that the best possible price is obtained. Moreover, if the lands are both restricted and tax-exempt, it has an interest in the reinvestment of the proceeds of the sale in similarly tax-exempt and restricted lands. Act of June 30, 1932, 47 Stat. 474, 25 U. S. C. Sec. 409a. And there is a further interest in protecting the preferential right of the Secretary of the Interior to purchase the land for another Indian under Sec. 2 of the Act of June 26, 1936, 49 Stat. 1967. For these reasons we held in *United States* v. *Hellard*, *supra*, that the United States was a necessary party to the partition proceedings, even absent a statutory requirement to that effect.

"Heirship proceedings, however, present quite different considerations. They involve no governmental interests of the dignity of those involved in partition proceedings. Restrictions on alienation do not prevent inheritance. *United States* v. *Hellard*, *supra*, p. 365. Death of the allottee operates to remove the statutory restrictions on alienation and the determination of heirship does not of itself involve a sale of land. The heirship proceeding involves only a 'determination of the question of fact as to who are the heirs of any deceased citizen allottee of the Five Civilized Tribes.' As such, it is little more than an identification of those who by law are entitled to the lands in question and does not directly affect the restrictions on the land or the land itself. Important as these proceedings may be to the stability of Indian Land titles, they are of primary interest only to the immediate parties. The United States is, indeed, hardly more than a stakeholder in the litigation.

"That is the distinction between partition and heirship proceedings which we recognized in *United States* v. *Hellard*, *supra* (p. 365–366). We adhere to it. Accordingly the question certified is answered 'No.'"

This is pertinent in the present situation for two reasons. First, an action between the State of California and the State of Arizona which only involves the rights between them is not such an action that requires the United States to be made party, and secondly, the doctrine announced in the *Hellard* and *Shade* cases means that no matter what the form of action, in the *Hellard* case it was an action in partition, the United States in order to invoke the jurisdiction of the Supreme Court must have a direct and immediate interest in the controversy, or in other words, it must state a juticiable controversy and there is not and cannot be, as we have pointed out, any present justiciable controversy between the United States and any of the Basin States.

As we have shown there is not only now no controversy between the United States and all or any of the Colorado River Basin States suggested by the California-Nevada Brief, but there are in fact none, nor could there be, because those rights were protected in the Colorado River Compact, as herein heretofore in our preliminary statement of facts pointed out and they are not and could not be now questioned by any of the Basin States.

And here, so far as the legal phases of the problem are concerned, the Brief might end were it not for the fact that the California-Nevada Brief claims certain disputes to exist between those States and the State of Arizona, and that because of them the United States should bring the suit contemplated by the Resolution. As we have already argued, such disputes would not justify such a suit by the United States as is contemplated by the Resolution even if such disputes were of such a character as to constitute them justiciable controversies, but we also say that none of them are of such a character.

The California-Nevada Brief states that "no problems requiring present disposition are believed to exist between the 'Upper and Lower Basin.'" This is a cautious statement. It implies that in the future California and Nevada may be able to dig up some, but it suffices to show what is the fact, that there are no existing justiciable controversies between the two Basins. That lets out all of Colorado and Wyoming and those portions of Arizona, Utah, and New Mexico in the "Upper Basin." The Brief says 'No specific question is known to exist relative to the claims of Nevada, Utah, and New Mexico." Here again the same caution. But it suffices, because it lets out the rest of Utah and New Mexico, and that is the fact, because those portions of Utah and New Mexico must receive their water out of the 2,800,000 acre-feet allocated to Arizona by the contract between the United States and that State, and there is no controversy between Utah and New Mexico and Arizona on that score.

It also lets out Nevada, so the question arises as to why Nevada joins California in proposing the Resolution and joins in the Brief. Notwithstanding they contradict the earlier statement, this is attempted to be answered by three later paragraphs of the Brief, which out of the 73 pages of the Brief set forth Nevada's claims. In them it is again stated that Nevada's share of water—the 300,000 acre-feet contracted for between the United States and Nevada—have never been questioned by either California or Arizona yet "Nevada is seriously concerned as to the effect of political processes upon the stimulation of projects and development in the other States, with consequent repercussions as to Nevada's allotment." If that is a definition of what constitutes a present justiciable controversy, then all the decisions of the Supreme Court cited above will have to be reversed.

Then follows the one and only claim of grievance which Nevada asserts, and again it is that same S. 1175, which is California's sole grievance, that Congress may authorize the Central Arizona Project. Nevada is concerned because, as the Brief says, that project contemplates the operation of a power plant at the proposed Bridge Canyon Dam (located immediately above Lake Mead), and its operation will have the effect of reducing the power available to Nevada at the Hoover Dam from which Nevada gets its power under contract with the United States through the Secretary of the Interior, and the project also contemplates "ultimately" diverting over a million acre-feet which will reduce the quantity of water at Hoover Dam available for power purposes and thereby affect the quantity and cost of power to Nevada thereat. Our answer to the claim of Nevada is precisely the same as that already made to the claim of California with respect to S. 1175 heretofore herein set out, and which we do not think needs repeating here, except to add that, as pointed out in our preliminary statement of facts, under the Colorado River Compact, power is subservient to the right to use the water of the Colorado River for irrigation and domestic purposes, and therefore the incidental loss of water available for the generation of power by projects necessary for the uses of the States other than Nevada for irrigation and domestic uses, is a matter as to which neither California or Nevada has a right to object, nor has either a right to anticipate that the Congress will authorize projects which will violate that Compact, which is binding alike upon the United States as well as all the States parties to it.

The entire remainder of the California-Nevada Brief is devoted to claims exclusively between California and Arizona, and the conclusion is irresistible that those disputes are really all there are between any of the States in the Basin. They are stated to be three in number, exclusive "a variety of more or less minor or detailed divergencies of opinion," otherwise not specified in the Brief, which surely it could not be claimed rise to the dignity of a justiciable controversy. The first is, as to what is meant by what is called in the Colorado River Compact "III (b) water," or the million acre-feet, which is in addition to the water allocated to the Lower Basin in III (a), an interest in which the Brief claims California did not renounce in its Limitation Act. Notwithstanding the language of the Compact which to us clearly enough indicates that the 1,000,000 acre-feet is apportioned water, and notwithstanding that clarity is strengthened if it needed

any strengthening by (c) of Article III, which refers to the contemplated Treaty with Mexico, and says Mexico's rights shall be supplied first from waters which are surplus over and above the waters specified in (a) and (b), which places III (b) water along with (a) and (c) water in the water that is apportioned, and says that the unapportioned water is water other than (a), (b), and (c), and in spite of the fact that (f), which determines how unapportioned water is to be disposed of, (a) and (b) water are both referred to as apportioned water, California argues that the 1,000,000 acre-feet is unapportioned or surplus water.

It is to be noted that in the Brief, (f) is referred to as relating to the waters which may be allocated to Mexico, but it does not. It relates to that water which is apportioned and that which is not.

The Brief commences the argument by saying "In any event, the matter being one of contract law, we are concerned with the intent of the parties to the contract in the use of the words."

The Brief then seeks to show that intent by quoting from the Report of Mr. Delph E. Carpenter, who was the Commissioner from Colorado, on the Commission which drafted the Compact, and various statements made by various Senators at a later date when the Boulder Canyon Project Act was before the Senate, and by quotations from the Brief of the attorneys for Arizona in the case of *Arizona* v. *California* (283 U. S. 423), none of which when examined will be found to sustain the contentions made in the Brief. But, if we are to take the writers of the Brief at their word, and we are to seek what is meant by "III (b) water" by evidence outside the instrument itself, which assumes that there is some ambiguity in that language, which as we have already shown there is not, then the Brief omits the most significant evidence there is.

When the Compact was ready for signature, Arizona refused to sign because she did not consider that she was protected in her rights in the Gila River, and so the provision as to "III (b) water," the million acre-feet was added. After it was signed, Herbert Hoover, who, as already stated, was Chairman of the Commission, wrote a letter to Mr. W. S. Norviel, the Commissioner representing Arizona, which reads as follows:

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,

(Signed) HERBERT HOOVER.

The photograph of Mr. Hoover which he enclosed in the letter has this in his own handwriting "W. S. Norviel, from Herbert Hoover in tribute to a million acre-feet and a fine associate."

Herbert Hoover has been charged with making many mistakes, but surely he did not make the mistake as claimed in the California-Nevada Brief of wanting to inscribe on a monument "One Million Acre-Feet" when it should have been "One-Half Million Acre-Feet." (Hearings before the Committee on Irrigation and Reclamation, House of Representatives, Seventy-ninth Congress, Second Session, on H. R. 5434, a Bill authorizing the Gila Federal Project, and For Other Purposes, Part 2, July 8, 1946, Page 370.)

The argument then shifts to a consideration of the meaning of Section 4a of the Boulder Canyon Project Act and California's Limitation Act, which the Brief claims shows that III (b) water is unapportioned. After providing in the first paragraph for the limitation by California to the use of 4,400,000 acre-feet per annum of the Colorado River Water, the second paragraph reads as follows:

"The States of Arizona, California, and Nevada are authorized to enter into an agreement which shall provide (1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River

Compact there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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; but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico by the lower basin, and (5) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water which cannot reasonably be applied to domestic and agricultural uses, and (6) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact, and (7) said agreement to take effect upon the ratification of the Colorado River compact by Arizona, California, and Nevada."

In the light of what we have said at least from the point of view of the United States, this disposes of the contention of Nevada and California as to III (b) water, for (3) of the paragraph says that the "State of Arizona shall have the exclusive beneficial consumptive use of the Gila River within the boundaries of said state" and it explains why III (b) water was separated from III (a) water, a separation which disturbs the writers of the Nevada-California Brief if it is apportioned water. It was because it had nothing to do with the division of water between the Upper and Lower Basin. It was Arizona's because the Gila River was Arizona's. But apart from all this argument as to III (b) water, it presents no present justiciable controversy between Arizona and California, because it does not jeopardize any of California's present use of the river's water. Indeed, the argument that III (b) water is unapportioned or surplus water goes too far. If it be such, then it is water which comes within III (f) and III (g) of the Compact, and thereby California agreed that there shall be no division of unapportioned or surplus water until after 1963 and then only "if and when either Basin shall have reached its total beneficial consumptive use, as set out in paragraphs (a) and (b)," which conclusively demonstrates there could be no justiciable controversy over such water at least until 1963.

Indeed, the question as to whether or not III (b) is apportioned water under the contract is set at rest by the decision of the United States Supreme Court in the case of *Arizona* v. *California* (292 U. S. 341 at p. 742 of 54 S. Ct.), by the following statement of the Court:

"Sixth. The considerations to which Arizona calls attention do not show that there is any ambiguity in article III (b) of the compact. Doubtless the anticipated physical sources of the waters which combine to make the total of 8,500,000 acre-feet are as Arizona contends, but neither article III (a) nor (b) deal with the waters on the basis of their source. Paragraph (a) apportions waters 'from the Colorado River system,' i. e., the Colorado and its tributaries, and (b) permits an additional use 'of such waters.' The compact makes an apportionment only between the upper and lower basin; the apportionment among the states in each basin being left to later agreement. Arizona is one of the states of the lower basin, and any waters useful to her are by that fact useful to the lower basin. But the fact that they are solely useful to Arizona, or the fact that they have been appropriated by her, does not contradict the intent clearly expressed in paragraph (b) (nor the rational character thereof) to apportion the 1,000,000 acre-feet to the states of the lower basin and not specifically to Arizona alone. It may be that, in apportioning among the states the 8,500,000 acre-feet allotted to the lower basin, Arizona's share of waters from the main stream will be affected by the fact that certain of the waters assigned to the lower basin can be used only by her; but that is a matter entirely outside the scope of the compact."

The next alleged dispute is stated to be "the charge against III (a) water on account of Gila uses." Says the Nevada-California Brief:

"The Gila River in its lower reaches was, in a state of nature, a wasting stream. In the last one hundred miles above the point where is disembogues in

the Colorado its bed is wide, sandy, flat, and subject to the intense heat of the desert. As a result, although an average of about 2,300,000 acre-feet of water per annum flows into the Phoenix area in Central Arizona from the mountainous watershed of the Gila and its tributaries, it has been estimated by the Bureau of Reclamation that, in a state of nature, before any water was put to use in Central Arizona, an average of only approximately 1,300,000 acre-feet per annum flowed from the Gila at its mouth into the Colorado. The rest was lost by evaporation, deep seepage, and transpiration. Arizona argues that it is chargeable for its use of Gila water only to the extent it 'depletes' the flow of the main stream of the Colorado below the quantity which would have flowed in it in a state of nature. California contends that that view is a distortion of the measure of charge specified in the compact, namely, 'beneficial consumptive use.' By construction of an extensive system of impounding reservoirs in the mountains east of Phoenix and batteries of pumps in the lowlands, Arizona projects have accomplished the capture and utilization of substantially all of the 2,300,000 acre-feet. All of that water supply is actually being beneficially and consumptively used in Arizona and produces crops. One way of expressing the problem is, therefore, 'Is a state or project entitled to salvage by conversion works, water which in a state of nature was wasted, and not be charged under the compact for water so salvaged?' "

The short answer to this contention is, as we have already pointed out, this water in question is not III (a) water, but III (b) water, and that Arizona is entitled to all the water of the Gila River, and that therefore what is meant by "consumptive beneficial use" in the Compact becomes immaterial.

Indeed, from the point of the United States, 4a of the Boulder Canyon Project Act disposes of both the first and the second alleged disputes between Arizona and California. It not only says that the State of Arizona is entitled to the beneficial consumptive use of the Gila River. That takes care of the III (b), the million acre-feet. That also takes care of the definition of the term "beneficial consumptive use in perpetuity." Then it says that Arizona is entitled to 2,800,000 acre-feet per annum "for exclusive beneficial consumptive use," which obviously is in addition to the Gila River. The United States is in no position, having by legislative enactment determined these matters and its administrative officers having acted thereon ever since, now to reverse that determination and to lend any aid to California or any other Basin State to try and change that determination.

Moreover, and here again, this is our fundamental answer, the interpretation of the meaning of the term, does not create any present justiciable controversy between California and Arizona even if it might in the future, because however it be interpreted, it does not jeopardize California's present use of the waters of the River.

The third claimed dispute between California and Arizona is whether California's 4,400,000 acre-feet per annum of the River is subject to its proportionate share of the losses in Lake Mead, as it is stated Arizona contends. In other words, does the 4,400,000 acre-feet per annum mean a "net limitation," or is it to be lessened by proportioned reservoir losses? Well, again, what of it? It may become important in the future, but it cannot be now, because whether it be 4,400,000 acre-feet net, or a lesser amount even by the 600,000 acre-feet suggested in the Brief as California's proportionate share of Lake Mead losses, California's present use of the water of the Colorado River is not in jeopardy.

Finally, what sort of disputes are these three claimed disputes? They are as to the meaning of certain provisions of the documents constituting the law of the River, which may or may not become important in the future but are not now, because they do not jeopardize any present use by California of the water of the River. They are first: What is meant by "III (b)" water as used in the Compact? As to that, it is claimed Arizona has one opinion and California another. Second, what is the meaning of the term "beneficial consumptive use of water" as used in the Compact? As to that it is claimed the opinions of California differ from those of Arizona. Third, what is the interpretation to be given to the limit on California's use of the River, the 4,400,000 acre-feet per annum? California says that means without losses. Arizona says, so the Brief claims, it means subject to losses. This demonstrates that what California really wants is a definition of these words and terms for future guidance. That can only be done by agreement or by a declaratory judgment of a court. She knows that the Supreme Court has decided it will not render declaratory judgments in the exercise of its original jurisdiction because of the constitutional limitation upon it. She cannot bring an action or suit to have their meaning fixed. So, what she proposes is that the United States shall bring the suit or action and thus indirectly give color of jurisdiction which would otherwise not exist. We

say that the attempt would eventually be futile, because color of jurisdiction does not suffice. It must be existant. We say that if the bill of complaint which was filed would state all the three claimed disputes of California against Arizona as stated in the Brief, and as we have shown that is all there is on the River, and then state the facts as to present use of the water of the River, and what is going to waste, it would not state a justiciable cause of action. If it went further, then it would state more than California has asked or has a right to ask.

This brings us to the questions of policy apart from the legal questions involved in the adoption of this Resolution. Should the United States for the supposed benefit of California, attempt to do for her what she can't do for herself, especially if it be to the detriment of the other States, as we shall now show it would be?

3. The Upper Colorado River Basin States are now negotiating a compact to allocate between them the waters apportioned to them by the Colorado River Compact—The allocation among the Lower Basin States is substantially settled by the law of the river

As shown by the quotations hereinbefore made from decisions of the Supreme Court of the United States and the opinions of its judges, disputes between states, for the reasons better stated therein than we could state, should be settled by compact rather than by litigation before it.

The states of the Upper Basin, through a Compact Commission, are now engaged in an attempt to divide the waters allocated to them by the Colorado River Compact. The California-Nevada brief says with respect to those negotiations "the Upper Basin States, Wyoming, Utah, Colorado and New Mexico and, as to a trifling interest, Arizona, have for a year or more been engaged in negotiations for a compact to divide the upper basin water among them. It is believed that this effort will be effectual." Whether California is sincere in this statement we shall later discuss, but it suffices now to state that we concur and, indeed, there is every reason to believe that before the end of the year such a compact will be entered into so as to submit the same to the interested states when their legislatures meet at the beginning of next year and to the Congress for ratification.

So far as the Lower Basin States are concerned, as we have already shown, the United States by the enactment of the Boulder Canyon Project Act has already determined that two out of the three principal contentions now made by California cannot be successfully made and that the United States cannot now countenance California making them. So far as the United States is concerned they are settled as fully and completely as if there were an express compact as to them between the Lower Basin States and the United States and between those states. By virtue of Section IV (a) of the Boulder Canyon Project these are—

"(1) That of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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 dimunition whatever by any allowance of water which may be made by treaty or otherwise to the United States of Mexico."

As already pointed out, these provisions of IV (a) dispose completely of California's contention with respect to III (b) water and what is meant by the beneficial consumptive use of water so far as the Gila River is concerned. Taking into consideration that Arizona is entitled to all the use of the Gila River as set out in this paragraph, this necessarily means that Arizona is entitled in addition thereto to 2,800,000 acre-feet per annum which means, further, that there is ample water for the Central Arizona Project because California does not and cannot assert that that project will take more water than that. In other words, by virtue of Section IV (a) of the Boulder Canyon Project act the United States has said to the Lower Basin States that these four items are so settled that there need be no compact concerning them, and if you do make any compact as to any other differences there may be between you, if any such

exist, such compact must contain these provisions and be subject to these limitations. This so far as the Nevada-California brief is concerned, and as we have before stated, it must be assumed that that brief states as strongly as can be stated California's position, leaves only one dispute of any consequence as between California and Arizona, namely, whether California shall be required to bear its proportionate share of the evaporation loss in Lake Mead.

As we have already shown, that cannot now give rise to a justiciable controversy before the Court, and even if it could it would only be a dispute as between California and Arizona but, of course, it can now be settled by compact and such settlement would not in anywise affect the Central Arizona Project or any other project for the development of the Upper Colorado River so as to jeopardize the rights under the compact of those states. Surely, if the Upper States can settle their differences by the division of the water allotted to them under the compact, why can't Arizona and California settle this one remaining dispute between them? The California-Nevada brief says they can't, because Arizona refuses even to meet with Nevada and California, and in support of that statement have appended to the brief as appendices, certain letters passing between the Governors of the respective states. That the correspondence be complete, we attach the remainder of it. We submit that an analysis of the entire correspondence does not disclose a refusal by Arizona to meet, and that instead of trying to help California to air its disputes with Arizona by the adoption of the proposed Resolution in the Courts, the Congress should advise California and Nevada to do what the Supreme Court has advised be done, what the Upper Basin States are doing, namely, to negotiate with respect to that one remaining dispute. If the States which formed the Union could resolve their differences by the adoption of the Constitution under which we live, surely California and Arizona ought to resolve this one remaining difference of opinion between them by a compact authorized by that same constitution. The President and Congress by the enactment of the Boulder Canyon Project Act have pointed the way and fixed the manner of travelling it. (Section IV (a) hereinbefore quoted.) California does not like to travel that way but it would be inconsistent for the United States now not to insist that California follow it, especially, as litigation contemplated by the proposed Resolution will have the effect of greatly delaying the development of the Colorado River, and particularly in the Upper Basin as we shall now proceed to show.

4. The adoption of the proposed resolution will delay the development of the river

In the opinion of Justice Frankfurter heretofore quoted, upon the filing of a bill of complaint in the Supreme Court, the practice of the Court is pointed out, and that practice is to appoint a Master or Commissioner to take the testimony which is usually voluminous and in its taking a long period of time is consumed. Then the Master or Commissioner has to make his Report and Fndings and it is only then that the case comes to the Supreme Court for decision. The case of *Nebraska* v. *Wyoming* (325 U. S. 589), involving the North Platte River, was commenced in 1934, and was completed in 1945. The litigation over the Arkansas River was commenced in 1901 (*Kansas* v. *Colorado*, 206 U. S. 46, and *Colorado* v. *Kansas*, 320 U. S. 381), and ended in 1943. The Laramie River case was commenced in 1911 (*Wyoming* v. *Colorado*, 259 U. S. 419, 309 U. S. 572) and decided in 1940. The result of the adoption of the Resolution, and the commencement of the action, pursuant thereto, instead of expediting the development of the Colorado River Basin as claimed in the Resolution, will greatly delay it. The writer or writers of the California-Nevada Brief are cognizant of the long delays in water litigation between States in the Supreme Court of the United States, but they claim that the issues in this case will be merely "interpretations of satutes and other documents," and therefore this case will differ from all previous water litigations. That statement but reinforces our claim that that is the extent of their claims, they they want these statutes and documents now construed solely for future guidance. That they cannot do as the decisions of the Supreme Court stand now, because uniformly that Court has refused to render declaratory judgments. Apparently they have not the courage to ask the Supreme Court to reverse those decisions, and parenthetically we may say they have been criticized, and so they ask the United States to pull their chertnuts, which may exist sometime, although they do not now exist, out of the fire which is not yet burning. They hope that the Attorney General, if the Resolution passes, can camouflage an action to declare the meaning of certain "statutes and documents" into a

justiciable controversy, or at least be the intermediary by which they will be able to do it. We submit it would be a breach of faith to all the other Basin States for the United States to lend California any aid or comfort in such an undertaking and to bring an action which would throw the rights of all the Basin States and of the United States in the River in litigation which it will take many years to conclude. In other words, the inconsistency of the Brief and the Resolution is this: The Brief claims that the disputes are confined to interpretations of instruments affecting only the rights in the River between Arizona and California. The Resolution attempts to put in issue all the claims of all the States. Meantime California will endeavor to use the water to which the other States are entitled and will oppose any projects of the Upper River, as she is opposing the Central Arizona project, including the Central Utah Project now pending in Congress (S. 2095, H. R. 5233), and we can now hear her representatives shout "Why appropriate any of the money of the United States so needed for other projects to construct this project on the Colorado River when that River is in litigation before the Supreme Court of the United States, and it will be years and years before it will be determined whether there will be any water available for the project?" When reduced to the ultimate, this Resolution is nothing but a flank attack upon the Central Arizona Project. But it will undoubtedly be followed—if it is adopted and the contemplated suit is brought—by frontal attacks upon every project for the development of the River. Putting it bluntly, California, having already received all the major projects needed by her to enable her to use not only the water to which she is entitled, but an amount greatly in excess thereof, wants to be in a position to use those excess waters which the other Basin States are entitled to use but have not the facilities to enable them to so use.

Then, after she has used them, she will raise the cry that she must not be deprived of them because it will ruin the wondrous civilization which has been builded upon their use. Indeed, this cry, while somewhat vague and feeble, is nevertheless audible in the Resolution and in the Brief. In the Resolution it is intimated "engineering, economic, and other facts" are factors to be considered in determining the rights of the Basin States in the River. In the Brief the immense amount of water involved is stressed. The number of people it will serve with domestic water is heralded—5,000,000 people. But vague and feeble though it now be, it will become a lusty yell once California is using water which really belongs to the other States for 5,000,000 people, or some such number. Thus, are the rights of the other States in the River to be sacrificed upon the altar of California's alleged economic needs? We submit the United States ought not to kindle the fire that will enable California to make that sacrifice and that is the purpose of the Resolution and will be its effect if it is adopted and pursuant to it, the suit is brought.

5. The adoption of the resolution will hamper the consummation and ratification of the Compact between the Upper Basin States, and the failure of the Upper Basin States to enter into a Compact will delay the development of the river

As pointed out, the States of the Upper Basin are engaged in formulating a Compact which will divide the waters of the Colorado River to which they are entitled between those States. If the rights of all the Basin States are thrown into litigation, as provided for in the Resolution, naturally of what use will it be for the Upper Basin States to continue their negotiations when their rights are in litigation? True it is, the Commissioners may be so confident that California's claims will ultimately be determined to be fanciful, to be distorted interpretations of words and phrases in documents, to be utterly unsound, as we are, and therefore will courageously proceed, but even should they do so, it would be practically impossible to procure ratification of any compact formulated, because it cannot be presumed that the members of the Legislatures will have the same convictions that the Commissioners have because of their years of studies of the questions.

So, if the Upper Basin States should fail to consummate a Compact, or if it should fail of ratification in any one State, there will be another excuse for delay in the development of the upper River, and again the United States will be adding fagots to California's sacrificial fire.

Why should the United States thus play into California's hands when none of its rights are in any jeopardy, when none of its rights are in any wise threatened by any Basin State, including California?

We respectfully submit that the United States should not; that the Department of the Interior should not recommend the adoption of the Resolution, involving as it does, the United States suing all the Basin States, not only for the reason that there are no rights of the United States involved or threatened, but because all of the contracts the Department has entered into have been based upon a denial of the only claims California has or can make, and in harmony with the second paragraph of 4a of the Boulder Canyon Project Act, and to take a different position now would be inconsistent; on the contrary, to be consistent it should recommend that the Resolution be not adopted; that the Department of Justice should not recommend the adoption of the Resolution, because it must necessarily depend for its facts upon the Department of the Interior, because that Department is charged with the responsibility of determining them, and we submit that no facts can be furnished by the Department of the Interior that will show a present justiciable controversy between the United States and any of the States; that on the contrary, if it be convinced by both the California-Nevada Brief and this Brief, as we submit it must be, that the only controversy that exists is the difference of opinion between Arizona and California as to the meaning of the documents as set out in both briefs, the Department should recommend that the Resolution be not adopted, because the authority of the Attorney General's office to institute suits in behalf of the United States ought not to be used to give either California or Nevada the means of resolving such differences of opinion, but the burden of instituting such a suit should be cast upon the State asserting such differences, the Attorney General knowing full well he can intervene if he deems the interests of the United States involved, as he has done before in other suits; that the Congress should not adopt the Resolution and thereby instruct the Attorney General to bring a suit against all the Basin States, not only because the Congress would thereby determine for the Attorney General that there is a legal basis for the suit, when in fact none exists, but because it should not be the policy of the United States, when none of its own interests are involved, to take the side of one State in a dispute it has with another, or with others, especially when as here, as we have shown, it will be to the disadvantage of the other State or States, and particularly when, as here, the State is making contentions contrary to what the Congress has determined by legislation, and contrary to the acts of the administrative officers of the United States pursuant to that legislation.

SUMMARY

The position of the Colorado River Basin States Committee, and of the States of Colorado, Wyoming, Utah, New Mexico, and Arizona which are members of that committee, can be summarized thus:

1. Jurisdiction of the United States Supreme Court in controversies between states is determined by the constitution of the United States and may not be enlarged or diminished by act of Congress.

2. The Supreme Court has, by a long and consistent line of decisions, established the rule that a suit may not be maintained against a state by another state or by the United States unless the complainant has suffered or is immediately threatened with an injury of serious magnitude.

3. The proposed suit by the United States against certain Colorado River Basin states does not come within the stated rule because there is no injury or threat of injury. This conclusively appears from the following irrefutable facts:

(a) Every Colorado River Basin state is now using water in an amount substantially less than that to which it is fairly and equitably entitled under the documents which constitute the law of the river.

(b) No project has been constructed, is under construction, or has been authorized for construction in any state which threatens to diminish the supply of water which admittedly is available to each other state under the documents constituting the law of the river.

(c) Very large amounts of Colorado River water are flowing unused across the international boundary into Mexico and there is no claim that within the immediate future those amounts will be so substantially reduced as to interfere with the availability of water necessary to supply the admitted share of the proponents of the resolution.

(d) There is no suggestion of any projects for development of Colorado River water which might interfere with the claimed rights of any state except pro-

jects which are of such magnitude that federal financing is essential. Projects of that character must be authorized by Congress and financed by congressional appropriations. The availability of water for those projects is a proper concern for Congress when considering the necessary legislation. Under our Constitution and applicable decisions of the Supreme Court, Congress cannot avoid that responsibility or obtain assistance by requesting declaratory or advisory opinions of the Supreme Court.

4. The Colorado River Basin States Committee, and the states composing that committee, affirm that they recognize as valid and binding instruments and legislation and as the law of the river the Colorado River Compact, the Boulder Canyon Project Act, the California Self-Limitation Act, the Boulder Canyon Project Adjustment Act, the Mexican Water Treaty of 1944, and the various water use contracts executed by the Secretary of the Interior. Any assertion to the contrary by the proponents of Supreme Court litigation is without foundation and constitutes a deliberate distortion of the truth.

5. It is reasonable to assume that any Supreme Court litigation, such as that proposed, will require a period of years before ultimate determination by the Court. The practice of the Court in interstate cases involving disputes as to facts is to appoint a master or commissioner for the taking of testimony. Experience has shown that this process is long drawn out and costly. Assertions to the contrary are misleading as they are based upon cases determined on objections to the filing of a bill. While the status of the pleadings in any litigation such as is proposed may not be forecast with any accuracy, it is reasonable to believe that there will be issues of fact. It is within the power of any state, including those states proposing this legislation, to create such issues of fact. There is and can be no assurance from the sovereign states involved, either individually or as a group, that factual questions will not be raised.

6. The effect of the proposed litigation can only result in delay in the development of the river. Congressional authorization of projects or appropriations for construction of projects will be contested upon the ground that until the decision of the Court the availability of a water supply is uncertain.

7. The consummation, ratification, and approval of a compact between the states of the Upper Basin will be embarrassed and handicapped by the proposed litigation. The case, if filed, will raise questions as to the interpretation and applicability of the Colorado River Compact. A compact between the upper basin states must conform to the Colorado River Compact. The pendency of litigation over that basic compact will be used as the basis for arguments that an Upper Basin Compact should not be made while such litigation is pending This will delay the development of the upper basin by federally financed projects as the Department of the Interior and the Bureau of the Budget have ruled that new federal projects will not be authorized in the upper basin until an allocation of the water available for use in the upper basin is made between the states located therein.

8. The proposed legislation is unnecessary as it must be assumed that the attorney general of the United States and the responsible officials of each state will do their duty and institute whatever litigation is necessary to protect the rights of their respective governments.

9. The assertion that the legislation is necessary because the United States is an indispensable party to litigation involving the issues presented is without merit because (a) the mere presence of the United States in the suit does not create a justiciable controversy, (b) there is no justiciable controversy and hence legislation giving the consent of the United States to suit is unnecessary, (c) if any state believes and can establish that it is being injured or threatened with injury by another state, a suit by such injured state may not be defeated by the assertion that the United States is an indispensable party and (d) whenever in the future some controversy, as yet undefined either as to issues or parties, arises and in connection with such litigation it is proper for the United States to be a defendant, then will be the time for Congress to give consideration to legislation involving consent to be sued therein.

10. Congress should not infringe upon the duties, rights, and prerogatives of the executive and judicial branches of the government of the United States by directing the institution and maintenance of unnecessary litigation. Congress can

and should make its own determination as to each and every project submitted to it. If any state disagrees with such congressional determination, our Constitution affords method of redress.

For the reasons assigned it is asserted that the proposed legislation does not merit favorable consideration.

Respectfully submitted.

The Colorado River Basin States Committee: State of Colorado, Clifford H. Stone (Chairman), Frank Delaney; State of Wyoming, L. C. Bishop, H. Melvin Rollins; State of Utah, W. R. Wallace, Grover A. Giles; State of New Mexico, Fred E. Wilson, John H. Bliss; State of Arizona, Nellie T. Bush, Charles A. Carson.

Subcommittee to Oppose Litigation: State of Utah, J. A. Howell (Chairman), Grover A. Giles; State of New Mexico, Fred E. Wilson, Martin A. Threet; State of Wyoming, Norman B. Gray (Attorney General), H. Melvin Rollins; State of Colorado, Clifford H. Stone, Jean S. Breitenstein; State of Arizona, Nellie T. Bush, Charles A. Carson

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APPENDIX

Correspondence between the Governor of California and the Governor of Arizona omitted from the California-Nevada Brief.

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, Calif., May 16, 1947.

The Honorable SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz.

DEAR GOVERNOR OSBORN: I did not bother you during the time you were ill in our state concerning my suggestions for settling the differences of opinion of Arizona and California regarding their respective rights to the use of the water of the Colorado River. However, now that you have recovered sufficiently to return to your home, I would like to discuss your letter of March 12, 1947, and the accompanying copy of your letter to William E. Warne, Acting Comissioner of the Bureau of Reclamation, dated November 22, 1946.

I gather from these two letters that you believe it is unnecessary to try to write a compact between the lower-basin states or to have your respective claims arbitrated, because you consider the existing statutes, contracts, etc., have so settled the rights of Arizona, California, and Nevada in the Colorado River that there are no substantial differences between the states. It may well be that the suggestions of a compact and arbitration are not feasible at this late date, but I am of the opinion that there are such basic divergencies of interpretation of the statutes and documents mentioned above, particularly between Arizona and California, that without an authoritative determination as to which state is right, it is impossible for anyone to know what quantity of water either state is entitled to. If our states are to plan for their futures, they must know with certainty how much water is eventually to be made available to them, because everyone recognizes that there is not enough water in the river to fully serve the legitimate aspirations of both our states.

It seems to me that a suit in the Supreme Court of the United States, to which the lower-basin states and the United States are parties, is essential to supply the necessary answer. This would of course require a jurisdictional act of Congress authorizing the United States to be made a party of such suit. Governor Pittman of Nevada has expressed a similar opinion in a letter to me dated March 6, a copy of which is enclosed. I am sure that such a procedure will eventually redound to the benefit of both of our states.

With best wishes for the continued improvement of your health, I am,

Sincerely,

(Signed) EARL WARREN,
Governor.

EW: mm.
Enc.

EXECUTIVE OFFICE, STATE HOUSE,
Phoenix, Arizona, May 23, 1947.

Honorable EARL WARREN,
Governor of California,
State Capitol, Sacramento, California.

MY DEAR GOVERNOR WARREN: I have received your letter of May sixteenth and appreciate your personal good wishes.

In my letter to you of March twelfth and in my letter to William E. Warne, Acting Commissioner of the Bureau of Reclamation, of November 22, 1946, a copy of which I sent to you, I clearly stated the facts and the reasoning which in my opinion lead to the inescapable conclusion that the quantities of apportioned water available for use in Arizona, California, and Nevada, respectively, from the Colorado River, are already determined.

If you do not agree with such facts and reasoning and my conclusions, it is regrettable that you do not specify wherein you disagree.

On Page 8 of "The Views and Recommendations of the State of California on Proposed Report of the Secretary of the Interior entitled 'The Colorado River'" there purports to be a list of relevant statutes, decisions and instruments affecting the Colorado River, but no mention is made of the California self-limitation act, Chapter 16, California Statutes, 1929.

I discussed the California self-limitation act as well as the other relevant compact, statutes, contracts and reports in my letters, but in your letters to me you take no exception to any statements in my letters, nor do you set forth any statement of any facts, reasoning or conclusions as to what claim to water of the Colorado River you intend to assert for California nor the basis for such claim.

California has unconditionally and irrevocably limited herself forever to the quantity of water set out in the California self-limitation act. Arizona has by contract recognized the right of California to the quantity of water set out in that act and Arizona does not intend to and will not attempt to utilize water to which California is entitled.

Arizona respects her commitments.

Any aspiration entertained in California to use water in excess of that limitation appears to be illegitimate. If California would be content with the use of the quantity of the water to which she has by solemn statutory agreement unconditionally and irrevocably limited herself forever all occasion for any feeling that any further compact, any arbitration or litigation is advisable would disappear.

I am sure if you will review my letters and the compact, statutes, contracts and reports therein mentioned you will recognize that the only thing required for cooperation between our great states in developing the use of the waters of the Colorado River to which they are respectively entitled for their mutual benefit and for the benefit of the southwest and the nation, is for your great state to respect the agreements your state has already made.

I request that you again review my letters and if in your opinion, there is any error in the facts, reasoning or conclusions stated in my letters, I will appreciate your advising me concerning the same.

With all good wishes, I am,
Sincerely,

SIDNEY P. OSBORN, *Governor.*

SPO: E.

EXECUTIVE OFFICE, STATE HOUSE,
Phoenix, Arizona, October 10, 1947.

Honorable EARL WARREN,
Governor, State of California,
Sacramento, California.

MY DEAR GOVERNOR WARREN: In my letter to you of March twelfth, 1947, in reply to your letter to me of March third, 1947, I extended to you an invitation in the following words. I quote the last two paragraphs of my letter to you of March twelfth, 1947:

"However, I will be glad to meet and discuss with you and the Governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences and if it should develop that anything further is necessary, we can consider the proper course to pursue.

"During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our state and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other Governors of the basin states as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly."

To date you have neither accepted nor declined that invitation.

I note that in the public press there are appearing statements to the effect that I refused to meet with you.

Of course, you and I know that such is not the case, but in order to clear up any possible misunderstanding I herewith repeat the above-quoted invitation. I will be glad to meet with you and with the Governors of other Colorado River Basin states, jointly or severally, at any time to discuss matters of common interest.

I suggest you arrange to come to Phoenix before Christmas, giving me twenty days' advance notice of the date of your arrival, and the names of the other Governors and advisors who will attend, so that I may make the necessary hotel reservations and arrangements.

With all good wishes, I am,

Sincerely,

SIDNEY P. OSBORN, *Governor.*

SPO: P.

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, October 16, 1947.

The Honorable SIDNEY P. OSBORN,
Governor of Arizona,
State House, Phoenix, Arizona.

MY DEAR GOVERNOR: I have your letter of October 10 concerning items in the public press relative to our Colorado River problems. I have not seen the items that you mention but if there is any statement in them to the effect that you have refused to meet and discuss matters with me, they are wholly without foundation. No one has been more willing to discuss our mutual problems than yourself and I am sure you know that I would never make any expression to the contrary.

The subject of the correspondence to which the press item must have had reference could not have applied to conferences, because innumerable conferences have been held during recent years without reconciling differences of opinion. In addressing you and Governor Pittman on the subject I merely proposed the only three methods that occurred to my mind as being able to lead to a final solution: (1) A compact between the three states, making a determination of all the issues; (2) Arbitration; (3) Judicial determination.

I merely suggested that California was willing to use any of these three methods that is agreeable to Arizona and Nevada. If I could have thought of any other practical method I would have incorporated it also.

Thanking you for calling the matter to my attention and with best wishes, I am,

Sincerely,

(Signed) EARL WARREN,
Governor.

EW: FL.

Mr. SHAW. Could we have copies?

Mr. HOWELL. A curious thing happened this morning. We were informed that all of the five copies which we submitted to the committee had disappeared, but we will be able to furnish you with copies.

Senator MILLIKIN. We will proceed.

Mr. HOWELL. Then, as chairman of the subcommittee, I shall make a brief preliminary statement in which I shall attempt also to state Utah's position as determined by its official representation.

Senator MILLIKIN. When will the copies be forthcoming?

Mr. HOWELL. We will get them in a few minutes.

Then we will ask Mr. Breitenstein, of Denver, Colo., who is attorney for the Colorado River Water Conservation Board, to argue the legal phases that arise out of the proposed resolution and state Colorado's position, to be followed by Mr. Charles A. Carson, Phoenix, Ariz., chief counsel of the Arizona Interstate Stream Commission, who will argue the question of policies involved. These will be the principal witnesses.

Senator MILLIKIN. We are glad to see that Senator Thomas was able to come to the meeting.

Mr. HOWELL. Judge Fred E. Wilson, special representative of the Governor of New Mexico, on Colorado River water matters, will make a statement in behalf of New Mexico; and Mr. W. J. Wehrli, special counsel for Wyoming, will make a statement in behalf of Wyoming; and Mrs. Nellie T. Bush, of Parker, Ariz., and a member of both of these committees, will make a statement in behalf of Arizona.

I should like, first of all, to make a brief analysis of the resolution. It will be observed that although the resolution purports at the beginning thereof only to authorize the commencement of the action, it winds up by directing the commencement of the action. In other words, the proponents of the resolution realize that a mere authorization would not suffice, because if the Attorney General is convinced that the rights of the United States in the Colorado River are being jeopardized by the lower-basin States of the Colorado River Basin or any of the States of the basin, the Attorney General is not only authorized to bring such an action, but it is his duty to do so, which duty it is presumed he will perform, and consequently there is no necessity for a mere authorization.

The effect of the resolution, then, is to direct the Attorney General to bring the action irrespective of whether he determines there is any legal basis for it or not. This poses the question as to whether the legislative branch of the Government should substitute its judgment as to the necessity for legal action for that of the executive officer charged with the responsibility of determining such matters.

True it is that whenever a project is presented to Congress, Congress must determine whether there is water available for the project, and whether that determination is simple or difficult, the onus of that determination is upon Congress, and while I do not want to trespass upon the field that will be covered by Mr. Breitenstein, still it is my opinion that until a project is authorized which infringes upon the rights of some State, the question is moot and cannot give rise to a controversy cognizable before the Supreme Court in the exercise of its original jurisdiction.

It will also be observed that the recitals of the resolution, the basis of fact for it, state that the reason for the bringing of the suit or action is not that there is any long-standing or any controversy between the United States and the States of the lower basin or any of the States of the basin, but there are long-standing controversies among the States in the lower Colorado River Basin as to the meaning and effect of the Colorado River compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act—(that act, by the way, has not been mentioned here in this hearing)—and the California Limitation Act, and various contracts executed by the Secretary of the Interior, the States, public agencies, and others in the lower basin of the Colorado River,

and other documents, and as to various economic engineering and other facts. What would be the conclusion from this statement?

Obviously, no other than that the meaning and effect of these documents should be judicially determined. Those responsible for this resolution were well aware of the fact that the Supreme Court of the United States in the exercise of its original jurisdiction will not render declaratory judgments. That, of course, is because of the limitation in the Constitution that its original jurisdiction is limited to controversies, either between the United States and one or more States, or between the States.

Accordingly, the resolution goes beyond the recitals upon which it is based and directs the Attorney General to bring an action against the States of Arizona, California, Nevada, New Mexico, and Utah, and such other parties as may be necessary or proper which would include, although not specifically named, the other States of the basin, namely, Colorado and Wyoming, not that the meaning and effect of recited documents and other facts be determined as recited in the resolution, but that the rights to the use of the water of the Colorado system available for the lower Colorado River Basin be determined.

In order to make that determination, it would, of course, be necessary to determine the rights of all of the Basin States to the use of the water of the Colorado River, and so the necessary effect of the resolution and the contemplated suit or action would be to throw the entire river into the litigation before the Supreme Court, and, as specifically stated in the resolution, to require all of the Basin States named in the resolution, as well as those included without being named, to assert and have determined their rights to the use of the water of the river; and, indeed, even if that language had not been used, such necessarily would be the nature of the suit, in our opinion.

It will further be observed that not only does the resolution direct that a suit or action be brought against the States named, and those necessarily included, but it directs the form of action which the Attorney General shall bring. It is not an interpleader action because those those responsible for the resolution were aware that such a suit or action could not be brought. An ordinary interpleader action, if I understand it correctly, arises from this sort of a state of facts: Someone has in his possession property or money or a fund which belongs to somebody else, and there are various claimants to it, and he does not know what the rights of either or any of them are, so he comes in to the court and he says to the court, "Here is this money and here is this fund, here is this money and here is this property. I claim no interest in it whatever, and I ask that the court discharge me from any responsibility with respect to it, and that those who claim it be required to litigate their claims to it."

They knew full well in such an action the moving party—that is, the United States—would have to allege that it has no interest in the fund in its possession—in this case I assume the river—and that the United States could not allege that it has no interest in the river. A great deal has been said here now, during this hearing, as to the interests of the United States in the river. Those matters were carefully considered at that time that the compact was ratified by the United States, and a letter of transmittal was sent to the Congress when the compact was transmitted to it, in which Chairman Hoover set out very elaborately the interest of the United States in the river

and stated that, in his opinion, all of these rights are safeguarded by the compact. So far, I have not heard that any State claims that it has any attack upon any of the interests of the United States in the river.

So this resolution is not to be an interpleader action—that is, an ordinary interpleader action—but a suit or action in the nature of an interpleader action. This raises the question, "Why all this indirectness?" Is it because California and Nevada doubt whether they have a real genuine present controversy between themselves or either of them against the other States, or any of them, which would enable them to bring a suit or action in the Supreme Court of the United States in the exercise of its original jurisdiction, as they have a constitutional right to do if they or any of them have such a controversy, and seek by means of a suit or action by the United States against the States named or contemplated in the nature of an interpleader action to give color to jurisdiction by the Court which it would otherwise not have?

In other words, if California and Nevada have a genuine presently existing controversy with any of the Colorado River Basin States, why does not that State, or the two jointly, bring a suit or action in the Supreme Court of the United States to determine such controversy? Why do either of them request the Attorney General to be required to bring a suit or action against them and the other States?

If I may pause here to give what I understand to be the difference between an interpleader suit and a suit in the nature of an interpleader suit, which is also a well-understood term in the law, I think, it is this: That in a suit in the nature of an interpleader suit, instead of alleging that he has no interest, the holder of the money or the fund or the property admits that he has, and then in order to get into court he has to assert some other equitable principle which will give the court jurisdiction, and that principle usually is to avoid a multiplicity of suits.

California says the only reason such an action cannot be brought—that is, an action by the State of California or the State of California and Nevada—is because the United States is an indispensable party and cannot be sued without its consent, and they cite the case of *Arizona* v. *California* (298 U. S. 559).

It is true that under the allegations of the bill in that case, in which Arizona sought to have her equitable share of the use of the water of the Colorado River determined, she was not at that time a party to the compact; the court so held, because necessarily the rights not only of the basin States but the rights of the United States as well, were put in issue. But California states she has no claims against the United States or any of the upper States, but only against the States of the lower basin, and so far as the State of Utah and the State of New Mexico are concerned, as lower basin States are concerned, she has no claim against them, but solely against Arizona.

I may say here that so far as Utah is concerned, we find ourselves in a rather curious situation of not having any controversy with the United States and not having any controversy with any of our neighbors, not even California and Nevada, and yet we are to be forced into this litigation.

Senator WATKINS. Let me ask you, Judge, suppose as a matter of law, a suit is brought against us. If we have no controversy, we could

so set up in an answer, could we not? You would not be forced to go ahead if there is none.

Mr. HOWELL. That would depend on the kind of action that is brought. If it is the type contemplated by this proceedings, I do not think that we could, because I think this type of a proceeding, whether it is attempted to be limited by virtue of the resolution or not, would put in issue all of the rights of the Colorado River Basin system States, including Utah, and would require us to assert our claims not only as a lower basin State, which we are to a small extent as shown by that map over there, but also as an upper basin State, which we also are; and therefore, it would throw all of our rights into controversy before the court.

Senator WATKINS. You assume that a controversy will be such as you think it is and not as California has indicated by the statement yesterday?

Mr. HOWELL. I say that any State may do that, notwithstanding any assurances they may give us now to the contrary. In other words, I do not think that there can be any limit put, if this sort of action is once commenced, and the Supreme Court would hold that it is an action coming within its jurisdiction, I do not think anybody can put on any limit as to what rights any one State may assert; and therefore, it makes it necessary that every State assert her rights; and knowing lawyers as I do, I cannot conceive that there will not be some one or more of those States which will assert facts which will be denied by other States, which will immediately cause, as I assume here and I have tried to point out, an ordinary water suit. We will have all of the delays incident thereto.

Senator WATKINS. As I understand it, Judge, and there may be a difference of opinion, the Court is ordinarily limited to the issues and the pleadings of the parties.

Mr. HOWELL. That is ordinarily true, but it is not true in a case which, like this, where practically it is a quiet title suit, in which everybody is required to assert his claims.

Senator WATKINS. I think that you would be right, if you assume that this is a quiet title suit among all of the States on the Colorado River.

Mr. HOWELL. Whether it is that or not, it is in the nature of such an action and it specifically says that the States of the lower basin, at least the defendants, are required to assert whatever claims they may have; and I say they can assert then any sort of a claim that any State thinks it has, and that is primarily—or, I will not say primarily—but that is one of the basic reasons why I think Utah ought to be opposed to this litigation, as I shall try to show. And also I shall try to show what is the remedy to get away from that sort of a situation.

Senator WATKINS. I am asking you the questions to bring out the points as to whether or not there is any type of action that can be brought which will be limited. The court will be limited by the pleadings in the case, I would assume, or by the jurisdiction given it.

Mr. HOWELL. If the action permits of that, and I shall try to point out, as I go along, the type of action which I think could be brought if it is necessary to have an action, which would enable that to be done.

Senator WATKINS. To accomplish the purpose that California stated yesterday, a limited proceeding?

Mr. HOWELL. So far as the nature of the proceeding is concerned. Whether I can furnish them with a justiciable cause of action is something else.

Senator WATKINS. You can perhaps furnish everything but the ground of action.

Mr. HOWELL. That may be so.

Senator MCFARLAND. If I may just ask one question, would not Utah be affected by any definition of beneficial consumptive use, just as much as any other State?

Mr. HOWELL. They might to a certain extent, but my own opinion about that is that so far as consumptive use is concerned, I think we are confusing that subject. We all know what consumptive use is. It speaks for itself, does it not? It is water consumed in one way or another for a beneficial purpose. But the difficulty arises not from the definition of consumptive use, but from the definition of how you are going to measure that consumptive use.

Senator MCFARLAND. That is what I was getting at.

Mr. HOWELL. And so far as the measurement of our consumptive use in the upper basin is concerned, the compact specifically provides how it shall be measured. In other words, it is depletion. We cannot get away from it, and we have no desire.

If I may proceed, then, perhaps, I think probably as I go along, Senator, I will answer your question.

Senator MILLIKIN. I believe the opponents should take the four points of controversy which have been mentioned, and if they wish, to take each one and make clear, if it can be made clear, what the ramifications of that might be to the upper basin States.

Mr. HOWELL. I think that we will do that as we go along.

I have no reason not to take what California says at its face value; that is, that they will raise certain issues, and upon that basis, I cannot see why the United States would be a necessary party to any action that might be brought by either California or Nevada or both of them. If California can state a cause of action against Arizona, or California and Nevada, so as to invoke the jurisdiction of the Court, and that depends upon whether or not, of course, they can state a justiciable cause of action, which I do not want to go into in detail because that is another part of the case, and if it should be determined that the United States be a necessary party, then what California should then ask and all that it has a right to ask, as I view it, is that the United States consent to be sued. And I think under such circumstances, upon those conditions, the consent should be given.

Then, the United States through the Congress can do what California requests, if this resolution is adopted. It can accede to California's request made yesterday to limit the issues as a condition to the consent of the United States to be sued. I think that I can give some examples of that that are fairly recent. It is not so very long ago, within a year or two at least, that I tried a case in which we sued the United States in the Federal court in the State of Utah upon a contract action. However, I could only do that because the amount claimed was less than $10,000 under the statute.

More recently we have tried two cases in a tort action against the United States, in which, however, the manner of trying that sort of an action is also limited by the Congress. In other words, in tort actions we are required to try the action before the court sitting with-

out a jury, and we are denied the right to a jury by virtue of the statute which confers the right upon a person deeming he has been injured by a tort of some employee or other representative of the United States to bring an action.

Finally, it will be observed that the resolution is for the purpose of avoiding a multiplicity of suits and expediting the development of the Colorado River Basin. Why its adoption and the bringing of the action or suit contemplated will avoid a multiplicity of suits and how such action will expedite the development of the Colorado River Basin, by which it must be assumed is meant the entire basin, not merely the lower Colorado River Basin, is not stated. The assertion that the multiplicity of suits will be avoided is undoubtedly made because those who are responsible for the resolution have in mind that some equitable ground must be stated to give color to the claim that the Court would have jurisdiction of the suit or action in the nature of an interpleader, since they can concede a real interpleader action cannot be brought.

This poses the question, What are the multiple suits to be avoided? And the statement that the action proposed will expedite the development of the Colorado River Basin raises the question as to whether, in fact, it will have that effect. If any one or more or two States bring an action against any State that affects the rights of any of the other States, that State or States will either be made a party or will be forced to come into the suit voluntarily, and so there would be no multiplicity of suits, but only one suit.

In my judgment, if the resolution is adopted and the suit contemplated by it were brought, and the Court should hold that the bill stated a cause of action so it would not be quickly dismissed, and if it were dismissed, as were the Arizona actions, which accounts for their speedy ending, nothing would be accomplished, and I cannot conceive but that one or more of the States in asserting their rights will not allege facts, which would be denied by one or more States, then the practice of the Court is to appoint a master or referee to take the testimony, and the result would be that there would be the usual long, drawn-out controversy incident to practically every water suit that I have ever been connected with.

In the meantime the result would be that it would embarrass the upper basin States in their efforts to make a compact which they are now engaged in doing, through a compact commission. We think that we shall be successful, and I notice that in the brief filed by Nevada and California, they agree with us. They think so, too. In fact, we are to meet on July 7 in Vernal, Utah, and attempt then to make a tentative compact which will be perfected by the first of the year so as to be submitted to our legislatures which meet immediately after the first of the year, and to the Congress for ratification.

If our rights are thrown into this character of litigation, contemplated or authorized by this resolution, then there will be those who will say, "What is the use of a compact when you do not know yet what water rights you have, as they are now before the court in litigation?"

That cry will make it difficult, if not impossible, to arrive at a compact as between the upper basin States. Then, too, if our rights in the upper basin are in litigation, under the proposed resolution, we fear that it will delay the development of the upper basin, as the same cry will be raised as to the central Arizona project, "Why

authorize any project in any State in the upper basin when its rights are in litigation?" Whereas, if the litigation, if there must be such litigation, the issues as stated here between Arizona and California are all of the issues that are to be tried in the lawsuit, then I do not think that it would affect either the making of a compact or delay projects on the upper river.

True it is that we have to divide among the upper basin States 7,500,000 acre-feet, not the 2,000,000 which California says is involved in the controversy in the lower basin, and as to which California says that they cannot make a compact, because there is not enough water to go around. There is probably not enough in the upper basin to go around, but instead of that being a reason for not making a compact, it seems to me it is a reason for making one, because in all of my experience that I have had in water litigation I have never known a court to produce any water for any of the litigants.

I do not wish to imply that I consider that, at least from the point of view of the United States, there could be 2,000,000 acre-feet in dispute between Arizona and California, because from that point of view, that is now from the point of view of the United States, I do not think that there could be. The two principal matters in dispute as outlined here are, what is meant by III (b) water under the compact, and what is the meaning of beneficial consumptive use, or rather, how shall that use be measured, and I think so far as Congress is concerned, at least, these are settled.

I shall read article III of the compact and then, if I may, as I go along, make comments with respect to it. I am reading from a brief of the Six States Committee of Arizona, Colorado, New Mexico, Texas, and Wyoming, volume 3, appendix. However, as I understand the record now, California has introduced this compact in evidence, and it is a part of the record, so I do not know that it makes any difference where I read it from.

ARTICLE III. (a) There is hereby apportioned from the Colorado River system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist. (b)—

And this is the one that causes all of the controversy—

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.

Now, when it says "in addition to the apportionment," I conceive that to mean the same as an additional apportionment, and when it speaks of "such waters," what waters can it refer to except those waters which are in paragraph (a), or in other words, "apportioned waters." So that it seems to me from the language used in (b) itself those waters are apportioned waters.

But let us go on and see if that is in anywise detracted from or strengthened:

(c) If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River system, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be equally borne by

the upper basin and the lower basin, and whenever necessary the States of the upper division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provided in paragraph (d).

Now, when it speaks of surplus waters "over and above the waters specified in paragraphs (a) and (b)," does it not necessarily mean that those are waters which are in addition to or surplus over and above the apportioned waters in (a) and (b)?

I come now to (d):

The States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact.

May I pause there, perhaps, to further answer Senator McFarland's question that it will be noted that the word "depleted" is used in paragraph (d), and so far as I am aware, that is the only definition that is given of the measurement of the consumptive use of water anywhere in the compact.

Senator McFARLAND. But the point I was getting at, Judge, was if a construction was to be placed upon the word "consumptive use," any other than depletion of the main stream water, of a tributary, that construction would affect your use in Utah on your tributaries and the tributaries in Colorado and every other tributary, because the compact apportioned 7,500,000 acre-feet of water per year to the upper basin and to the lower basin.

Now, they would add your consumptive use in Utah, and Colorado and Wyoming and New Mexico on these tributaries, and it might very well add up to 7,500,000 acre-feet, but if you were confined to that word "depletion" on the tributaries, to the consumptive use on the tributaries, and not what you deplete the main stream, you might not get nearly as much water.

Mr. HOWELL. Well, of course, what you mean by "depletion" and what you mean by "diversion," and all of those sorts of things, I recognize are not only legal but engineering terms, and I am not an engineer.

Senator McFARLAND. Do not misunderstand me, now. If you will pardon me, I am not trying to answer the question, but my question was that would you not be affected by any definition that might be made by the Supreme Court on consumptive use. In other words, would you not be interested in it?

Mr. HOWELL. I think that we might be, and for that reason if an action were brought by Arizona against California and Nevada, or California and Nevada against Arizona, and they raised any such issue as that, we might want to come in and be made a party, and we would intervene undoubtedly.

Senator MILLIKIN. Let us take a 5-minute recess.

(Whereupon a short recess was taken.)

Senator MILLIKIN. The meeting will come to order, please.

Will you proceed, Judge, please?

Mr. HOWELL. I would like at this point, inasmuch as this matter of the measurement of water has been brought up, to state what my views are, and I will say that I state them irrespective of where the chips may fall, whether they are to our advantage or disadvantage. I should like to read, if I may, from the Bridge Canyon project hearings before a subcommittee of the Committee on Public Lands of the United States Senate, Eightieth Congress, first session, on S. 1175, and I should like

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to read it clear through, because I think that it goes all of the way along. This is on page 480. This is an examination by the chairman, Senator Millikin, of Mr. Meeker, who is one of the engineers who took part as representing Colorado, if I recollect correctly, in the old Santa Fe meeting which produced the Colorado River compact. [Reading:]

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.

I do not know whether that adds to your question or not, Senator. At least it is my idea of "consumptive use."

As confirming what I have said now, coming back to the question as to what is the apportionment of water under this compact, I should like to quote from a decision in the case of *Arizona* v. *California* (292 U. S. 341)—

The considerations to which Arizona calls attention do not show that there is any ambiguity in article III (b) of the compact—

from which I derive the conclusion that in order to determine what is the meaning of article III (b) we are confined to the four corners of the instrument, and any evidence as to what somebody said about it is not material. [Continuing:]

Doubtless the anticipated physical sources of the waters which combine to make the total of 8,500,000 acre-feet are as Arizona contends, but neither article III (a) nor (b) deal with the waters on the basis of their source. Paragraph (a) apportions waters "from the Colorado River system," i. e., the Colorado and its tributaries, and (b) permits an additional use "of such waters." The compact makes an apportionment only between the upper and lower basin; the apportionment among the States in each basin being left to later agreement. Arizona is one of the States of the lower basin, and any waters useful to her are by that fact useful to the lower basin. But the fact that they are solely useful to Arizona, or the fact that they have been appropriated by her, does not contradict the intent clearly expressed in paragraph (b) (nor the rational character thereof) to apportion the 1,000,000 acre-feet to the States of the lower basin and not specifically to Arizona alone. It may be that, in apportioning among the States the 8,500,000 acre-feet allotted to the lower basin, Arizona's share of waters from the main stream will be affected by the fact that certain of the waters assigned to the lower basin can be used only by her; but that is a matter entirely outside the scope of the compact.

Of course, I recognize that notwithstanding the Supreme Court of the United States has said that (b) water is apportioned water, and I

say so, that nevertheless (b), of course, does stand out there by itself, and I think that there is probably some necessary explanation of that.

In other words, why didn't they just add that to III (a) water, and let it go at that? In that regard, I think that we have got to take into consideration what the Supreme Court of the United States took into consideration, that is, the sources of the water of the Colorado River, and particularly, of course, of the Gila River, which as shown by that map rises in New Mexico and then flows into Arizona and then finally empties into the river below a point at which any other State could use the water than Arizona. And so it seems to me inescapable that when they were talking about (b) water, which according to the legislative history of this compact arose after the first draft had been made, it was inserted in there to take care of the Gila River, and indeed evidence has been introduced here by Mr. Carpenter, who was the representative from Colorado, that such was the case.

Now, what they failed to do, and the only thing that I see that gives any ambiguity to this situation, is that when they inserted paragraph III (b) in article III, they failed to go back to article II and redefine the Colorado River system by taking out of it the Gila River. That is a thing that frequently happens, according to my experience. You draw a contract and you start out, and you make certain statements or define certain terms, and then you go along; and then subsequently a change is made, and you forget to go back and make the change in the first part of the contract.

However, I do not think that that makes any difference, so far as the meaning, from my point of view, is concerned. And I am only speaking now of the point of view of what I shall try to develop as far as the United States is concerned.

Now, we heard a great deal yesterday about how disputes between States should be settled, and we were informed that the United States Chamber of Commerce had discovered that there are three methods of settling such disputes: (1) By compact; (2) by arbitration; and (3) by litigation.

Well, in spite of the fact that it seems to be assumed that they made some sort of a discovery, as a matter of fact we have had all three here in this very situation. In 1927, a Governors' conference was held at Denver, Colo., in which the Governors of the seven basin States were present. The Governors of the upper basin States volunteered to act as arbitrators, considering they were free from prejudice as to any claims between Arizona—I don't know that Nevada was in it at that time—and California.

They did make an arbitration. It was not accepted and there seems to be some difference of opinion between California and Arizona as to whether or not one of them or both of them refused to accept it, but I am not concerned with that in my view of the situation, because it was not entirely without future use.

I now want to read that report, and again I am reading from this same book that I had here from which I read the testimony before.

I am sorry that I do not have the reference to that, and I do not want to delay the committee. I will go on, but all I wanted to point out was that practically the same language that was used in the report, as contained in the report made by the governors, is contained in the Boulder Canyon Project Act, except as to a change of figures

which I will point out, and which leads me to the belief that there is no question as to the meaning of III (b) water.

That section 4 (a) has been read here, I think, in full, and I do not want to read any more of it than is necessary. It provides in 4 (a) that there are two subsections, (1) and (2), and (1) relates to the method of ratifying the contract without Arizona participating, and (2) refers to the limitation act. I have now found it and I would like, if I may, Mr. Chairman, to read this report of the arbitrators because I think it is quite suggestive. It suggests the basis of the division of water between the lower basin States, submitted by the governors of the States of the upper division at the Denver conference August 30, 1927. The governors of the States of the upper division of the Colorado system suggested the following as a fair apportionment of water between the States of the lower division, subject and subordinate to the provisions of the Colorado River compact insofar as such provisions affect the rights of the upper basin States. [Reading:]

Of the average annual delivery of water to be provided by the States of the upper division at Lee Ferry, under the terms of the Colorado compact: (a) To the State of Nevada, 300,000 acre-feet; to the State of Arizona, 3,000,000 acre-feet; to the State of California, 4,200,000 acre-feet; and to Arizona in addition to water apportioned in subdivision (b), 1,000,000 acre-feet to be supplied from the tributaries of the Colorado River flowing in said State, and to be diverted from said tributaries before the same empty into the main stream. Said 1,000,000 acre-feet shall not be subjected to diminution by reason of any treaty with the United States of Mexico, except in such proportions as the said 1,000,000 acre-feet shall bear to the entire apportionment in (1) and (2) of 8,500,000 acre-feet.

Senator MILLIKIN. Tell us something of the purpose of that meeting.

Mr. HOWELL. The purpose of that meeting, as I understand it, was this: There had at that time arisen a dispute between the lower division States, the States of Nevada, California, and Arizona, and there is a distinction between the lower division and the upper division, which has not always been made here in the hearing, and the other States, of course, constitute the upper division. That is different from the division as to the basins, as to which I have already said New Mexico and Utah are both in both basins. And so it was conceived, there being seven governors of these States present at that time—and I think it appears here who they were; it was a conference of the seven governors: For Arizona, Governor Hunt; and California, Gov. C. C. Young; and Colorado, Governor Adams, New Mexico, Gov. Richard G. Dillon; and Nevada, Governor Balzer; and Utah, Gov. George H. Dern; and Wyoming, Gov. Frank D. Emerson.

The Governors of the upper basin States, conceiving that they had no particular interest as between the waters so far as their division was concerned between the lower basin States, volunteered to act as an arbitration committee or an arbitration board, and they did so. And they had two sessions, if I recollect it rightly, both held at Denver.

Senator MILLIKIN. Was California represented?

Mr. HOWELL. Yes, represented by Governor Young; and Nevada was there also, by Governor Balzer, so they were all present.

Of course, it was not accepted, but as I want to point out now, and I would like to read that portion of 4 (a) which it seems to me, so far as Congress is concerned, carried out that arbitration:

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—

that was cutting Arizona down 200,000 acre-feet below that which was determined to be its share by the Governors—

for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half 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—

Now, there for the first time, although it is implied in the compact that III (b) water had to do with the Gila River, but not mentioned specifically, and even when the Governors were talking about it they talked about a stream in Arizona or streams in Arizona, but didn't mention the Gila—but here for the first time the Gila River is mentioned. It says:

the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State; and (4) that the waters of the Gila River and its tributaries, except return flow after the same enters the Colorado River, shall never be subject to any diminution whatever by any allowance of water which may be made by treaty or otherwise to the United States of Mexico but if, as provided in paragraph (c) of article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico. * * *

As I conceive it, although it is said that III (b) water was not mentioned in the Boulder Canyon Project Act, that is the wood pile in which we find the III (b) water.

I am reading from the compact, and I am also reading from the report of the Governors.

Senator WATKINS. As I understand it, you would say there is no controversy over the meaning or no reason for any controversy over the meaning of those provisions of the compact?

Mr. HOWELL. That is right, so far as the United States is concerned. The question as to whether or not California is bound by that is another question, of course.

Senator WATKINS. Bound by what?

Mr. HOWELL. Bound by the decision of Congress that if they were to make a compact it was to be subject to those limitations. In other words, if I construe that language rightly, it is substantially this: Congress says to the lower division States, "You may make a contract, but when you make your compact you must have those provisions in it."

Now, if you get anything else, you can go ahead and settle those matters, too, but if I construe the situation rightly there are three ways in which compacts between States may be made. In the one

case, Congress can authorize States to enter into a compact and fix precisely the things that they may contract about, and then I assume that there would be no need for a ratification; or the States can go out by themselves, and then come to Congress, and if the Congress ratifies it that can be done; or the Congress can say to the States, "You may make a compact, but when you make it, certain things will be in it," and these things were in this authorization; namely, that Arizona was entitled to 2,800,000, and California was limited to the 4,400,000, and Nevada 300,000, and that makes the 7,500,000, which seemed to be that water of the Colorado which could be divided; and then the Gila River, which is in Arizona, was allocated to Arizona.

Now, of course, if my construction of that is correct, then, of course, it is immaterial what you mean by consumptive use or what you don't mean by consumptive use, and also it takes care of the situation there——

Senator WATKINS. Let me get that clear. In what document did the United States say that?

Mr. HOWELL. In the Boulder Canyon Project Act.

Senator WATKINS. That is what I was trying to find out.

Mr. HOWELL. That is the language that I read from it.

Senator WATKINS. I just wanted to get the source of it.

Mr. HOWELL. What I mean to say is that this is an act of Congress that is still in force, and it has never been repealed. It has been amended, but only by changing the name of the dam.

Senator MCFARLAND. Do I understand your testimony to be that, in your opinion, that was the interpretation of the Congress as to the effect of the Colorado River compact and the California Limitation Act?

Mr. HOWELL. I think it is a legislative construction of the compact.

Senator MCFARLAND. And the limitation act, also?

Mr. HOWELL. Yes.

Now, Senator, you asked me a question which is rather interesting, I think, and I would like to just talk about it a little, although I cannot give you any very definite information.

You will observe that 4 (a) starts out "Sec. 4 (a)"——

Senator WATKINS. What are you reading from?

Mr. HOWELL. From the Boulder Canyon Project Act. It goes down and there is a subdivision (1), and then you can go down a little further and it says it shall take effect upon the proclamation of the President; and then (2), as to what was to happen if they did certain things.

Then there is a limitation on California.

Now, without any change from that, except by the insertion of a new paragraph, you go on down until you get to (b).

Now, whether, of course, all of this is a part of subdivision (2) is a question. I assume that it would be said that it is not, and therefore that California is not bound, like she is as to 4 (a), subdivision (2), by the subsequent paragraph of (a) which is before (b). So I am not saying now, and I do not want to be understood as saying, that California is bound by this, but what I do say is that so far as the Congress is concerned, that this is a legislative determination as to the meaning of the words used in the Colorado River compact and the determination by it as to what water out of the 8,500,000 the States of the lower basin were entitled to have: That the Congress having put this construction upon the compact and the effect of the limitation

statute is in no position now to direct the Attorney General to bring any action that will enable any State to claim any different construction, but the burden of claiming a different construction should be on the State that asserts it.

Now, of course, I have heard it said here by California, and I assume Arizona would say the same, that they do not want to in anywise change the Colorado River compact, the Boulder Canyon Project Act or any of the other documents that, as they say, constitute the law of the river; but of course, I do not mean to say that that should be taken too literally. What they really mean is, on both sides, I suppose, that they want the contract to stand, but they want it to be interpreted like they want it interpreted. That is the difference between them.

Senator WATKINS. That is what makes a controversy in court.

Mr. HOWELL. It may or may not be a controversy that can result in litigation, but at any rate it is a difference of opinion.

Now, that leaves only the one question as has been stated here, except, of course, this question of the meaning of beneficial use, which was discussed yesterday. It was said that would have some effect upon the the rights of the upper basin. I have already said all I care to about that.

Also there is a question as to whether or not Arizona is in or out of this compact, and that I personally don't seem to have very much doubt about. It is true that this 6 months' period was fixed in the Boulder Canyon Act, but I don't find in the original compact anything that required this contract to be signed within any particular date, and so I am not inclined to assume that Arizona is in the compact.

Now, the other question is whether or not California ought to share its proportionate share of the water at Lake Mead because of evaporation, about which there was something said at the start here, as to the amount. That is important regarding the construction to be given the words in the Boulder Canyon Project Act, which defines what is meant by "consumptive use." Of course, I conceive that "consumptive use" may be measured in any way, if it is not fixed by statute, in any way you please, but it can be fixed by statute. And here, apparently, it is fixed by statute. It is diversions less returns to the river. That is the definition given in the limitation to California of the water.

Then the question arises as to what do you mean by "diversions"? That raises some question there.

I assume there would be no doubt that if I may make an assumption of fact that the Colorado River was of such a character that there was no depression, such as there was behind Hoover Dam, so that it could constitute a reservoir, but there was one either a short or some distance away, and the water was taken out of that river and into that reservoir or other reservoir for use, that would be a diversion within the meaning of this phrase. So the real question is whether or not stored water, water held for storage for future use, is to be considered as diverted water.

I can see no distinction between the two situations that I have outlined. I can also see no distinction between that situation and the situation which prevails in my own locality. Ogden is located on a spur of the Wasatch Range, and then there is the Ogden Valley. In that valley rises the Ogden River. The north fork of it rises to the north of the valley and flows down in a southerly direction until it

makes its junction with the Ogden River. On that fork the users of water up there, who are mostly growers of hay so that they irrigate early, have been in the habit of putting a tight dam in the north fork at a place called Liberty, and using all of the water there is in the fork; and then there is a town lower down, Eden, and it puts a tight dam in; and still, although there is no water immediately below the Liberty Dam, there is a large quantity of water for use farther down. So Eden does the same thing, and spreads it out on the land.

Those appropriators up in the valley were all junior to the lower valley users. But our supreme court held that notwithstanding they were junior, they could take that water and spread it out upon those lands up there, in an early part of the year; and assuming it got back into the river so that the river had the same quantity it had or would have had had they not done it, they had a right to do that, even as against senior appropriators.

So I do not see whether it makes any difference whether you put it in storage in a nonstream reservoir or you put it in storage in an off-stream reservoir, or you put it on land which acts as a sort of a sponge for it so that it gets back into the river. I think it is all diverted water.

Now, of course, there is to my mind not 2,000,000 acre-feet in dispute between California and Arizona, but at most this dispute as to the evaporation at Lake Mead, so that the lower basin, the lower division States, have a much less problem than we have to settle by a compact. I think that I should like to conclude by reading from a disturbing opinion in the Supreme Court by Justice Frankfurter in *Texas* v. *Florida*, the case has already been referred to here (306 U. S. 398) in which he attempts to state the relative merits of these various means of settling disputes:

> The authority which the Constitution has committed to this Court over "Controversies between two or more States," serves important ends in the working of our federalism. But there are practical limits to the efficacy of the adjudicatory process in the adjustment of interstate controversies. The limitations of litigation—its episodic character, its necessarily restricted scope of inquiry, its confined regard for considerations of policy, its dependence on the contingencies of a particular record, and other circumscribing factors—often denature and even mutilate the actualities of a problem and thereby render the litigious process unsuited for its solution. Considerations such as these have from time to time led this Court or some of its most distinguished members either to deprecate resort to this Court by States for settlement of their controversies or to oppose assumption of jurisdiction.

Citing a number of cases along that line.

I say that I see no reason that, if we can settle our disputes over 7,500,000 acre-feet of water, why California and Arizona and Nevada could not settle theirs involving, whatever it may be, in something like 600,000 acre-feet, all the other questions having been settled by the Boulder Canyon Project Act.

I think that that concludes my statement, Mr. Chairman.

Senator MILLIKIN. Thank you, Judge.

Are there any questions?

Senator MCFARLAND. We have no questions.

Senator MILLIKIN. We will recess, then, until 2 o'clock.

(Whereupon, at 12:20 p. m., the hearing was recessed until 2 p. m., of the same day.)

AFTERNOON SESSION

(The hearing was reconvened at 2 p. m., upon the expiration of the noon recess.)

Senator MILLIKIN. The hearing will come to order, please.

Judge Howell, had you finished?

Mr. HOWELL. Yes.

Senator MILLIKIN. Who is the next witness please?

Mr. HOWELL. The next witness will be Mr. Breitenstein.

Senator MILLIKIN. Sit down, Mr. Breitenstein, and be comfortable. Give the reporter your name, address, and business.

STATEMENT OF JEAN S. BREITENSTEIN, ATTORNEY, DENVER, COLO., REPRESENTING COLORADO WATER CONSERVATION BOARD

Mr. BREITENSTEIN. My name is Jean S. Breitenstein. My address is 718 Symes Building, Denver, Colo. I am a lawyer, and attorney for the Colorado Water Conservation Board.

The Colorado Water Conservation Board is the official agency of the State of Colorado, charged with the protection and conservation of the water resources of the State.

I might say by way of introduction, that it has fallen to my lot to be one of the attorneys for the State of Colorado in four interstate water cases in the United States Supreme Court, those cases involving the Arkansas River, Laramie River, LaPlata River, and the North Platte River.

The Colorado Water Conservation Board, which I represent, has unanimously adopted a resolution opposing Senate Joint Resolution 145. I do not have a copy of that resolution with me today, but we would like to submit that for inclusion in the record.

Senator MILLIKIN. It will be included whenever it arrives.

(The resolution referred to is as follows:)

RESOLUTION OF COLORADO WATER CONSERVATION BOARD APRIL 23, 1948

Whereas there has been introduced in the Senate of the United States Senate Joint Resolution 145 and a number of companion resolutions in the House of Representatives of the Congress which read as follows:

"[S. J. Res. 145, 80th Cong., 1st sess.]

"IN THE SENATE OF THE UNITED STATES

"July 3 (legislative day, April 21), 1947

"Mr. McCarran (for himself, Mr. Downey, Mr. Knowland, and Mr. Malone) introduced the following joint resolution; which was read twice

"July 8 (legislative day, July 7) 1947

"Referred to the Committee on Public Lands

"JOINT RESOLUTION To authorize commencement of an action by the United States to determine interstate water rights in the Colorado River

"Whereas the development of projects for the use of water in the lower Colorado River Basin is being hampered by reason of long-standing controversies among the States in said basin as to the meaning and effect of the Colorado River

Compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act, the California Limitation Act (Stats. Cal. 1929, ch. 16), various contracts executed by the Secretary of the Interior with States, public agencies, and others in the lower basin of the Colorado River, and other documents and as to various engineering, economic, and other facts; Now, therefore be it

"*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That, for the purpose of avoiding a multiplicity of actions and expediting the development of the Colorado River Basin, the Attorney General is hereby directed to commence in the Supreme Court of the United States of America, against the States of Arizona, California, Nevada, New Mexico, and Utah, and such other parties as may be necessary or proper to a determination, a suit or action in the nature of interpleader, and therein require the parties to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the lower Colorado River Basin."

Whereas this resolution and its effect on Colorado in the present and future utilization of the Colorado River water have been fully studied and considered by the Colorado Water Conservation Board, its engineers and attorneys; and

Whereas the passage of such resolution would adversely affect the interests of Colorado in the present and future utilization of Colorado River water and would be contrary to the maintenance of the integrity of the Colorado River compact: Now, there, be it

Resolved by the Colorado Water Conservation Board, That it opposes the passage by the Congress of Senate Joint Resolution 145, or any companion resolution in the House; and that copies of this resolution be sent to the Senators and Representatives of the State of Colorado and that they be urged to resist passage of Senate Joint Resolution 145.

Adopted and approved this 23d day of April 1948.

Mr. BREITENSTEIN. Colorado is one of the upper basin and upper division States involved in the Colorado River compact. Two of the States, Colorado and Wyoming, are entirely within the upper basin.

The resolution does not specifically name those two States, Wyoming and Colorado, and it is a proper inquiry as to what interest those two States, which are entirely in the upper basin, have in this matter.

Colorado is one of the signatory States to the Colorado River compact. We feel that any matter which involves the interpretation or application of the Colorado River compact necessarily involves every States which is signatory to that compact. In fact, we feel that in any litigation each of the signatory States would be an indispensable party to the litigation.

The resolution, as has been pointed out by others, would specifically direct the Attorney General to proceed against the named States of the lower basin; and then it goes on, "and such other parties as may be necessary or proper to a determination."

We feel that the only other parties that could be necessary or proper to the determination sought would be the States of Colorado and Wyoming.

As has been stated here by Judge Howell, the upper basin States are now engaged in a negotiation of an upper basin compact.

Senator MILLIKIN. May I interrupt and ask whether you foresee any contingency whereby private parties might be considered as indispensable parties?

Mr. BREITENSTEIN. I do not, Senator. It is my position that in litigation of this nature, the State has a position of parens patriae for all of its citizens, all of its water users. Such have been the holdings of the Supreme Court in various cases. The last one where it was discussed, I believe, was the first decision in the *Nebraska* v. *Wyoming* case, when it came up on a motion to dismiss.

It was also discussed to some extent in the final decision.

As I said, the upper basin States are now engaged, and have been for about a year and a half or 2 years, in the negotiation of an upper basin compact, for the purpose of apportioning the water allotted to the upper basin by the Colorado River compact to the States of the upper basin.

Also, as has been pointed out by others, the Department of the Interior and the Bureau of the Budget have taken the position that no new water-use projects for the utilization of Colorado River waters will be recommended for authorization in the upper basin until there is an apportionment of the water between the various States. So we are stymied, so far as any federally financed development is concerned, until we do have a compact apportioning the water to the States.

The pendency of litigation in the United States Supreme Court involving the interpretation and application of the Colorado River compact, we fear, would embarrass and delay the consummation of the upper basin compact. Those opposing the compact would point to the pendency of that litigation as a reason for the various State legislatures and the Congress of the United States taking unfavorable action. At least, that is our fear. It would certainly give them something to tie to.

Likewise, we have the fear that the pendency of this litigation would be used by those who oppose the authorization and construction of federally financed projects in the upper basin; that it would be said that until the litigation is determined, the interpretation of the compact is uncertain, and hence the water supply is uncertain, and the projects should not be authorized, and appropriations should not be made for them.

In that regard we somewhat question the sincerity of the proponents of this legislation.

It was recited that one purpose of the legislation is to promote the development of the Colorado River Basin. And there it does not confine itself to the lower basin. Those appearing here in support of the resolution are all from California. It is interesting to note that California has admittedly already obtained the projects to utilize its share of Colorado River water. There are constructed, for use in California, of Colorado River water, projects which have the capacity to divert from the stream approximately 8,000,000 acre-feet of water annually.

We feel that that is much in excess of the share of California, and that since California now has those projects, and since California, by its actions in Congress and elsewhere, has uniformly shown opposition to the larger projects which are now under study for authorization and construction, we have some doubt as to the sincerity of the proponents of the resolution in saying that it is necessary in order to further the development of the river.

Also, as to why the upper basin States are interested in this resolution, we have the statements of the California witnesses that the fact that we have this treaty with Mexico makes all of the basin States interested in an interpretation of the compact which would involve the question of surplus water, because, as has been pointed out many times, the Mexican share is satisfied first out of surplus, and then one-half the deficiency from each basin.

So much for the reasons why we are interested in the proposed legislation.

Now, why do we feel that the legislation is objectionable?

First, it might be well to point out that under section 2 of article III of the United States Constitution the United States Supreme Court has original jurisdiction of controversies between two or more States. That is the Constitution. It is clear to us, under decisions of the United States Supreme Court, that Congress may not enlarge or diminish that jurisdiction. The jurisdiction in such cases is fixed by the Constitution itself. It cannot be taken away, nor can it be added to by any act of Congress.

There are a number of cases on that. Just for the record, I will cite only one. It is *Ex Parte Yerger* (75 U. S. 85).

Now, under this constitutional provision, there has to be a controversy. In a long series of decisions, the United States Supreme Court has had before it this provision and what it means. The Court has laid down a number of rules as to what is a justiciable controversy within the meaning of this constitutional provision.

To discuss that, I would like to read briefly from the brief which has been filed here by Judge Howell's committee. It says it perhaps more succinctly than I could.

In reading this, I will omit the citations, as they all appear in the brief and can be secured there:

The Supreme Court of the United States has had occasion frequently to pass upon the meaning of the foregoing constitutional provisions in suits or actions between States, and to fix the limits of its jurisdiction thereunder. It has held that it will not grant relief against a State unless the complaining State shows an existing or presently threatened injury of serious magnitude (*Missouri* v. *Illinois* (200 U. S. 496, 521); *New York* v. *New Jersey* (256 U. S. 296, 309); *North Dakota* v. *Minnesota* (263 U. S. 265, 374); *Connecticut* v. *Massachusetts* (282 U. S. 660, 669); *Alabama* v. *Arizona* (291 U. S. 286, 291); *Washington* v. *Oregon* (297 U. S. 517, 528)).

A potential threat of injury is insufficient to justify an affirmative decree against a State. The Court will not grant relief against something feared as liable to occur at some future time (*Alabama* v. *Arizona* (291 U. S. 286, 291)).

The rule that judicial power does not extend to the determination of abstract questions has been announced in numerous cases (*Ashwander* v. *Tennessee* (297 U. S. 288, 324); *New York* v. *Illinois* (274 U. S. 448); *U. S.* v. *West Virginia* (295, U. S. 463)).

For there to be a justiciable controversy it must appear that the complaining State has suffered a loss through the action of the other State, furnishing a claim for judicial redress, or asserts a right which is susceptible of judicial enforcement according to the accepted principles of jurisprudence (*Massachusetts* v. *Missouri* (308 U. S. 1, 16). The mere fact that a State is plaintiff is not enough (*Florida* v. *Mellon* (273 U. S. 12, 16)). An injunction will issue to prevent existing or presently threatened injuries but will not be granted against something merely feared as liable to occur at some indefinite time in the future (*Connecticut* v. *Massachusetts* (282 U. S. 660, 674)). The Court has repeatedly said that it will not issue declaratory decrees (*Arizona* v. *California* (283 U. S. 423, 473); *United States* v. *West Virginia* (295 U. S. 463, 474); *Alabama* v. *Arizona* (291 U. S. 286, 291); *Massachusetts* v. *Missouri* (308 U. S. 1, 15)). Inchoate rights dependent upon possible future development furnish no basis for a decree in an interstate suit (*Arizona* v. *California* (283 U. S. 423, 462)).

Now for two or three brief quotations from the decisions of the Court.

In *Texas* v. *Florida* (306 U. S. 398), a case which had been previously mentioned in this hearing, the Court said:

So that our constitutional authority to hear the case and grant relief turns on the question of whether the issue framed by the pleadings constitutes a justiciable "case" or "controversy" within the meaning of the constitutional provision, and whether the facts alleged and found afford an adequate basis for relief according to the accepted doctrines of the common law or equity systems

of jurisprudence, which are guides to decisions of cases within the original jurisdiction of this Court.

Many years earlier in *Louisiana* v. *Texas* (176 U. S. 1, 15, 20 S. Ct. 251), the Court declared:

But it is apparent that the jurisdiction—

That is, in an interstate suit—

is of so delicate and grave a character that it was not contemplated that it would be exercised save when the necessity was absolute and the matter in itself properly justiciable.

The Court has said that it will not grant relief against something feared as liable to occur at some future time.

In *Alabama* v. *Arizona* (291 U. S. 286) the Court said:

This Court may not be called upon to give advisory opinions or to pronounce declaratory judgment * * *. Its jurisdiction in respect of controversises between States will not be exerted in the absence of absolute necessity.

And in another case, which was not an interstate case, but was a well-known case, the one involving the New River, *U. S.* v. *Appalachian Electric Power Company* (311 U. S. 377), the Court said:

To predetermine, even in the limited field of water power, the rights of different sovereignties, pregnant with future controversies, is beyond the judicial function.

Mr. Shaw, in his statement yesterday, referred to the decision of the Court in the North Platte case, and he read certain extracts from that decision of the Court. In so doing, he omitted a part of the decision which I feel to be of the utmost importance.

Mr. Shaw read this sentence:

The original jurisdiction of this Court is one of the alternative methods provided by the framers of our Constitution.

Following that, some cases are cited. And then Mr. Shaw omitted all the remainder of that paragraph. I would like to read the remainder of that paragraph. The Court said:

The Kendrick project—

That was a Bureau of Reclamation project on the North Platte River—

plainly is an existing threat to senior appropriators downstream.

So in that case, we had a threat.

As we have noted, it is junior to practically every appropriation on the river between Alcova and the Tri-State Dam. Since 1930, there would have been no water for it if it were operated on a priority basis. And in view of the general position taken by Wyoming with respect to Nebraska priorities, it cannot be assumed that the Kendrick project would be regulated for the benefit of senior appropriators in Nebraska. Neither Wyoming nor Colorado has ever recognized any extension of priorities across State lines. They have never limited or regulated diversions by their appropriators in subordination to the senior appropriators of a downstream State. Out-of-priority diversions by Colorado have had an adverse effect downstream. We do not know their full extent. But we do know that Colorado appropriators, junior to Pathfinder—

That is another Federal reservoir of the stream—

consume about 80,000 feet a year, and the Pathfinder has never been filled since 1930 and has always been in need of water.

This alone—

says the Court—

negatives the absence of present injury. The fact that on the average there is some water passing Tri-State Dam unused is no answer. While over half of that

excess amount occurred in May and June, there was comparatively little in August and September. Moreover, we are dealing here with the problem of natural flow. The critical condition of the supply of the natural flow during 1931 and 1940 in the Whalen-to-Tri-State Dam section is obvious. The claim of Colorado to additional demands may not be disregarded. The fact that Colorado's proposed projects are not planned for the immediate future is not conclusive, in view of the present overappropriation of the natural flow. The additional demands on the river which those projects involve constitute a threat of further depletion. Colorado in her argument here asserts that if Jackson County is to maintain its livestock industry to the same extent as it has in the past, it will have to develop this additional summer pasture; and it cannot do this without increasing its irrigated acreage.

That which I have read is the portion which Mr. Shaw omitted. He took up with the next sentence.

So we see that in that case the Court pointed out, first, that there is an existing threat in the construction of the Kendrick project; and, second, a present injury by the out-of-priority diversions in Colorado.

Mr. Shaw said that it might be pointed out that the North Platte decision was a 5 to 3 decision. It was; only eight judges participated in that case.

I would like briefly to read into the record a portion of the dissenting opinion of Mr. Justice Roberts, which was joined in by Justice Frankfurter and Justice Rutledge.

Justice Roberts, dissenting, said:

The precedent now raised will arise to plague this Court not only in the present suit but in others. The future will demonstrate, in my judgment, how wrong it is for this Court to attempt to become a continuing umpire or a standing master, to whom the parties must go at intervals for leave to do what, in their sovereign right, they should be able to do without let or hindrance, provided only that they work no substantial damage to their neighbors. In such controversies, the judicial power should be firmly exercised upon proper occasion, but as firmly withheld unless the circumstances plainly demand the intervention of the Court. Such mutual accommodation for the future as Nebraska and Wyoming desire should be arranged by interstate compact, not by litigation.

And, again, Mr. Justice Roberts' dissent reads:

Such controversies between States are not easily put to repose. Even when judicial enforcement of rights is required, the attempt finally to adjudicate them often proves abortive. Our reports afford evidence of this fact. Kansas and Colorado came here twice at the instance of Kansas in a dispute over the flow of the Arkansas River. In a case presenting, on the whole, less difficulty than the present one, this Court entered a decree, on June 5, 1922, only to find it necessary to revise it on October 9, 1922. But the controversy would not down. The parties came back here on three occasions because of misunderstandings and disagreements with respect to the effect of our decree. The controversy with respect to the diversion of the waters of Lake Michigan seemed to require a decree conditioned upon and containing provisions with respect to future conduct. The difficulty of administering that decree is evidenced by the repeated appearance of the parties in this Court.

Experience teaches the wisdom of the rule we have so often announced—that in such cases the complaining State must show actual or immediately threatened damage of substantial magnitude to move this Court to grant relief, and that until such showing is made the Court should not interfere. The Court, as I think, now departs from this course.

The important thing is that in that North Platte case the Court, while I disagree with its conclusion of fact, nevertheless, found that there was an injury and a threat of injury because of the Kendrick project, and there was an injury because of the out-of-priority diversions.

Senator McFarland. May I ask a question? Was the Kendrick project an authorized project?

Mr. BREITENSTEIN. Yes; it was an authorized project, and the main portions of it were constructed while the litigation was going on.

An interesting thing there is the report of the master and the decision of the Court on the basis that the conditions during the drought period of the thirties would continue to prevail; that there would never be any water for the Kendrick project.

Within the same month that the United States Supreme Court announced its decision on that basis the storage of water in the reservoirs in the Pathfinder area was more than adequate to fill Pathfinder, and there is now, I understand, to the credit of Kendrick over 400,000 acre-feet of water.

Senator MCFARLAND. I hope it does not take a Supreme Court decision to make it rain in the West now. We need it before that time.

Mr. BREITENSTEIN. We say that the facts involved in this matter now before the committee do not show a situation which will bring the differences which exist here within the rule as laid down by the Supreme Court.

First, there is no threat here at all. The only project which I have heard mentioned is that of the central Arizona. That project is not an authorized project. It is up to Congress as to whether or not it ever will be an authorized project. But until it is it cannot be said that that project constitutes a threat.

Here I intended to bring out what I have just stated to Senator McFarland: That in the North Platte case the Kendrick project was an authorized project at the time the suit was brought by Nebraska; a difference which, to me, is very material.

In the second place, there is no existing injury.

Senator MILLIKIN. May I ask: Was construction under way when the suit was brought?

Mr. BREITENSTEIN. Senator, I don't recall that.

Mr. Wehrli says that it was; and he represented Wyoming in the case, and should know. Construction continued while the suit was in progress.

Second, we say that there is no existing injury here. So far as I am aware, there is no one that denies to California its right to 4,400,000 acre-feet of III (a) water, mentioned in the Boulder Canyon Project Act and the California Self-Limitation Act. It is pertinent, of course, to inquire as to what are the existing California uses.

In the hearings before this committee on S. 1175 Mr. Matthew testified for California. Mr. Matthew is the chief engineer of the Colorado River Board of California.

In the hearings on that bill, at page 412, is a table submitted by Mr. Matthew. It is headed "Estimated Annual Beneficial Consumptive Use of Projects in Lower Basin of Colorado River System at Present Time."

Hearings were held last summer, 1947. For the State of California, it gives the total, and the California consumptive use is 3,230,000 acre-feet of water. Those are Mr. Matthew's figures.

Our engineers questioned them. But on his figures, their use is 1,170,000 acre-feet less than the 4,400,000 acre-feet mentioned in their self-limitation statute and the Boulder Canyon Project Act.

It is difficult for me to see how California can say there is an existing injury, when its present uses are a million acre-feet under what, so far as I know, the States agree California is entitled to.

At the same hearing Mr. Royce Tipton presented a table, to which I would like also to call attention. That appears on page 540 of the hearings on S. 1175. And in that table Mr. Tipton has a column, "Estimated Present Use Under Each Priority (1945)," and his total is 2,860,000 acre-feet, or about 400,000 acre-feet less than Mr. Matthew. But under either one, of course, the amount of water being used is very substantially under the 4,400,000 acre-feet.

Also, we feel that it is pertinent to call attention to the fact that there are large amounts of water——

Senator MILLIKIN. Just a minute.

Mr. Shaw, please come up to the table, if it is more comfortable to take notes there. Any of the other gentlemen who are riding herd on this may also come up to the table and be comfortable. You may, of course, be dispossessed if we get an unexpectedly large inflow of Senators.

Mr. SHAW. Thank you very much.

Mr. BREITENSTEIN. The next thing, it seems to me, it is pertinent to point out is the fact that there are large amounts of Colorado River water now flowing to waste in the Gulf of California. In the report made on the Mexican water treaty, Senate Executive Report No. 2, Seventy-ninth Congress, first session, page 4, that amount of water is stated to be eight to nine million acre-feet of water per year.

As I understood Mr. Shaw's testimony yesterday, he gave the figure of 7,000,000 acre-feet per year.

With that amount of water going to waste, and with California using only, under her own figures, 3,200,000 acre-feet, we say that there can be no showing of existing injury, and there is no threat of injury.

Unless you have one or the other, then we say that there may not be and cannot be a compliance with the rule laid down by the Court in the decisions to which I have called attention.

And it seems to me that such was the determination of the Department of Justice in its report. The Department of Justice says:

> It appears, however, that there are no present conflicts in need of judicial determination between the United States and the States in the Colorado River Basin.

And again:

> In the absence of such a request, without adequate supporting data, it would not be in accord with the policy of the Department to institute such an action on its own initiative on the basis of the facts at hand.

The facts at hand are those to which I have directed attention.

Another matter which causes us to object to this proposed legislation is the fact that we feel that litigation of the type contemplated will inevitably delay the development of the river because of the time which will be consumed in such litigation.

The State of Colorado has had some experience in interstate lawsuits.

Senator MCFARLAND. Now, that is assuming that the Court took jurisdiction. If they did not take jurisdiction, the time that it took to determine whether there was a justiciable controversy would be lost.

Mr. BREITENSTEIN. Well, obviously, Senator McFarland, if the Court gave leave to file the bill, and, after the answering pleadings were on file, appointed a master to hear testimony, and the master made his report, and the Court then determined that there was no justiciable controversy, all the elapsed time would be lost.

Senator McFARLAND. Then we would have to start right in where we are now.

Mr. BREITENSTEIN. That is right.

I was about to call attention to some of the experiences of Colorado in interstate litigation, if I may mention my own State.

As far as the Arkansas River is concerned, Kansas sued Colorado in 1901. The decision in that case was handed down in 1907.

From shortly thereafter until 1928, there was continuous litigation over the Arkansas in the lower Federal courts. The second Supreme Court suit started in 1928. The final decision was rendered in 1943. There was litigation again, not continuously but almost continuously, for 42 years.

On the Laramie River, Wyoming sued Colorado in 1911, and, after three oral arguments had been heard by the United States Supreme Court, a decree was entered in 1922.

About 6 months after it entered the decree, the Court had to change it. Wyoming then brought another suit saying Colorado was not complying with the decree. That was brought in either 1930 or 1931. I do not recall the exact date. Two decisions were handed down in that case, the last one in 1936. Then, in 1939, Wyoming sued us again, and that case was decided in 1940.

So there we have 29 years of litigation.

The suit on the LaPlata River, which involved the LaPlata River compact between Colorado and Mexico, was not an original suit. It was started in the lower Colorado court. The case was filed in 1928. It went to the United States Supreme Court twice. The final decision was in 1938.

The North Platte case was started by Nebraska in 1934. The final decision was handed down in 1945. That is 11 years. That decision has been on the books perhaps too short a time for us to say whether or not it will be necessary to have further trips to the court on that case.

Senator MILLIKIN. Mr. Breitenstein, can you speculate on whether framed issues could be presented to the Court that would be acceptable to the Court?

Mr. BREITENSTEIN. Senator, I have given quite a bit of consideration to that. I would be glad to give you my views on it.

In the first place, I doubt that Congress or the representatives of any of the States here can bind the States to any particular issues.

In connection with our various matters in Colorado, we have given serious consideration to whether or not the attorneys general of two States can enter into a stipulation which will control the progress of an original suit in the United States Supreme Court.

It has been suggested that in an original suit in the United States Supreme Court, the contesting parties, through their chief law officers, could enter into a stipulation of facts, or of consent decree and secure its entry by the United States Supreme Court.

The objection to that is that if the parties can so act through their executive officers, then they can circumvent the provision of the United States Constitution requiring the consent of Congress to an interstate compact.

There are serious doubts as to whether or not such a procedure would be legal. Many lawyers say that the only way you can bind a State

in such a matter is through action of the legislature, and not through action of the executive officers.

We feel that it is very questionable as to whether or not any stipulations which might be made, would be treated by the Court as binding.

Now, in that, I am trying to present the thing objectively. I myself have argued at great length that it can be done. But I recognize that there are serious doubts.

Senator O'MAHONEY. What is the basis of your argument that it can be done?

Mr. BREITENSTEIN. Frankly, in saying that it can be done, I am persuaded by the fact that the Court has on numerous occasions acted upon stipulations of attorneys general of the States in cases involving boundaries. I do not have them with me, but in five or six cases involving boundaries, the Court has acted on those stipulations.

The catch is that no one has ever objected to them.

Now, as to what the situation would be if an objection is made, I do not know. The objection would probably go to the authority of the executive officers of the State.

Of course, we in Colorado had another instance in which there was a dispute as to whether or not the Governor or the attorney general represented the State in a matter such as this. And the Supreme Court avoided the necessity of deciding that point.

Yesterday Mr. Shaw related the times which were consumed in the three Arizona-California cases. Those cases were all different from the cases about which I have been talking. Two of the cases were determined upon objections to the filing of the bill, and the other case was decided upon a motion to dismiss.

Of course, it is obvious that if you can get a decision on a law point, the same length of time is not consumed as it would be in a case involving factual matters.

Senator MILLIKIN. In your opinion, could this matter be presented so that the Court could reach a decision without the appointment of a master?

Mr. BREITENSTEIN. That is the next point that I intend to develop, Senator.

We cannot deny that it is a possibility that the Court might do so. But, in my opinion, it is not a probability because it is within the control of any party to that litigation to raise an issue of fact which would require the appointment of a master.

In cases involving factual disputes, the procedure in the Court, as I understand it, has been to appoint either a commissioner to take the testimony or a master. The only practical difference is that the master makes a report while the commissioner does not.

I say that because it has been my experience with masters appointed by the United States Supreme Court in these interstate water matters that those masters take the position that they cannot pass upon the admissibility of evidence. So everybody offers every evidence of any kind that he wants to, and you have interminable hearings, while all parties put in anything that the imaginations of their lawyers or engineers can produce.

If a master had, and would exercise, power as to the admissibility of evidence, these hearings could be shortened immeasurably.

Senator MILLIKIN. Of course, if he exercises that power, he might have to do his work all over again, if he did not do it correctly.

Mr. BREITENSTEIN. That is right. I think that is the position that they took.

I say that in this proposed litigation issues of fact will be involved. It is my judgment that we cannot, by any action of Congress or by any agreement between the States, conclusively fix the pattern of litigation. It is impossible for us to forecast the shape of the issues.

I have already mentioned that stipulations of facts would be of doubtful validity.

Now, on what issues might there be factual disagreements? California has pretty well set out the differences of opinion which exist between that State and Arizona.

One of those involves III (b) water.

Mr. Ely, in his presentation, called attention to the statements of various individuals as to what was the meaning of those provisions—those applicable provisions—of the compact.

Now, of course, if a document such as the compact is not ambiguous or indefinite, or uncertain, parol evidence cannot be received as to its meaning. But here, California seems to think that there is an ambiguity or an uncertainty. And by their presentation here, they have called attention to matters entirely extraneous to the compact to justify their position.

It seems to me reasonable to assume that, if you get into Supreme Court litigation, California will do the same thing, and say, "Here is an ambiguity and uncertainty, so we are entitled to introduce evidence to explain away that uncertainty."

So you have an issue right here, on their own presentation, which would call for the taking of testimony. And no matter how strongly the other States might urge that there is no ambiguity, there is inherent in the situation the possibility that the Court would say, "All right, California; you may produce evidence on this, and we will appoint the master for hearing."

Then the matter is thrown wide open.

Then you have the question of the definition and measurement of beneficial consumptive use.

In the hearings on S. 1175, Judge Clifford H. Stone, the director the Colorado River Water Conservation Board, testified; and his point was, on this particular issue, that since the term was not defined, and was of uncertain meaning, it was proper to go back to the records of the original compacters to determine what they meant.

It is the same situation, urged by another party, as we have on the III (b) water. So there is another place where it seems reasonable to assume an attempt would be made to secure the introduction of evidence.

Also, on the matter of beneficial consumptive use, the consumption of water, the depletion of these streams, is a physical matter. The engineers have done a great deal in regard to them, since the time when this compact was made. In connection with the proposed upper basin compact, we have had an engineering committee working now for over a year and a half.

One of the primary jobs of that committee has been to determine the consumptive uses of water in the upper basin. And a group of very able engineers has been at it for a long time, and they have not yet reached definite conclusions.

But it is my observation, from seeing what that committee has done, the great amount of study in the field and in the office which they have been required to make, that once you get into litigation on how you measure or how you define consumptive use, you have thrown the door wide open for the engineers or the lawyers to have a field day, so far as the introduction of evidence before a master is concerned.

And to my mind, it is reasonable to assume that if this question as to the meaning of the term "beneficial consumptive use" or as to the method of measurement of beneficial consumptive use is raised in any lawsuit, it is inevitable that you will have an issue of fact which will take not months, but years before you will have all the testimony before a master.

On that matter I again refer to the experience of our State, because that is all I have had experience with.

This matter of consumptive use was one of the primary issues in the second Laramie River case.

The engineers spent a long, long time trying to develop their theories of consumptive use, and the Court did not accept them. But a long time was taken in introducing evidence. And in the North Platte case, one of the major reasons for the length of time consumed by that case was the question of consumptive use of water.

The third point which California has mentioned is the reservoir evaporation loss. I do not know how that can be determined unless you have some evidence as to what those reservoir evaporation losses are and as to what the uses of that reservoir water may be.

In our State we have a theory that those who store water or those for whose benefit water is stored, have to sustain the charges resulting from the loss of water from evaporation. I don't know whether that would be applied here or not. But certainly any consideration of the question as to how you charge reservoir evaporation losses would carry with it the probability of a factual issue.

And then, going through all of this, of course, you have the question of whether or not there is a justiciable controversy; which will raise the question as to whether there is an injury or a threat of injury.

I do not know how we can bind any State in any proposed litigation such as this to not raise the point of injury, or threat of injury.

The policy of Colorado for many years has been that it objects to the maintenance of any suit against it unless there is an injury or threat of injury. Unless the Colorado Water Conservation Board completely reverses its policy in any litigation such as this, it would have to raise the question that there is no injury or threat of injury. It might reverse its policy. I do not know.

But under existing policy, that question would be raised; and it would raise a factual matter, of course.

Another feature of this proposed litigation might well be raised here in passing.

The resolution attempts to define the type of action which shall be brought. It directs the Attorney General—who, of course, is an officer supposed to do his duty, and who, if he thought, the United States was being injured, would, I am sure, bring whatever action was necessary—to bring an action in the nature of an interpleader.

Now, the type of action has been discussed here before. One aspect of it perhaps has not been covered, and that is this:

In many of the interstate controversies the Court has emphasized the burden which is upon a complaining State.

If you bring an action in the nature of a bill of interpleader, the complaining State might avoid whatever embarrassment there might be from the question of who has to sustain the burden.

Again, in passing, it seems to me that a technical objection to the resolution is the fact that it endeavors to control the form of action and the parties, and is an effort to control the discretion of the Attorney General of the United States.

Senator MILLIKIN. Do you intend to discuss that basically, as to our right to direct the Attorney General?

Mr. BREITENSTEIN. I intended to mention that a little further, later on. I might as well do it now.

Senator MILLIKIN. Go ahead.

Mr. BREITENSTEIN. It seems to me that one basic defect in this proposed legislation is the fact that through it Congress is infringing upon the prerogatives of both the executive and judicial branches of the Government.

The Attorney General of the United States, as the chief law officer of the United States, is presumed to do his duty and to bring whatever actions as are necessary to protect the United States.

And as shown by his letter to the committee, the Department of Justice will do that.

It might be well just to note this:

The Department of Justice says:

> Here it may be noted that there has been no request by any agency of the Federal Government to this Department for the institution of an action for the purpose of determining the rights of the United States in the basin of the lower Colorado River.
>
> In the absence of such a request with adequate supporting data it would not be in accord with the policy of the Department to institute such an action on its own initiative on the basis of the action at hand.

That is what the chief law officers of the United States say. And it seems to me that after a statement like that, for Congress to come in and direct the institution of a suit is to tread upon the toes of the executive branch of the Government.

Senator MILLIKIN. I want to go deeper on this than just the punctilio that might be involved.

I should like to have some discussion from both sides as to whether we have a constitutional right to direct the Attorney General to bring suit.

Mr. BREITENSTEIN. I am inclined to think you have a constitutional right to direct him to bring a suit under proper circumstances.

My objection goes really to another point.

Well, let me develop it a little further as to the Attorney General.

While you may have a right to direct him to bring a suit if you thing it is proper, or if you think he is not doing his duty, or something, it seems to me that you are treading upon the discretionary powers of the Executive if you go into the detail which is found in this legislation here, to control the form of suit and the parties to it.

My primary objection is it seems to me that this is an attempt to encroach upon the judicial power. It must be assumed that Congress knows these rules which I have just referred to as to justiciable controversy. It knows the constitutional provisions, and what not.

And, knowing all that, if Congress should pass this resolution, it will probably be argued by the proponents that that constitutes a finding by Congress that there is a justiciable controversy.

Now, I say that Congress cannot determine that. That is a matter which can only be determined by the Court.

If there is no justiciable controversy here, Senator, this legislation should not be passed; because Congress knows, from the decisions of the Court, that it interprets the Constitution as giving it jurisdiction in these interstate actions only where here is a justiciable controversy. If there is no justiciable controversy, there is no reason for Congress to pass this legislation. And an attempt to do so is an attempt to decide the case ahead of time on that point.

Senator MILLIKIN. I would like to have discussion of perhaps a deeper phase than that.

Assume that there is, without admitting that there is, a justiciable controversy. Does the Congress have the right to direct the Attorney General to take this, that, or the other action respecting it?

Mr. BREITENSTEIN. I haven't any cases with me on that point, Senator. If you wish, I would be glad to furnish a statement on that.

Senator O'MAHONEY. In making response to the chairman's question, perhaps you ought to take into consideration that this is a joint resolution, which would require the signature of the President, and therefore would be the joint action of the executive and the legislative branches.

Mr. BREITENSTEIN. That is one reason, Senator, that made me hesitate on this: The fact that it does require the signature of the President in order to become law. And if the President does sign it, then you have the action of the Chief Executive Officer.

So you have a joint resolution which the President can veto or approve.

Senator O'MAHONEY. Suppose that instead of being drafted as it is, there should be a joint resolution to the effect that it shall be the duty of the Department of Justice, or the Attorney General, to do thus and so?

Congress would have the right to prescribe the duties of the Attorney General, I assume.

Mr. BREITENSTEIN. Yes, sir; that is correct.

Senator MCFARLAND. Would there be any difference in a joint resolution which would be passed over the President's veto, and one which would pass with his signature? Would there be any difference in the effect of it as a law?

Well, then, if it was passed over his veto, certainly you would not have the approval of the President.

Senator MILLIKEN. I think Senator O'Mahoney has drawn an interesting distinction. Congress is constantly putting out duties for the Attorney General.

In any law that it passes, it has an enforcement angle. It presents duties for the Attorney General or for some law enforcement officer. But he has the discretion. He is the judge of when the duty arises.

Mr. BREITENSTEIN. Here you control the discretion, or attempt to control the discretion.

Senator MILLIKIN. I hope that both sides will either here or by memo give us some enlightenment on that.

Mr. BREITENSTEIN. We will be glad to furnish a statement on that.

In answer to what Senator McFarland was saying, in my thinking on it, if the President would sign this legislation, that in my opinion would do away with the point, because he is the Chief Executive Officer, and he would be approving it.

I do not know that that is correct thinking, but that is what I had in mind.

We will be glad to furnish you with a memorandum on that particular point, Senator.

(The memorandum referred to is as follows:)

SUPPLEMENTAL BRIEF AND ARGUMENT OF THE COLORADO RIVER BASIN STATES COMMITTEE, REPRESENTING THE STATES OF WYOMING, COLORADO, NEW MEXICO, ARIZONA, AND UTAH

S. J. RES. 145 PROPOSES AN UNCONSTITUTIONAL ENCROACHMENT BY THE CONGRESS ON THE EXECUTIVE BRANCH OF THE FEDERAL GOVERNMENT

A consideration of S. J. Res. 145 directs the Attorney General of the United States to commence a suit in the Supreme Court of the United States in the nature of interpleader against five named parties, to wit: Arizona, California, Nevada, New Mexico, and Utah.

It is suggested in the joint brief filed on behalf of the Colorado River Basin States Committee that in directing a suit of a specific nature against specific named parties Congress would be encroaching upon the powers of the executive department of the President and more particularly on the executive powers of the Attorney General of the United States, who is the executive officer charged with the responsibility of determining the necessity of legal action, the type of proceeding to be filed, and the parties to be made defendants whenever it shall appear to him that the interests of the United States are involved.

S. J. Res. 145 raises the specific question as to whether the determination of such matters as set forth therein are within the discretion of the legislative department or executive department of our Government.

The answer to this question must of necessity be determined by a consideration of specific constitutional provisions and powers and by a consideration of those legal authorities which interpret those provisions. It is important, therefore, to consider the duties of the Attorney General of the United States.

In 5 Am. Jur., page 236, Section 7, is a discussion of the general nature of the duties of the Attorney General of the United States from which we quote:

"While the Federal statutes which establish and regulate the Department of Justice provide that 'there shall be at the seat of government an executive department to be known as the Department of Justice, and an Attorney General, who shall be the head thereof,' they contain no specific statement of the general duties of the Attorney General * * *.

"While there is no specific statement in the enactments of Congress enumerating the general duties of the office, it is held that as the Constitution contemplates the existence of an officer of the government to determine when the United States shall sue, to decide for what it shall sue, and to be responsible for the conduct of suits, Congress, in creating the office of attorney general and in using that term in other statutes has reference to the similar office under the English law, and therefore have impliedly conferred upon him authority, and made it his duty, to supervise the conduct of all suits brought by or against the United States * * *."

In 1854 Attorney General Caleb Cushing rendered an opinion to the President of the United States in which he set forth a brief exposition of the history of the office of the Attorney General and from which we quote:

"Exposition of the early establishment of executive departments: The Constitution does not specify the subordinate, ministerial, or administrative functionaries, by whose agency or counsels the details of the public business are transacted. It recognizes the existence of such official agents and advisers, but leaves the number and the organization of those departments to be determined by Congress. In the exercise of this duty, the constitutional Congress proceeded at an early day of its first session (July 27, 1789, 1 Stat. 28, c. 4) to establish the 'department of foreign affairs,' with 'a principal officer therein' to

be called the secretary for the department of foreign affairs. * * * At the same session (Sept. 24, 1789, 1 Stat. 73) followed 'An Act to establish the judicial courts of the United States,' wherein, by section 35 of said Act, provision was made for the appointment of an attorney general * * *. Such was the original basis of the executive organization of the government. The Secretary of State for political and foreign affairs, the Secretary of War for military and naval matters, the Secretary of the Treasury for those of finance, and the Attorney General for judicial and legal affairs—these were the immediate superior ministerial officers of the President, as well as his constitutional counselors during the whole period of the administration of the first President of the United States" ((1854) 6 Op. Atty. Gen. 326).

The leading case concerning the power of the Attorney General of the United States to initiate a suit in its behalf is the case of *United States* v. *San Jacinto Tin Co.* (Cal. 1888) (125 U. S. 273; 8 S. Ct. 850; 31 L. Ed. 747). In this case suit was brought by the Attorney General of the United States in behalf of the United States to cancel a patent for land on the ground that it was obtained by fraud or mistake. The Court held that the initial consideration of such a suit lies with the Attorney General as head of one of the executive departments. As this is the leading authority, we desire to quote at length therefrom. Mr. Justice Miller in speaking for the Court said in 8 S. Ct. 850 at page 853:

"Another question, however, is raised by counsel for the defendant, which is earnestly insisted upon by them, and which received the serious consideration of the judges in the circuit court; namely, the right of the Attorney General of the United States to institute this suit. * * * *It is denied that the Attorney General has any general authority under the constitution and laws of the United States to commence a suit in the name of the United States to set aside a patent*, or other solemn instrument issued by proper authority. It is quite true that the Revised Statutes, in the title which establishes and regulates the department of justice, simply declares, in section 346, that 'there shall be at the seat of government an executive department, to be known as the Department of Justice, and an attorney general, who shall be the head thereof.' There is no very specific statement of the general duties of the attorney general, but it is seen from the whole chapter referred to that he has the authority, and it is made his duty, to supervise the conduct of all suits brought by or against the United States, and to give advice to the president and the heads of the other departments of the government. There is no express authority vested in him to authorize suits to be brought against the debtors of the government, or upon bonds, or to begin criminal prosecutions, or to institute proceedings in any of the numerous cases in which the United States is plaintiff; and yet he is invested with the general superintendence of all such suits, and all the district attorneys who do bring them in the various courts in the country are placed under his immediate direction and control. * * * If the United States, in any particular case, has a just cause for calling upon the judiciary of the country, in any of its courts, for relief by setting aside or annulling any of its contracts, its obligations, or its most solemn instruments, the question of the appeal to the judicial tribunals of the country must primarily be decided by the attorney general of the United States. * * * *There must, then, be an officer or officers of the government to determine when the United States shall sue, to decide for what it shall sue, and to be responsible that such suits shall be brought in appropriate cases.* * * * The judiciary act of 1789, in its third section, which first created the office of attorney general, without any very accurate definition of his powers, in using the words that 'there shall be appointed a meet person, learned in the law, to act as attorney general for the United States' (1 U. S. St. at Large 93), must have had reference to the similar office with the same designation existing under the English law; and, though it has been said that there is no common law of the United States, it is still quite true that when acts of congress use words which are familiar in the law of England, they are supposed to be used with reference to their meaning in that law. *In all this, however, the attorney general acts as the head of one of the executive departments, representing the authority of the president in the class of subjects within the domain of that department, and under his control.*" [Emphasis supplied.]

The only applicable case decided by the U. S. Supreme Court prior to the *United States* vs. *San Jacinto Tin Co.*, *supra*, is the case of *United States* vs. *Hughes* (11 How. 552), which also involved cancellation of a patent. In this case it was held that it was proper for the Attorney General to file an information on behalf of the United States to cancel the patent.

In another case, *United States* vs. *Beebe* (127 U. S. 228, 8 S. Ct. 1083), decided at the same term of court, the Attorney General's action in bringing a suit in behalf of the United States to cancel a patent was approved.

Since the decision in *United States* vs. *San Jacinto Tin Co., supra*, there have been innumerable cases in both the Supreme Court of the United States and in the lower federal courts in which it has been held that the Attorney General in initiating a suit in behalf of the United States is exercising an executive function. Among those cases are the following:

Sanitary District of Chicago vs. *United States* (45 S. Ct. 176, 266 U. S. 405, 69 L. Ed. 352).

New York vs. *New Jersey* (41 S. Ct. 492, 256 U. S. 296, 65 L. Ed. 937).

United States vs. *American Bond & Mortgage Co.* (31 F. (2d) 448, Aff. 52 F. (2d) 318; certiorari denied 52 S. Ct. 311, 235 U. S. 538, 76 L. Ed. 931).

North Dakota-Montana Wheat Growers Ass'n. vs. *United States* (66 F. (2d) 573, 92 A. L. R. 1484, writ of certiorari denied in 291 U. S. 672, 78 L. Ed. 1061, 54 S. Ct. 457).

United States vs. *American Bell Telephone Co.* (128 U. S. 315, 367, 9 S. Ct. 90, 32 L. Ed. 450.

Application of Texas Company (27 F. Supp. 847).

United States vs. *Kolcno* (226 F. 180, 141 C. C. A. 178).

In re Debs (158 U. S. 564, 15 S. Ct. 900, 906, 39 L. Ed. 1092).

In the case of *Sanitary District of Chicago* vs. *U. S., supra*, Mr. Justice Holmes said, at 45 S. Ct. 177:

"This is not a controversy between equals. The United States is asserting its sovereign power to regulate commerce and to control the navigable waters within its jurisdiction. It has a standing in this suit not only to remove obstruction to interstate and foreign commerce, the main ground, which we will deal with last, but also to carry out treaty obligations to a foreign power bordering upon some of the Lakes concerned, and, it may be, also on the footing of an ultimate sovereign interest in the Lakes. *The Attorney General by virtue of his office may bring this proceeding and no statute is necessary to authorize the suit.* (*United States* vs. *San Jacinto Tin Co.* (125 U. S. 273, 8 S. Ct. 850, 31 L. Ed. 747).)" [Emphasis supplied.]

It was held in *United States* vs. *American Bond & Mortgage Co., supra*, that the Attorney General by virtue of his office might bring suit in behalf of the United States to enjoin radio broadcasting without a license under Radio Act, 1927 (44 Stat. 1162), as amended March 29, 1928 (45 Stat. 373).

It was held in *North Dakota-Montana Wheat Growers Ass'n.* vs. *United States, supra*, that the Attorney General of the United States was authorized to institute a suit by the United States to foreclose a mortgage given by the cooperative association to the Farm Board under the Agricultural Marketing Act (7 U. S. C. A., Sections 521–535; 5 U. S. C. A., Sections 291–339), the Court said, at page 577:

"The moneys advanced by the Farm Board under the Act of Congress providing a revolving fund of $500,000,000 were Government funds to be devoted to the advancement of a public purpose. By this suit the right to have the money of the Government loaned for a public purpose returned to it is being asserted. The argument is not at all appealing that the Government had no authority to bring this action merely because the Agricultural Marketing Act did not so provide, and that it must be brought by the Farm Board. We have pointed out that the Farm Board had no such authority. The Government being the proper party to bring the suit, *it follows that the Attorney General, the head of the Department of Justice with broad powers and responsibilities in respect to all legal matters of the Government* (sections 291–339, chapter 5, title 5 USCA) had *authority to initiate this action* (*United States* vs. *San Jacinto Tin Co.*, 125 U. S. 273, 8 S. Ct. 850, 31 L. Ed. 747)." [Emphasis supplied.]

It is crystal clear from consideration of these authorities that the power to initiate suits, determine the type of action to be followed, and to select the parties to be sued is within the executive power of the United States and more particularly is vested in the President of the United States and his subordinate officers by virtue of Article II, Section 3, of the United States Constitution which provides "He (President) shall take care that the laws be faithfully executed."

On the other hand, it is plain that S. J. Res. 145, directing the Attorney General of the United States to file a suit of a particular nature against particular named parties, would constitute an encroachment upon the executive power by Congress and therefore is unconstitutional.

There is no doctrine in American Constitutional Law better known than that of the separation of powers. There is little need for citing voluminous authorities relating to this doctrine. It is well recognized that the Constitution divides the powers among the three great departments, the legislative, the executive, and the judiciary, and that insofar as the powers are expressly divided, the departments are independent of each other and not subject to encroachment from either of the others or both. As it is plain from consideration of the authorities heretofore cited that the Attorney General in instituting a suit in behalf of the United States is exercising an executive power specifically provided for in Article II, Section 3, of the Federal Constitution, to wit: to execute the laws, it is obvious that S. J. Res. 145 is an encroachment.

Nowhere in the Constitution is there any authority granted to Congress to execute the laws. Its duty is to enact the laws. *Springer* vs. *The Government of the Philippine Islands* (48 S. Ct. 480, 277 U. S. 189, 72 L. Ed. 845).

A review of the elementary principles of our form of government is contained in the opinion of the United States District Judge of the District of Illinois in the case of Application of Texas Company (27 F. Supp. 847 at 849). In substance the Court reviews those well-known principles concerning the division of powers and states that the function of Congress is to make laws, the function of the Supreme Court is to interpret laws, and the function of the executive department is to execute laws. It is only because there has been a blending of powers in certain instances that there has been any confusion.

An example of the blending of powers is found in the power of the President to approve or disapprove legislation. This, however, is a limited participation in the legislative function by the President authorized by the Constitution. The performance of such an act by the President is legislative rather than executive in character.

Senate Document 232, 74th Congress, 2d Session, entitled "The Constitution of the United States of America, Annotated" (1938), page 10, contains this language:

ENCROACHMENT BY THE EXECUTIVE.—"The doctrine of separation of power is, of course, applicable to the Executive and to Congress, except insofar as the Constitution authorizes the President to veto legislation, to inform Congress on the state of the Union, to conduct foreign affairs, etc.

"The exercise of the Presidential 'pocket veto' after Congress adjourns is not an encroachment on legislative prerogatives. He has 10 days in which to indicate his approval or disapproval; if Congress adjourns in the interim, it thereby prevents a return of the bill." [1]

The power of the President to approve or disapprove legislation passed by Congress is contained in Article I of the Constitution covering the "Legislative Department." (Article I, Section 7, Clause 2, of the Constitution.)

The question of separation of powers and encroachment by one department on another was the subject of a series of articles appearing in the Federalist and written by either Madison or Hamilton. These articles in the Federalist are XLVII, XLVIII, XLIX, L, and LI. Madison points out in the first of these articles a fact which is familiar to most of us, that Montesquieu was the originator of "the doctrine of separation of powers." In referring to Montesquieu, Madison says:

"His meaning, as his own words import, and still more conclusively as illustrated by the example in his eye, can amount to no more than this, that where the whole power of one department is exercised by the same hands which possess the whole power of another department, the fundamental principles of a free constitution are subverted."

In discussing the question of legislative encroachment Madison says:

"The legislative department derives a superiority in our Government from other circumstances. Its constitutional power being at once more extensive, and less susceptible of precise limits, it can, with the greater facility, mask, under complicated and indirect measures, the encroachments which it makes on the coordinate departments. It is not infrequently a question of real nicety in legislative bodies, whether the operation of a particular measure will, or will not, extend beyond the legislative sphere. On the other side, the executive power being restrained within a narrower compass, and being more simple in its nature, and the judiciary being described by landmarks still less uncertain projects of usurpation by either of these departments would immediately betray and defeat themselves. Nor is this all; as the legislative department alone has access to

[1] *Okagogan Indians* vs. *United States* (Pocket Veto Case), 279 U. S. 655 (1929).

the pockets of the people, and in some constitutions full discretion, and in all a prevailing influence, over the pecuniary rewards of those who fill the other departments, a dependence is thus created in the latter, which gives still greater facility to encroachments of the former.

Madison then quotes Jefferson's "Notes on the State of Virginia," Page 195:

"All the powers of government, legislative, executive, and judiciary, result to the legislative body. The concentrating there in the same hands, is precisely the definition of despotic government. It will be no alleviation, that these powers will be exercised by a plurality of hands, and not by a single one. One hundred and seventy-three despots would surely be as oppressive as one. Let those who doubt it, turn their eyes on the republic of Venice. As little will it avail us, that they are chosen by ourselves. An elective despotism was not the government we fought for; but one which should not only be founded on free principles, but in which the powers of government should be so divided and balanced among several bodies of magistracy, as that no one could transcend their legal limits, without being effectually checked and restrained by the others. For this reason, that convention which passed the ordinance of government, laid its foundation in this basis, that the legislative, executive, and judicial departments should be separate and distinct, so that no person should exercise the powers of more than one of them at a time. *But no barrier was provided between these several powers.*" [Emphasis supplied.]

"The judiciary and the executive members were left dependent in the legislative for their subsistence in office, and some of them for their continuance in it. *If, therefore, the legislature assumes executive and judiciary powers, no opposition is likely to be made; nor, if made, can be effectual; because in that case they may put their proceedings into the form of acts of Assembly, which will render them obligatory on the other branches.* They have accordingly, in many instances, decided rights which should have been left to judiciary controversy, and the direction of the executive, during the whole time of their session, is being habitual and familiar." [Emphasis supplied.]

This series of articles on the question of separation of powers is concluded with Federalist LI, in which Madison states that as all the exterior provisions are inadequate to prevent encroachment, the defect must be supplied from within the interior structure of the Government itself, and that the several departments of the Government may by their mutual relations be the means of keeping each other in their proper places.

The case of *Marbury* vs. *Madison* is particularly in point in considering S. J. Res. 145. It is unnecessary to detail the familiar facts in this great case. However, it is most helpful to consider language from the opinion. At page 175 thereof we find the following:

"This original and supreme will organizes the government, and assigns to different departments their respective powers. It may either stop here or establish certain limits not to be transcended by those departments.

"The Government of the United States is of the latter description. The powers of the legislature are defined and limited; and that those limits may not be mistaken or forgotten, the constitution is written. To what purpose are powers limited, and to what purpose is that limitation committed to writing, if these limits may, at any time, be passed by those intended to be restrained? The distinction between a government with limited and unlimited powers is abolished, if those limits do not confine the persons on whom they are imposed, and if acts prohibited and acts allowed, are of equal obligation. *It is a proposition too plain to be contested, that the constitution controls any legislative act repugnant to it;* or, that the legislature may alter the constitution by an ordinary act.

"Between these alternatives there is no middle ground. The constitution is either a superior paramount law, unchangeable by ordinary means, or it is on a level with ordinary legislative acts, and, like other acts, is alterable when the legislature shall please to alter it.

"If the former part of the alternative be true, then a legislative act contrary to the constitution is not law; if the latter part be true, then written constitutions are absurd attempts, on the part of the people, to limit a power in its own nature illimitable.

"Certainly all those who have framed written constitutions contemplate them as forming the fundamental and paramount law of the nation, and, consequently, the theory of every such government must be that an act of the legislature repugnant to the constitution is void.

"This theory is essentially attached to a written constitution, and is, consequently, to be considered by this court as one of the fundamental principles of our society. It is not therefore to be lost sight of in the further consideration of this subject.

"If an act of the legislature repugnant to the constitution is void, does it, notwithstanding its invalidity, bind the courts and oblige them to give it effect? Or, in other words, though it be not law, does it constitute a rule as operative as if it was a law? This would be to overthrow in fact what was established in theory; and would seem, at first view, an absurdity too gross to be insisted on. It shall, however, receive a more attentive consideration." [Emphasis supplied.]

And at page 165 thereof we find the following:

"By the constitution of the United States, the President is invested with certain important political powers, in the exercise of which he is to use his own discretion, and is accountable only to his country in his political character and to his own conscience. To aid him in the performance of these duties, he is authorized to appoint certain officers, who act by his authority, and in conformity with his orders.

"In such cases, their acts are his acts; and whatever opinion may be entertained of the manner in which executive discretion may be used, *still there exists, and can exist, no power to control that discretion.* The subjects are political. They respect the nation, not individual rights, and being intrusted to the executive, the decision of the executive is conclusive. The application of this remark will be perceived by adverting to the act of congress for establishing the department of foreign affairs. This officer, as his duties were prescribed by that act, is to conform precisely to the will of the President. He is the mere organ by whom that will is communicated. The acts of such an officer, as an officer, can never be examinable by the courts.

"But when the legislature proceeds to impose on that officer other duties; when he is directed peremptorily to perform certain acts; when the rights of individuals are dependent on the performance of those acts; he is so far the officer of the law; is amenable to the laws for his conduct; and cannot at his discretion sport away the vested rights of others.

"The conclusion from this reasoning is that where the heads of departments are the political or confidential agents of the executive, merely to execute the will of the President, or, rather, to act in cases in which the executive possesses a constitutional or legal discretion, nothing can be more perfectly clear than that their acts are only politically examinable. But where a specific duty is assigned by law, and individual rights depend upon the performance of that duty, it seems equally clear that the individual who considers himself injured has a right to resort to the laws of his country for a remedy." [Emphasis supplied.]

It is obvious from a consideration of *Marbury* vs. *Madison*, supra, above quoted, that there are two types of power which are normally exercised by the head of an executive department. The one is ministerial, and undoubtedly Congress has authority under the Constitution to require an executive officer to perform a ministerial duty. The other is within the constitutional executive discretion. It is at once apparent from the authorities cited in this memorandum that the Attorney General in initiating suits in the name of the United States is acting within his constitutional executive discretion and is not subject to the control of Congress. He is acting in a case in which the executive possesses a constitutional or legal discretion by virtue of the constitution itself—in this case under the authority of Article II.

It is further submitted that if Congress has the power, as suggested by S. J. Res. 145, to say what suits shall be filed and against whom, and for what purpose, then by the same token it would have the right to say what suits are not to be filed, and such an exercise of power would clearly be an usurpation on the part of Congress of the whole power vested in the President by Article II, Section 3, to see that the laws are faithfully executed.

Heretofore the proponents of this resolution presented to this Committee a number of congressional statutes for the purpose of showing that Congress has the authority to enact legislation such as S. J. Res. 145. An analysis of these statutes shows: first, in every statute but one a discretion as to whether or not an action should be filed was left to the Attorney General of the United States, where it clearly belongs under the Constitution; second, in each of these statutes

there is a definite, well-defined interest of the United States in the public lands to be protected, and it was therefore perhaps proper under U. S. Constitution, Art. IV, Sec. 3, cl. 2, for the Congress to enact the particular law; third, the question of legislative encroachment upon executive power was apparently never raised in connection with any of these statutes, and had it been, it is submitted an attempt to deny the executive department its constitutional discretion would be a violation of the constitution.

CONCLUSIONS

The conclusions reached by the Colorado River Basin States Committee, and of the States of Colorado, Wyoming, Utah, New Mexico, and Arizona, which are members of that Committee, may be summarized as follows:

1. The powers of the general government are divided by the Constitution among the legislative, the executive, and the judicial departments and insofar as the powers are expressly divided, the several departments are independent of each other and not subject to encroachment.

2. The Attorney General of the United States in commencing a suit or action on behalf of the United States is carrying out an executive power and duty vested in the President of the United States by Article II of the United States Constitution.

3. The President of the United States in the exercise of this executive power has a complete discretion; to aid him he has the Attorney General of the United States, the head of the Department of Justice, who acts by his authority and executes his will in exercising this constitutional and legal discretion; and no other branch of the government can control this discretion or usurp this power.

4. The approval or disapproval by the President of legislation passed by Congress is the performance, under a specific provision of the Constitution, of a function legislative rather than executive in character.

5. The Congress of the United States, by the passage of S. J. Res. 145, would be encroaching upon the executive power of the President in directing the Attorney General of the United States to commence an action of a specific nature against specific named parties as this determination is within the constitutional discretion of the President and the Attorney General, pursuant to Article II of the United States Constitution.

Respectfully submitted.

The Colorado River Basin States Committee: State of Colorado, Clifford H. Stone (Chairman), Frank Delaney; State of Wyoming, L. C. Bishop, H. Melvin Rollins; State of New Mexico, Fred E. Wilson, John H. Bliss; State of Arizona, Nellie T. Bush, Charles A. Carson; State of Utah, W. R. Wallace, Grover A. Giles.

Subcommittee to Oppose Litigation: State of Utah, J. A. Howell (Chairman), Grover A. Giles; State of New Mexico, Fred E. Wilson, Martin A. Threet; State of Colorado, Clifford H. Stone, Jean S. Breitenstein; State of Arizona, Nellie T. Bush, Charles A. Carson; State of Wyoming, Norman B. Gray (Attorney General), H. Melvin Rollins.

Mr. BREITENSTEIN. I got a little off the track here. I will just mention in passing one other matter involving these interstate lawsuits which has been and still is quite important to the State of Colorado.

We have been in so many of these that we have found they are terribly expensive. Not only are they time consuming, but they are money consuming.

Our most recent experience was in the North Platte case. Conservative estimates as to the cost of the North Platte case in money approximate a million and a half dollars.

Commissioner Bashore of the Bureau of Reclamation, testifying before, I believe, the Senate Public Lands Committee, in connection with the second Republican River compact, a year or so before the

North Platte suit was over, testified that that suit up to that time had cost the United States over $500,000.

I do not have the reference to that testimony with me, but if you wish, I can get it and supply it for the record.

But these interstate lawsuits are quite expensive; and if the money which went into these interstate lawsuits went into building dams, we would have a lot more dams.

Now, much of the time which has been spent here at the hearing has related to the matters which are believed to establish the existence of a controversy. Those have been argued on behalf of the proponents. On behalf of the opponents, Judge Howell has given very ably the answering argument.

I apprehend that the mere fact that Judge Howell this morning gave the theories of his State and the Colorado River Basin States Committee on these points raised by the proponents of the legislation—the mere fact that he did that—will be urged by them to show that there is a controversy.

Well, in my reasoning, that is not right. We lawyers have lots of differences of opinion. Out in our State, if you disagree as to the interpretation and application of a contract, you can bring an action for declaratory judgment and go up to the court, and the court will decide it.

Here you do not have the possibility of getting a declaratory judgment, because the court says it will not issue one in such suits.

Also, in our State, if the legislatures cannot agree upon the meaning of a statute which is before them, before they pass that statute or vote upon it, they can ask the supreme court for an advisory opinion, and thus settle their differences of opinion.

But here again you cannot do that with the Supreme Court of the United States.

Along that line, I would like to read very briefly from a decision of the Supreme Court in the case of the *United States* v. *West Virginia*.

That was a suit by the United States against the State of West Virginia.

The Court said this:

> But there is presented here, as respects the State, no case of an actual or threatened interference with the authority of the United States. At most, the bill states a difference of opinion between the officials of two governments, whether the rivers are navigable and, consequently, whether there is power and authority in the Federal Government to control their navigation, and particularly to prevent or control the construction of the Hawks Nest Dam, and hence whether a license of the Federal Power Commission is prerequisite to its construction. There is no support for the contention that the judicial power extends to the adjudication of such differences of opinion. Only when they become the subject of controversy in the constitutional sense are they susceptible of judicial determination. See *Nashville, C. & St. L. R. Co.* v. *Wallace* (288 U. S. 249, 259; 77 L. ed. 730, 733; 53 S. Ct. 345; 87 A.L.R. 1191).
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> Until the right asserted is threatened with invasion by acts of the State, which serve both to define the controversy and to establish its existence in the judicial sense, there is no question presented which is justiciable by a Federal court. See *Fairchild* v. *Hughes* (258 U. S. 126, 129, 130; 66 L. ed. 499, 504, 505; 42 S. Ct. 274); *Texas* v. *Interstate Commerce Commission* (258 U. S. 158, 162; 66 L. ed. 531, 537; 42 S. Ct. 261); *Massachusetts* v. *Mellon*, supra (262 U. S. 483, 485, 67 L. ed. 1083, 1084, 42 S. Ct. 597); *New Jersey* v. *Sargent*, *supra* (269 U. S. 328, 339, 340; 70 L. ed. 289, 294, 295; 46 S. Ct. 122).
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> General allegations that the State challenges the claim of the United States that the rivers are navigable, and asserts a right superior to that of the United States to license their use for power production, raise an issue too vague and ill-

defined to admit of judicial determination. They afford no basis for an injunction perpetually restraining the State from asserting any interest superior or adverse to that of the United States in any dam on the rivers, or in hydroelectric plants in connection with them, or in the production and sale of hydroelectric power. The bill fails to disclose any existing controversy within the range of judicial power. See *New Jersey* v. *Sargent*, supra, 339, 340.

So here we can have our disagreements with California. We can have our differences of opinion as to what this statute and that compact and the other contract mean.

But those differences of opinion do not amount to anything, unless you get a controversy of the type which gives the Court jurisdiction under the United States Constitution. Until you have that, all you have is a situation where the engineers and lawyers are arguing about what something means. And they may argue all day long, and still their arguments in and of themselves will not and cannot make a justiciable controversy. That is made by the facts.

Is there an injury? Or is there a threat of injury? Until the facts develop a situation where there is an injury or threat of injury, you do not have a controversy, no matter how many arguments you have.

So the mere fact that California says one thing, and we say another thing, while it does show a difference of opinion, does not and cannot show a justiciable controversy.

I do not know that it would be worth while for me to go over again the arguments which were presented by Judge Howell this morning in regard to whether or not III (b) is apportioned water. We feel that definitely it is apportioned water.

There is one matter which perhaps is worthy of mention that perhaps Mr. Howell did not bring out, and that is the answer which Mr. Hoover, the compact commissioner, gave to one of the interrogatories propounded to him by Representative—now Senator—Hayden.

Senator MILLIKIN. What is the background of the interrogatory?

Mr. BREITENSTEIN. Well, all I know is what appears here, in what California has referred to as the bible. That is a compilation by Wilbur and Ely of the basic documents constituting the law of the river; that is, the compact, the Project Act, and the various contracts which have been entered into by the Secretary of the Interior.

The title of the book is "Hoover Dam Contracts" by Wilbur and Ely.

On page 393, under the heading "Analysis of Colorado River compact," there appears a letter to the Honorable Carl Hayden, House of Representatives, Washington, D. C., under date of January 21, 1923.

It reads:

DEAR MR. HAYDEN: Referring to your letter of January 9 addressed to the secretary, enclosing questionnaire on the Colorado River compact, I have requested Mr. Hoover to forward to you his answers on the questions which you propounded.

Very truly yours,

CLARENCE E. STETSON,
Executive Secretary, Colorado River Commission.

And as for question No. 5, the question is a little obscure to me, but it reads:

Why is the basis of division changed from the "Colorado River system" to the "River at Lee Ferry" in paragraph (d) of article III, the period of time extended to 10 years, and the number of acre-feet multiplied by 10?

Senator MILLIKIN. Would you mind reading that again?

Mr. BREITENSTEIN (reading):

Why is the basis of division changed from the "Colorado River system" to the "River at Lee Ferry" in paragraph (d) of article III, the period of time extended to 10 years, and the number of acre-feet multiplied by 10?

Now, perhaps to get that clear, we should look at the Compact: Paragraph (d) reads thus:

The States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this Compact.

Section (f) is the one read to you this morning by Judge Howell:

Further equitable apportionment of the beneficial uses of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c)—

And note the word "unapportioned"—

may be made in the manner provided in paragraph (g) at any time after October 1, 1963, if and when either basin shall have reached its total beneficial consumptive use as set out in paragraphs (a) and (b).

Now, Secretary Hoover, in answering that question of Mr. Hayden, said:

I do not think there is any change in the basis of divisions as the result of the difference in language in articles III (a) and III (b). The two mean the same.

So we see that the man who was the Federal representative at the time of the execution of the contract considered III (a) and III (b) to mean the same, which would definitely mean that there was an apportionment made by each of those, and that the III (b) water is apportioned water.

Judge Howell this morning pointed out that section IV (a) of the Boulder Canyon Project Act gave the authorization of Congress to a compact between the three States of the lower division. And he read to the committee the provisions of that.

It seems to me that there are two points to be emphasized there:

First, that that constitutes a legislative interpretation of the compact made in 1928 by Congress, which is the only authorization by Congress to the making of a compact between the three States of the lower division.

There is no other authorization than that one.

Hence, it would seem that unless and until Congress changes the law, any compact which is entered into pursuant to such authorization would have to comply with paragraph IV (a) in its important provisions.

Of course, it may be said in answer to that, that the States are free to compact, and they can come back to Congress and get consent. That is true.

So far as any existing authorization is concerned, there is none, other than that found in IV (a).

So it seems to us—and I again reflect the thinking of the responsible officials in Colorado at the present time—to be clear that III (b) water is apportioned water.

It has been suggested to us several times that we are making a terrible mistake in so construing the compact. It has been argued that if III (b) water is not apportioned water, and goes into surplus, we will

get the benefit of it, because Mexican water is first satisfied out of surplus.

Well, in the first place, whether or not that would be of benefit to us at all—and it would be of benefit, as I will show in a minute—we are bound to use our best judgment in construing and applying the compact as it was intended to be applied when we signed it. And we believe that California, in executing this contract, did it under circumstances which can only be said to have contemplated that the III (b) water was apportioned water, and if we said anything else, we would be going back on what was the interpretation and understanding of our State.

But the argument that we would benefit by the surplus is, of course, a will-o'-the-wisp, because your Mexican water could not be satisfied out of III (b) water; III (c) is clear on that.

The Mexican water comes out of surplus above that taken care of by (a) and (b). So we could not get any benefit out of it anyhow.

But we feel that the true construction of the compact is that that is apportioned water beyond any doubt. And we feel that such was the holding of the Court in the second Arizona-California case also. That matter has already been covered.

The second point where there is said to be a difference of opinion, or controversy, relates to the measurement of beneficial consumptive use.

Beneficial consumptive use is not defined in the compact. The method of measurement of beneficial consumptive use is not provided, nor is the place of measurement provided.

In the hearings on S. 1175, Judge Stone, the director of the Colorado Water Conservation Board, went into the records of the compact meetings to show that when the original compact commission was considering this matter, the important point was whether or not the compact should divide water, or should divide the use of water; and that the determination was to divide the use of water.

At that time the progress of engineering in irrigation matters had not progressed as much as it has now. I think the first attempt to bring the principle of consumptive use into an interstate lawsuit was made by Colorado in the first Laramie River case. And in some way or other, the Court misconstrued our testimony and took what we said was consumptive use to mean a headgate-diversion figure. And instead of referring to consumptive use in the decree, the Court referred to the right to take and use. So we did not get off so well on that.

In the North Platte case we were able to educate the Court, and the definition of consumptive use which has been read to the committee was made by the Court.

Now, it is all right to define consumptive use, and to define beneficial consumptive use. We have been unable in our State to work out any all-inclusive definition which will apply to every situation. Maybe some smarter men can do it.

We haven't been able to.

But when you talk about beneficial consumptive use, do you talk about the consumptive use of each little acre or 5-acre tract? Do you talk about the consumptive use of the valley? of the basin?

There is nothing in our Colorado River compact which says which

one of those you are talking about—unless you look at III (d), which says that the States of the upper division shall not deplete the flow of the river below 75,000,000 acre-feet every 10-year period at Lees Ferry. There the term used is "depletion."

When you take that use of the term "depletion," together with the term "beneficial consumptive use," and consider the minutes of the meetings, which are available, of the original compact group, then we say it follows that beneficial consumptive use, so far as the upper basin is concerned, is measured at Lees Ferry.

So far as the lower basin is concerned, it is measured at the international boundary.

Now, it may be inquired as to why that is important. And I would like to spend just a minute on it from the upper basin standpoint.

The Senator, of course, is familiar with the hay meadows situation. You have those along the Green River in Wyoming, Senator. In Colorado, I think the most famous ones are along the Gunnison. There is no doubt that before the white man came into that area those hay meadows consumed a lot of water.

There is now an engineering committee appointed by the Upper Colorado River Basin Compact Commission studying the questions of the consumptive use of water in the upper basin. And this matter which I have mentioned is one of the things which they are taking into consideration.

But take a hypothetical case. I am not an engineer, and perhaps I am getting beyond my depth in talking about this. But let us say you have an area where in the state of nature the stream overflowed and watered these meadows on either side. The consumptive use of water was then, say, 60,000 feet a year. The white man comes along and he enlarges the meadows a little, and builds a few dams to throw the water across them, and raises hay on these same meadows. The consumptive use of water, after he comes in, amounts to 100,000 acre-feet a year.

Now, we say that the only amount of water which should be chargeable to us is 40,000 acre-feet; not 100,000 acre-feet. Because in the state of nature 60,000 acre-feet of that water was consumed. It never got down to Lee Ferry. It never got down to the lower basin, to be available for any use down there.

And we say that we are chargeable with the amount of water which we deplete the stream, and from whatever salvage we bring about from a situation like that, we are entitled to benefit from.

Another illustration would be on a transmountain diversion.

Say you have an exportation of water from the basin of 500,000 acre-feet a year at the headwaters of some tributary.

The mere fact that you take out that half million acre-feet up there does not mean that you deplete the flow of the stream down at Lee Ferry by half a million acre-feet, because, in going down the two or three hundred miles to Lee Ferry, that water will suffer losses from evaporation, bank seepage, transpiration, and things like that.

That again is another subject which is being studied by the engineering committee to which I have referred. So to us it is important to have the beneficial consumptive use measured as a stream depletion, so far as the upper basin is concerned, at Lees Ferry.

The amount of water involved is as yet an unknown factor. The committee has not come to any final conclusions on that. There are some guesses which have been made, which are only guesses, and for that reason not worthy of repetition here. But we feel that the amount of water involved is substantial.

On the question of reservoir evaporation losses, I don't know as there is much for me to say. An inquiry was made this morning as to the amount of such reservoir evaporation losses. I can give figures from the Colorado River Report of the Bureau of Reclamation, if the committee wishes to have those. In the Colorado River Report of the Bureau of Reclamation—I am referring here to the printed copy of that report—the evaporation from reservoirs under ultimate conditions in the upper basin will amount to 831,000 acre-feet annually. That is taken from table 73, page 151.

The same report gives the present evaporation losses from reservoirs in the lower basin at 713,000 acre-feet annually, and under ultimate conditions in the lower basin of 1,701,000 acre-feet. Those figures are from the same report, page 186, table 121.

It is easy to see that the amount of water involved is a very substantial amount. As to how that is to be apportioned between the people who use the water from the reservoirs, I frankly do not know. There is no provision of the compact on that. It may be that under the power of the Secretary to make rules and regulations, as is permitted under each of the water-use contracts, the Secretary has the right to establish a charge for evaporation losses. I would not want to venture an opinion on that.

But in any event, the mere question as to how reservoir evaporation losses shall be charged certainly cannot be said to create a justiciable controversy at this time, when there is some 7 or 8 million acre-feet flowing to waste in the Gulf of California.

Senator MILLIKIN. Is there any law on that subject?

Mr. BREITENSTEIN. I do not know of any law on it, Senator, in Colorado. In Colorado, in the cases of which I know, it is handled by contract, agreement between the parties.

Senator MILLIKIN. Has the question ever come up between reservoir companies and lower users?

Mr. BREITENSTEIN. Yes; it has, in the Denver area. There was some litigation on that, which was settled by agreement. Under the agreement a certain charge is imposed against the reservoir of the city and county of Denver for evaporation losses.

Another factor comes in there, and that is who gets the benefit of the water which falls on the surface of the reservoir. But it seems to me that from the standpoint of equity, the persons who use the stored water should bear some responsibility in sustaining the charges which result from losses because of the storing of water.

Senator O'MAHONEY. How is the loss measured?

Mr. BREITENSTEIN. Well, you had better ask that question of an engineer, Senator. I have heard the engineers explain it. They get into some very complicated maneuvers.

Up at the reservoirs along the stream in your State, they use pans, and they have large pans with water in them, and they take the temperature readings and the decline of these pans each day, and then they relate that to the amount of water in the reservoir.

The engineers say it is a simple procedure, but it has always been very complex to me.

Senator O'MAHONEY. It would seem so to me. A reservoir, in the first instance, is a structure which saves water which without the structure would be lost.

Mr. BREITENSTEIN. That is right, but there is a loss from the reservoir by evaporation, and that is a matter of great importance so far as the upper basin is concerned, because the estimates on your evaporation losses from the main reservoirs are quite high. The evaporation sometimes gets up to 3 or 4 or 5 feet a year.

Senator MILLIKIN. Is it fair to say, then, that we have no law on reservoir evaporation losses?

Mr. BREITENSTEIN. None that I know of. There is this law in Colorado: If you store water in a reservoir, and you store 100,000 acre-feet there, and you have a wet year down in your farming area, and you do not use that water, and the sun evaporates 6,000 acre-feet off of it, you have just lost 6,000 acre-feet of water. That is just factual matter, and that is all there is, and you can fill up your reservoir again and take care of that.

Senator MILLIKIN. If we had the river fully developed today, the Colorado River, could it be said that we would not have a source of law out of which to determine how to charge the evaporation?

Mr. BREITENSTEIN. Senator, we have been considering that at some length in this upper basin compact negotiation. I personally drew up a beautiful formula to take care of it, and the engineers said it was not workable; and now the engineers are working on one. But we are considering that now. So far as the upper basin compact is concerned, I feel it is essential to work out some method of taking care of these reservoir evaporation losses.

Senator MILLIKIN. Then am I correct in the assumption that the law on that subject will evolve just as the whole law of irrigation evolved and as the law of reservoirs evolved.

Mr. BREITENSTEIN. You have got to have some way of doing it.

Senator MILLIKIN. Somebody will have to make a decision.

Mr. BREITENSTEIN. We are going to have to in this upper Colorado River Basin compact. Somebody has got to come up with a good workable formula to do it. We do not want to get into any argument like they have down in the lower basin, how they are going to charge these things. We would like to have that settled ahead of time.

As a matter of fact, I do not know as we can get the compact approved unless they work out something. It is just that serious. It involves about 1,000,000 acre-feet a year. So we have to work out a formula to take care of it. That is one of the jobs that we have. I am very hopeful in the next few months we will be able to make our effort along that line.

There are a couple of minor points that have been mentioned. As I understood the communications from the Nevada people, they said that they objected to certain developments in the lower basin because they would diminish the amount of power which would be generated at Boulder Dam. Well, the Nevada people want to remember the Colorado River compact says this, in article IV (b):

> Subject to the provisions of this compact, water of the Colorado River system may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such

water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes.

That is in the compact.

The question has been suggested as to whether or not Arizona, because she waited some 15 to 16 years to ratify the compact, is not bound by the compact. Now, I know of no provision or no condition in any Federal or State legislation having to do with the ratification or approval or consent of the Colorado River compact which placed any time limit upon Arizona or required her to come in within 6 months or any period of time. I know of no provision in any of those laws which in any way qualified the ratification or approval of the compact by reason of anything which Arizona might or might not do in the future. As far as I know, the position of our State is that Arizona is firmly bound by the compact.

There is one other——

Senator MILLIKIN. Does Arizona make any claim that she is not bound?

Senator MCFARLAND. No.

Senator MILLIKIN. Does Arizona claim that she is bound?

Senator MCFARLAND. That is correct.

Mr. BREITENSTEIN. One other matter which is of obscure importance to me, was presented, a statement that there is no relationship between III (a) and III (d) of the compact.

III (a) is the one which apportions the exclusive beneficial use of 7½ million acre-feet to each of the basins; and III (d) is the one that obligates the upper basin to deliver 75,000,000 acre-feet over 10 years. We feel a reading of the available minutes of the original compact meetings shows that there was a definite relationship between those two figures. It would take too much time to read all of the excerpts which pertain to the subject. Here is a statement of Commissioner Hoover, made at the seventeenth meeting, held in Santa Fe, page 18 of the minutes of that meeting:

Mr. HOOVER. The difficulty that strikes me at the moment in the 65,000,000 guarantee is that it does not cover the needs of the southern States, including the Mexican burden. You estimate the needs of the southern States at 75,000,000, whereas you guarantee 6½ million, so that it cannot be said to cover the needs.

That shows that the Commissioner, at least, had in mind a definite relationship between the III (d) obligation of 75,000,000 and the III (a) apportionment of 7½ million.

Other comparable statements appear in the minutes of that meeting to which I have referred.

Another matter which has been raised here is that in order for there to be litigation to solve these differences which exist, the United States must give consent to suit. That arises out of the holding of the Court in the third Arizona-California case. I would like to point out what I consider to be a difference between the situation involved in that case and the one involved here.

In the third Arizona case, as I understand the opinion, Arizona alleged that the natural flow of the stream available for irrigation uses was overappropriated, and the only water available was that which was impounded in the dams which the United States built. It asked for an apportionment or an allocation to it of such water.

The dams, of course, impounding the water had been built by the Federal Government. Very properly, it seems to me, the Court held under those circumstances the United States was an indispensable party to the litigation, because the request was for a decree which would divide up water stored by these dams.

Now, here you have an entirely different situation. Arizona is now a signatory State to the Colorado River compact. The Secretary of the Interior has entered into contracts with California and Nevada water users and with Arizona. Those contracts cover the water available to the lower basin under the compact, and all of them condition the delivery of water expressly upon the availability of the water under the Colorado River compact. So you do not here have a situation where any State is seeking to get from the United States Supreme Court an allocation of unappropriated water. What they are trying to get by litigation, it seems to me to be an interpretation and application of the various documents under which they assert rights.

Now, if a State feels, like California, that Arizona is getting more water than it is entitled to under the documents constituting the law of the river, that State has the right to bring suit against Arizona and say that Arizona is injuring it because it is taking water to which it is not entitled, and in such a suit it would be perfectly proper to join the Secretary of the Interior, because he is the man who is really running the river down there. He operates, or his agents and employees operate, the gates of the dams and the diversion structures, and if he is permitting Arizona or proposes to permit Arizona to take more water than California thinks Arizona is entitled to, California can sue Arizona and join the Secretary of the Interior if she wishes.

Senator MILLIKIN. Can Arizona get jurisdiction over the Secretary?

Mr. BREITENSTEIN. Yes.

Senator MILLIKIN. If the suit were not brought here?

Mr. BREITENSTEIN. It would be an original suit, and you would have a suit before the United States Supreme Court, in which the process is returnable. So it seems to me that that would be a perfectly proper way to start such litigation.

Or the pattern of the North Platte suit might well be followed. In the North Platte case, after the Kendrick project was authorized, Nebraska sued Wyoming, alleging as one of the grounds of the suit the authorization of this project, which Congress had authorized and for which Congress had appropriated funds.

Now, if a project is authorized in Arizona which California thinks is a threat to it, it can bring a suit against Arizona just as Nebraska brought a suit against Wyoming. Nebraska did not come down here and ask for any permissive legislation. It just went ahead and sued Wyoming. The matter came to the attention of the Attorney General of the United States, and he intervened. By that time Colorado was in the suit, and the three States decided we didn't want the Attorney General of the United States in the suit. We filed a very learned brief to try to keep him out, and we came here to make argument. But the Court gave us very short shrift and let the Attorney General come in, and he participated in the case.

That can well happen here. If the Attorney General thinks that any right of the United States would be involved, I, for one, assume that he would do his duty and intervene on behalf of the United States.

Then there is one other thing which I think should be mentioned: If the United States is an indispensable party, and if consent of Congress is necessary in order to give the consent of the United States to suit, it must be remembered that the mere fact that he United States is a party to the case does not make it a justiciable controversy. You have got to have a justiciable controversy in any event—that is, you have got to have your injury or your threat of injury. And the mere fact that Congress might give consent to the suit does not and would not create a justiciable controversy.

Senator MILLIKIN. Would an authorization by itself be such a threat, in your opinion?

Mr. BREITENSTEIN. I think that it would, Senator.

Senator MILLIKIN. Without being followed by appropriations?

Mr. BREITENSTEIN. I think it would. I would have to admit that that point was not involved in the North Platte case, because there it was followed immediately by appropriations. But I feel that the authorization of the project would furnish the basis for an allegation of a threat of injury, if there would be an injury because of the project. I think that it could well be said that the authorization in one State of a large water-use project constitutes a threat to another State.

Senator MILLIKIN. It might be argued that the authorization is not a mandate for appropriations.

Mr. BREITENSTEIN. It might be. That is a possibility.

Senator MCFARLAND. We will take the next steps if you will just give us the authorization.

Senator O'MAHONEY. Are you sure that you will take the next step?

Senator MCFARLAND. We will try.

Senator MILLIKIN. Are you sure that California won't take the next step?

Senator MCFARLAND. If they step too soon, that is their hard luck.

Senator MILLIKIN. Now, Mr. Breitenstein, in point of saving time, let me assume something that may not be correct, but merely to get your perspective on the subject, assume without conceding that the Arizona project should be authorized, and assume without conceding that California and Nevada, or one or the other of those States, would move immediately to put the matter into litigation. In the end, what time would be saved by postponing the litigation, assuming without conceding that you could initiate the litigation with this resolution?

Mr. BREITENSTEIN. Well, it is a little difficult for me to answer that question directly.

Senator MILLIKIN. Do I give you too many assumptions?

Mr. BREITENSTEIN. Yes; you threw me for a loss there.

I say that you are not saving any time by passing this legislation now, because there is not a justiciable controversy; that a justiciable controversy would culminate only when the project is authorized. And if you would bring the suit now, and then spend 4 or 5 years to find out there is no justiciable controversy, and then authorize the project and then have another suit, you have just lost the 5 years in the middle. You would have two law suits instead of one.

In other words, we see absolutely no justification for a lawsuit at this time. We hope that ultimately there will not be a lawsuit. There are a lot of factors which come in. I understand full well that the representatives of these States feel that rights of their States are involved which are of such importance that they cannot give in. Well,

that is a matter, of course, for them to determine. We in Colorado got over feeling that way a long time ago. Every time we make an interstate compact we give away something, and we are just a little more used to it, perhaps.

I think that that is all that I have, unless there are some other questions, Senator. We will furnish a memorandum on the matter which you requested.

Senator MILLIKIN. I would be very glad to have the memorandum. I think that will be one of the first questions that would be asked if we should authorize or attempt to have this project authorized.

Are there any questions?

Senator MCFARLAND. I have no questions.

Senator MILLIKIN. My list indicates that Mr. Carson is the next witness.

STATEMENT OF CHARLES A. CARSON, CHIEF COUNSEL OF THE ARIZONA INTERSTATE STEAM COMMISSION AND SPECIAL ATTORNEY FOR ARIZONA ON COLORADO RIVER MATTERS, PHOENIX, ARIZ.

Senator MILLIKIN. Will you identify yourself, Mr. Carson, and proceed, please?

Mr. CARSON. My name is Charles A. Carson. I live in Phoenix, Ariz. I am attorney and special counsel for the State of Arizona on Colorado River matters, and chief counsel of the Arizona Interstate Stream Commission, which is by law charged with the responsibility of looking after Arizona's interests in interstate streams.

Most of the matters that I propose to cover have already been touched upon.

In the first place, I would like to offer for the record the complete correspondence between Governor Warren and Governor Osborn.

Senator MILLIKIN. Is that the same correspondence that has been introduced?

Mr. CARSON. No, sir; they introduced two letters. There are really six in the series.

Senator MILLIKIN. The correspondence will be put in the record at this point.

(The correspondence is as follows:)

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, March 3, 1947.

Hon. SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz., and
Hon. VAIL N. PITTMAN,
Governor of Nevada, Carson City, Nev.

MY DEAR GOVERNORS: We have just completed our review of the comprehensive plan for the Colorado River system as presented by the Bureau of Reclamation, and I am more than ever impressed by the staggering size and complexity of the proposal.

It is quite apparent, and it is admitted in the comprehensive plan, that the 134 projects inventoried will, if constructed, use more water than is available in the river system. This fact will undoubtedly emphasize the differences of opinion concerning the water to be made available to each State. It is therefore of the utmost importance to the lower-basin States that we reconcile our differences as soon as possible.

The negotiations of the past have failed to bring about agreement between Arizona and California but I am of the opinion that there must be some fair

basis upon which their respective rights can be determined. The only methods that occur to me are (1) negotiation of a compact, (2) arbitration, and (3) judicial determination.

I would therefore like to suggest that we three Governors of the affected States endeavor first to enter into a compact which will resolve our differences and finally determine our respective rights.

In the event you believe for any reason that this cannot be done, I suggest that we submit all our differences to arbitration, agreeing to be bound by the results thereof.

If this is not feasible, I propose that we join in requesting Congress to authorize a suit to determine our rights in the Supreme Court of the United States, which suit could, if agreeable to the States, be submitted on an agreed statement of facts.

I believe that either method could produce the desired results. If you agree with me, I suggest that the three of us meet at some time and place mutually agreeable for the purpose of furthering exploring the subject. If we can place our three States in position to maintain a common front in urging the speedy and orderly development of the Colorado River system, we will have rendered a great service to our people.

Hoping that I may have your reaction to this proposal and with best wishes, I am

Sincerely,

EARL WARREN, *Governor.*

EXECUTIVE OFFICE,
Phoenix, Ariz., March 12, 1947.

HON. EARL WARREN,
Governor, State of California, Sacramento, Calif.

MY DEAR GOVERNOR WARREN: I have your letter of March 3, addressed to Gov. Vail Pittman and myself, concerning the report of the Bureau of Reclamation on the development of the water resources of the Colorado River Basin.

I presume from your letter that you have completed and sent to the Bureau your comments on the above-mentioned report. I, too, have furnished the Bureau with my comments and am enclosing a copy to you herewith. It will be appreciated if you will furnish me with a copy of your report.

Ever since I have been Governor of Arizona, I have endeavored to cooperate with all other States in the Colorado River Basin in all matters of common interest. Arizona has at all times been represented on the Committee of Fourteen and Sixteen, whose name has now been changed to the Colorado River Basin States Committee. Arizona is now represented on the Colorado River Basin States Committee, which committee as presently constituted and as heretofore constituted has been very helpful in all matters affecting the interests of the respective States in the Colorado River. Arizona is now cooperating in plans for the utilization of Colorado River water in the respective States within the allocation of water available to them.

I will be pleased to meet with you, or with you and Governor Pittman, or with the governors of other interested States, to discuss all matters of common interest to our respective States.

All seven of the Colorado River Basin States—Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, five of which States are still represented on the Colorado River Basin States Committee—are parties to the Colorado River compact which apportions the water of the Colorado River system as between the upper basin and the lower basin and to Mexico. The compact contains provisions which make utilization of water over and above the apportionment made by the compact of interest to all of the States of the Basin.

Portions of Utah and New Mexico are in the lower basin and are entitled to share in the apportionment made to the lower basin and in the use of any available water which is unapportioned by the Colorado River compact.

California, in consideration of the passage by the Congress of the Boulder Canyon Project Act and as a condition precedent to the taking effect of that act and the construction of Boulder Dam, Imperial Dam, and the All-American Canal, by chapter 16, California Statutes, 1929, entered into a statutory agreement with the United States and for the benefit of each of the Colorado River Basin States, irrevocably and unconditionally limiting California's claim to water of the Colorado River to 4,400,000 acre-feet per annum of the apportioned water, plus not

more than half of the water unapportioned by the Colorado River compact. The quantity of surplus water—that is, water unapportioned by the compact—varies from year to year and is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona recognizes the right of California to use the quantity of water to which California, by the statutory agreement, is forever limited.

Arizona recognizes the right of Nevada to use 300,00 acre-feet of apportioned water per annum, plus one-twenty-fifth of available unapportioned water, subject to further apportionment of the unapportioned water by agreement between the compact States after 1963.

Arizona has a contract with the United States for delivery for use in Arizona from the main stream of the Colorado River, subject to its availability for use in Arizona, under the Colorado River compact and the Boulder Canyon Project Act, of so much water as is necessary to permit the beneficial consumptive use in Arizona of main-stream water to a maximum of 2,800,000 acre-feet of the apportioned water, plus one-half of the available surplus, less such part of the one-twenty-fifth thereof as Nevada may use, the quantity of which surplus, of course, varies from year to year, and which surplus is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Nevada is entitled, and I am sure that Nevada does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Arizona is entitled.

It therefore appears that California and Nevada are now in a position to join Arizona in urging the speedy consideration and passage of S. 433 now pending in the United States Senate and H. R. 1598, its companion bill, now pending in the House of Representatives, which are authorization bills to authorize the construction of the central Arizona project, and H. R. 1597, which is an authorization bill to relocate the boundaries of the Gila project heretofore authorized.

I am certain that the passage of these bills and the construction of the works which they seek to authorize will be of great and incalculable benefit, not only to Arizona, but to California and Nevada and to the United States as a whole.

They are vitually necessary to the welfare and to the economy of the whole southwest region. They do not in any way interfere with the full use in California and in Nevada of the water to which California and Nevada are respectively entitled.

If either California or Nevada are interested in the promotion and construction of projects for the utilization of water to which they are respectively entitled, I would like to know it in order that I may render such aid as seems appropriate.

It is difficult for me to understand what, if anything further, need be done to place either California or Nevada or Arizona in position to support the utilization in our respective States of our respective shares of the water of the Colorado River, which shares have already been determined by the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, the water-delivery contracts of the California agencies, the Nevada water-delivery contracts and the Arizona water-delivery contract.

However, I will be glad to meet and discuss with you and the Governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences and if it should develop that anything further is necessary, we can consider the proper course to pursue.

During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other Governors of the basin States as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly.

With all good wishes, I am,

Sincerely,

———— ————, *Governor.*

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, May 16, 1947.

The Honorable SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz.

DEAR GOVERNOR OSBORN: I did not bother you during the time you were ill in our State concerning my suggestions for settling the differences of opinion of Arizona and California regarding their respective rights to the use of the water of the Colorado River. However, now that you have recovered sufficiently to return to your home, I would like to discuss your letter of March 12, 1947, and the accompanying copy of your letter to William E. Warne, Acting Commissioner of the Bureau of Reclamation, dated November 22, 1946.

I gather from these two letters that you believe it is unnecessary to try to write a compact between the lower basin States or to have your respective claims arbitrated, because you consider the existing statutes, contracts, etc., have so settled the rights of Arizona, California, and Nevada in the Colorado River that there are no substantial differences between the States. It may well be that the suggestions of a compact and arbitration are not feasible at this late date, but I am of the opinion that there are such basic divergencies of interpretation of the statutes and documents mentioned above, particularly between Arizona and California, that without an authoriatative determination as to which State is right it is impossible for anyone to know what quantity of water either State is entitled to. If our States are to plan for their futures, they must know with certainty how much water is eventually to be made available to them, because everyone recognizes that there is not enough water in the river to fully serve the legitimate aspirations of both our States.

It seems to me that a suit in the Supreme Court of the United States, to which the lower basin States and the United States are parties, is essential to supply the necessary answer. This would, of course, require a jurisdictional act of Congress, authorizing the United States to be made a party to such suit. Governor Pittman, of Nevada, has expressed a similar opinion in a letter to me dated March 6, a copy of which is enclosed. I am sure that such a procedure will eventually redound to the benefit of both of our States.

With best wishes for the continued improvement of your health, I am,
Sincerely,

EARL WARREN, *Governor.*

EXECUTIVE OFFICE,
Phoenix, Ariz., May 23, 1947.

Hon. EARL WARREN,
Governor of California, Sacramento, Calif.

MY DEAR GOVERNOR WARREN: I have received your letter of May 16 and appreciate your personal good wishes.

In my letter to you of March 12 and in my letter to Wiliam E. Warne, Acting Commissioner of the Bureau of Reclamation, of November 22, 1946, a copy of which I sent to you, I clearly stated the facts and the reasoning which in my opinion lead to the inescapable conclusion that the quantities of apportioned water available for use in Arizona, California, and Nevada, respectively, from the Colorado River are already determined.

If you do not agree with such facts and reasoning and my conclusions, it is regrettable that you do not specify wherein you disagree.

On page 8 of The Views and Recommendations of the State of California on Proposed Report of the Secretary of the Interior entitled "The Colorado River" there purports to be a list of relevant statutes, decisions, and instruments affecting the Colorado River, but no mention is there made of the California Self-Limitation Act, chapter 16, California Statutes, 1929.

I discussed the California Self-Limitation Act as well as the other relevant compact, statutes, contracts, and reports in my letters, but in your letters to me you take no exception to any statements in my letters, nor do you set forth any statement of any facts, reasoning, or conclusions as to what claim to water of the Colorado River you intend to assert for California nor the basis for such claim.

California has unconditionally and irrevocably limited herself forever to the quantity of water set out in the California Self-Limitation Act. Arizona has by contract recognized the right of California to the quantity of water set out in that act and Arizona does not intend to and will not attempt to utilize water to which California is entitled.

Arizona respects her commitments.

Any aspiration entertained in California to use water in excess of that limitation appears to be illegitimate. If California would be content with the use of the quantity of the water to which she has by solemn statutory agreement unconditionally and irrevocably limited herself forever all occasion for any feeling that any further compact, any arbitration, or litigation is advisable would disappear.

I am sure if you will review my letters and the compact, statutes, contracts, and reports therein mentioned you will recognize that the only thing required for cooperation between our great States in developing the use of the waters of the Colorado River to which they are respectively entitled for their mutual benefit and for the benefit of the Southwest and the Nation is for your great State to respect the agreements your State has already made.

I request that you again review my letters and if in your opinion there is any error in the facts, reasoning, or conclusions stated in my letters, I will appreciate your advising me concerning the same.

With all good wishes, I am

Sincerely,

——— ———, *Governor.*

EXECUTIVE OFFICE,
Phoenix, Ariz., October 10, 1947.

Hon. EARL WARREN,
Governor, State of California,
Sacramento, Calif.

MY DEAR GOVERNOR WARREN: In my letter to you of March 12, 1947, in reply to your letter to me of March 3, 1947, I extended to you an invitation in the following words. I quote the last two paragraphs of my letter to you of March 12, 1947:

"However, I will be glad to meet and discuss with you and the governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences we can consider and perhaps resolve such differences, and if it should develop that anything further is necessary we can consider the proper course to pursue.

"During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other governors of the basin States as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly."

To date you have neither accepted nor declined that invitation. I note that in the public press there are appearing statements to the effect that I refused to meet with you.

Of course, you and I know that such is not the case, but in order to clear up any possible misunderstanding I herewith repeat the above-quoted invitation. I will be glad to meet with you and with the governors of other Colorado River Basin States, jointly or severally, at any time to discuss matters of common interest.

I suggest you arrange to come to Phoenix before Christmas, giving me 20 days' advance notice of the date of your arrival, and the names of the other governors and advisers who will attend, so that I may make the necessary hotel reservations and arrangements.

With all good wishes, I am,

Sincerely,

SIDNEY P. OSBORN, *Governor.*

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, Calif., October 16, 1947.

The Honorable SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz.

MY DEAR GOVERNOR: I have your letter of October 10 concerning items in the public press relative to our Colorado River problems. I have not seen the items that you mention but if there is any statement in them to the effect that you have refused to meet and discuss matters with me they are wholly without foundation. No one has been more willing to discuss our mutual problems than yourself and I am sure you know that I would never make any expression to the contrary.

The subject of the correspondence to which the press item must have had reference could not have applied to conferences, because innumerable conferences have been held during recent years without reconciling differences of opinion. In addressing you and Governor Pittman on the subject I merely proposed the only three methods that occurred to my mind as being able to lead to a final solution:

1. A compact between the three States, making a determination of all the issues.
2. Arbitration.
3. Judicial determination.

I merely suggested that California was willing to use any of these three methods that is agreeable to Arizona and Nevada. If I could have thought of any other practical method I would have incorporated it also.

Thanking you for calling the matter to my attention and with best wishes, I am,

Sincerely,

EARL WARREN, *Governor.*

Mr. CARSON. Again I would like to refer to this in the rebuttal, to what has been testified to concerning it, and what was carried in Governor Warren's letter. To do so, I think that I should read a part of the two letters which they put in the record, so that it will be clear.

The first letter was from Governor Warren to Governor Osborn and Governor Pittman. It stated no position of California and no claim and no basis for any claim, but merely suggested negotiation of a compact, arbitration, or judicial determination.

Governor Osborn's answer was this:

MY DEAR GOVERNOR WARREN: I have your letter of March 3, addressed to Governor Vail Pittman and myself, concerning the report of the Bureau of Reclamation on the development of the water resources of the Colorado River Basin.

I presume from your letter that you have completed and sent to the Bureau your comments on the above-mentioned report. I, too, have furnished the Bureau with my comments, and am enclosing a copy to you herewith. It will be appreciated if you will furnish me with a copy of your report.

Ever since I have been Governor of Arizona I have endeavored to cooperate with all other States in the Colorado River Basin in all matters of common interest. Arizona has at all times been represented on the committee of fourteen and sixteen, whose name has now been changed to the Colorado River Basin States Committee. Arizona is now represented on the Colorado River Basin States Committee, which committee as presently constituted and as heretofore constituted, has been very helpful in all matters affecting the interests of the respective States in the Colorado River. Arizona is now cooperating in plans for the utilization of Colorado River water in the respective States within the allocation of water available to them.

I will be pleased to meet with you, or with you and Governor Pittman, or with the Governors of other interested States, to discuss all matters of common interest to our respective States.

All seven of the Colorado River Basin States—Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming—five of which States are still represented on the Colorado River Basin States Committee, are parties to the Colorado River compact, which apportions the water of the Colorado River system as between the upper basin and the lower basin and to Mexico. The compact contains provisions which make utilization of water over and above the apportionment made by the compact of interest to all of the States of the basin.

Portions of Utah and New Mexico are in the lower basin and are entitled to share in the apportionment made to the lower basin and in the use of any available water which is unapportioned by the Colorado River compact.

California, in consideration of the passage by the Congress of the Boulder Canyon Project Act and as a condition precedent to the taking effect of that act and the construction of Boulder Dam, Imperial Dam, and the All-American canal, by chapter 16, California Statutes 1929, entered into a statutory agreement with the United States and for the benefit of each of the Colorado River Basin States, irrevocably and unconditionally limiting California's claim to water of the Colorado River to 4,400,000 acre-feet per annum of the apportioned water, plus not more than half of the water unapportioned by the Colorado River compact. The quantity of surplus water, that is, water unapportioned by the compact, varies from year to year and is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona recognizes the right of California to use the quantity of water to which California, by the statutory agreement, is forever limited.

Arizona recognizes the right of Nevada to use 300,000 acre-feet of apportioned water per annum, plus one-twenty-fifth of available unapportioned water, subject to further apportionment of the unapportioned water by agreement between the compact States after 1963.

Arizona has a contract with the United States for delivery for use in Arizona from the main stream of the Colorado River, subject to its availability for use in Arizona, under the Colorado River compact and the Boulder Canyon Project Act, of so much water as is necessary to permit the beneficial consumptive use in Arizona of main stream water to a maximum of 2,800,000 acre-feet of the apportioned water, plus one-half of the available surplus, less such part of the one-twenty-fifth thereof as Nevada may use, the quantity of which surplus, of course, varies from year to year, and which surplus is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Nevada is entitled, and I am sure that Nevada does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Arizona is entitled.

It therefore appears that California and Nevada are now in a position to join Arizona in urging the speedy consideration and passage of S. 433 now pending in the United States Senate and H. R. 1598, its companion bill, now pending in the House of Representatives, which are authorization bills to authorize the construction of the central Arizona project, and H. R. 1597, which is an authorization bill to relocate the boundaries of the Gila project heretofore authorized.

The last bill referred to here has now been passed. [Continuing:]

I am certain that the passage of these bills and the construction of the works which they seek to authorize, will be of great and incalculable benefit, not only to Arizona, but to California and Nevada and to the United States as a whole.

They are vitally necessary to the welfare and to the economy of the whole Southwest region. They do not in any way interfere with the full use in California and in Nevada of the water to which California and Nevada are respectively entitled.

If either California or Nevada are interested in the promtion and construction of projects for the utilization of water to which they are respectively entitled, I would like to know it in order that I may render such aid as seems appropriate.

It is difficult for me to understand what, if anything further, need be done to place either California or Nevada or Arizona in position to support the utilization in our respective States of our respective shares of the water of the Colorado River, which shares have already been determined by the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, the water-delivery contracts of the California agencies, the Nevada water delivery contracts, and the Arizona water-delivery contract.

However, I will be glad to meet and discuss with you and the Governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences, and if it should develop that anything further is necessary, we can consider the proper course to pursue.

During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State, and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other Governors of the basin States as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly.

With all good wishes, I am——

Governor Warren's letter was dated March 3, 1947, and this one I have read was dated March 12, 1947.

Nothing further was heard from Governor Warren until, under date of May 16, 1947, he wrote the following to Governor Osborn:

I did not bother you during the time you were ill in our State concerning my suggestions for settling the differences of opinion of Arizona and California regarding their respective rights to the use of the water of the Colorado River. However, now that you have recovered sufficiently to return to your home, I would like to discuss your letter of March 12, 1947, and the accompanying copy of your letter to William E. Warne, Acting Commissioner of the Bureau of Reclamation, dated November 22, 1946.

I gather from these two letters that you believe it is unnecessary to try to write a compact between the lower basin States or to have your respective claims arbitrated, because you consider the existing statutes, contracts, etc., have so settled the rights of Arizona, California, and Nevada in the Colorado River that there are no substantial differences between the States. It may well be that the suggestions of a compact and arbitration are not feasible at this late date, but I am of the opinion that there are such basic divergencies of interpretation of the statutes and documents mentioned above, particularly between Arizona and California, that without an authoritative determination as to which State is right, it is impossible for anyone to know what quantity of water either State is entitled to. If our States are to plan for their futures, they must know with certainty how much water is eventually to be made available to them, because everyone recognizes that there is not enough water in the river to fully serve the legitimate aspirations of both our States.

It seems to me that a suit in the Supreme Court of the United States, to which the lower-basin States and the United States are parties, is essential to supply the necessary answer. This would, of course, require a jurisdictional act of Congress, authorizing the United States to be made a party to such suit. Governor Pittman, of Nevada, has expressed a similar opinion in a letter to me dated March 6, a copy of which is enclosed. I am sure that such a procedure will eventually redound to the benefit of both of our States.

That was the first time that Governor Osborn had any copy of the letter from Governor Pittman to Governor Warren.

With best wishes for the continued improvement of your health, I am.

Governor Osborn replied under date of May 23, 1947:

MY DEAR GOVERNOR WARREN: I have received your letter of May 16 and appreciate your personal good wishes.

In my letter to you of March 12 and in my letter to William E. Warne, Acting Commissioner of the Bureau of Reclamation, of November 22, 1946, a copy of which I sent to you, I clearly stated the facts and the reasoning which, in my opinion, lead to the inescapable conclusion that the quantities of apportioned water available for use in Arizona, California, and Nevada, respectively, from the Colorado River are already determined.

If you do not agree with such facts and reasoning and my conclusions, it is regrettable that you do not specify wherein you disagree.

On page 8 of "The Views and Recommendations of the State of California on Proposed Report of the Secretary of the Interior entitled 'The Colorado River'" there purports to be a list of relevant statutes, decisions, and instruments affecting

the Colorado River, but no mention is there made of the California self-limitation act, chapter 16, California Statutes, 1929.

I discussed the California self-limitation act as well as the other relevant compact, statutes, contracts, and reports in my letters, but in your letters to me you take no exception to any statements in my letter, nor do you set forth any statement of any facts, reasoning, or conclusions as to what claim to water of the Colorado River you intend to assert for California nor the basis for such claim.

California has unconditionally and irrevocably limited herself forever to the quantity of water set out in the California self-limitation act. Arizona has by contract recognized the right of California to the quantity of water set out in that act and Arizona does not intend to and will not attempt to utilize water to which California is entitled.

Arizona respects her commitments.

Any aspiration entertained in California to use water in excess of that limitation appears to be illegitimate. If California would be content with the use of the quantity of the water to which she has by solemn statutory agreement unconditionally and irrevocably limited herself forever all occasion for any feeling that any further compact, any arbitration or litigation is advisable would disappear.

I am sure, if you will review my letters and the compact, statutes, contracts, and reports therein mentioned, you will recognize that the only thing required for cooperation between our great States in developing the use of the waters of the Colorado River to which they are respectively entitled for their mutual benefit and for the benefit of the Southwest and the Nation is for your great State to respect the agreements your State has already made.

I request that you again review my letters and if, in your opinion, there is any error in the facts, reasoning, or conclusions stated in my letters, I will appreciate your advising me concerning the same.

With all good wishes, I am.

Now, that letter was dated May 23, 1947.

Thereafter there began to appear in the press statements that Arizona's Governor had refused to meet with Governor Warren, of California. On October 10, 1947—no reply was made by Governor Warren—but on October 10, 1947, Governor Osborn wrote him again:

MY DEAR GOVERNOR WARREN: In my letter to you of March 12, 1947, in reply to your letter to me of March 3, 1947, I extended to you an invitation in the following words. I quote the last two paragraphs of my letter to you of March 12, 1947:

"However, I will be glad to meet and discuss with you and the Governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences and if it should develop that anything further is necessary, we can consider the proper course to pursue.

"During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other Governors of the basin States as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly."

To date you have neither accepted nor declined that invitation. I note that in the public press there are appearing statements to the effect that I refused to meet with you.

Of course, you and I know that such is not the case, but in order to clear up any possible misunderstanding I herewith repeat the above quoted invitation. I will be glad to meet with you and with the Governors of other Colorado River Basin States, jointly or severally, at any time to discuss matters of common interest.

I suggest you arrange to come to Phoenix before Christmas, giving me 20 days' advance notice of the date of your arrival, and the names of the other governors and advisors who will attend, so that I may make the necessary hotel reservations and arrangements.

With all good wishes, I am.

Then on October 16, Governor Warren answered that as follows:

MY DEAR GOVERNOR: I have your letter of October 10 concerning items in the public press relative to our Colorado River problems. I have not seen the items that you mention but if there is any statement in them to the effect that you have refused to meet and discuss matters with me they are wholly without foundation. No one has been more willing to discuss our mutual problems than yourself and I am sure you know that I would never make any expression to the contrary.

The subject of the correspondence to which the press item must have had reference could not have applied to conferences, because innumerable conferences have been held during recent years without reconciling differences of opinion. In addressing you and Governor Pittman on the subject I merely proposed the only three methods that occurred to my mind as being able to lead to a final solution:

1. A compact between the three States, making a determination of all the issues.
2. Arbitration.
3. Judicial determination.

I merely suggested that California was willing to use any of these three methods that is agreeable to Arizona and Nevada—

You will notice that he ignores all of the other States—

If I could have thought of any other practical method I would have incorporated it also.

Thanking you for calling the matter to my attention and with best wishes, I am.

Senator MCFARLAND. Do you know, Mr. Carson, whether any invitation to Utah or New Mexico was extended?

Mr. CARSON. I am informed that there was not. I do not know.

Senator MILLIKIN. I suggest a 5-minute recess.

(Short recess.)

Senator MILLIKIN. The hearing will be in order.

Mr. CARSON. Now, I would like to offer and have printed in the record the testimony of E. B. Debler, from the hearings on Senate bill 1175 last summer, pages 292 to 307. He is an engineer, and he has the engineering figures in there that you were asking about.

Senator MILLIKIN. That will be inserted in the record at this point.

(It is as follows:)

STATEMENT OF E. B. DEBLER, CONSULTING ENGINEER FOR THE STATE OF ARIZONA

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

Mr. DEBLER. I am a consulting engineer in private practice, located at Denver, Colo., and have been so engaged for about 2 months.

Prior to that time, for a period of some 28 years, I was with the United States Bureau of Reclamation: From 1921 until 1943, in charge of most of the project planning for the Bureau and in charge of hydrological work; from 1943 to 1944, Director of Project Planning; and from 1944 to April of this year as regional director of region 7.

Senator MILLIKIN. Proceed, Mr. Debler.

Mr. DEBLER. I tender copies of my statement, Mr. Chairman.

Senator MILLIKIN. If you will distribute the copies, please. [The copies were so distributed.]

Proceed, Mr. Debler.

Mr. DEBLER. Waters for the project are to be diverted from the Colorado River by pumping from Lake Havasu, impounded by Parker Dam built by the Bureau of Reclamation at the expense of the Metropolitan Water District of Los Angeles, to facilitate diversion by that district, and for other purposes.

Availability of water is controlled by the Colorado River compact, the Boulder Canyon Project Act, and the treaty with Mexico.

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I would like to interject just a slight statement here that from here on this paper presents my interpretation of the legislation and the intent thereof as gained from my connection with the Colorado River matters dating from a year or two prior to the compact and as the result of listening to many learned discussions and deciding in my own mind as to what was intended.

The Colorado River compact, signed at Santa Fe November 24, 1922, by representatives of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, was approved by Congress in section 13 of the Boulder Canyon Project Act of December 21, 1938, with a waiver of the part of article XI requiring approval of the compact by all of the States, such approval by the Congress being conditional on acceptance of the waiver and approval of the compact by California and at least five other States. The States, except Arizona, complied promptly. Arizona ratified on February 24, 1944.

The compact provisions pertinent to the central Arizona project are as follows:

"ARTICLES II AND III, COLORADO RIVER COMPACT

"ART. II. As used in this compact:

"(a) The term 'Colorado River system' means that portion of the Colorado River and its tributaries within the United States of America.

"(e) The term 'Lee Ferry' means a point in the main stream of the Colorado River 1 mile below the mouth of the Paria River.

"(f) The term 'Upper Basin' means those parts of the States of Arizona, Colorado, New Mexico, Utah, and Wyoming within and from which waters naturally drain into the Colorado River system above Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River system which are now or shall hereafter be beneficially served by waters diverted from the system above Lee Ferry.

"(g) The term 'Lower Basin' means those parts of the States of Arizona, California, Nevada, New Mexico, and Utah within and from which waters naturally drain into the Colorado River system below Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River system which are now, or shall hereafter be, beneficially served by waters diverted from the system below Lee Ferry.

"ART. III. (a) There is hereby apportioned from the Colorado River system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist.

"(b) In addition to the apportionment in paragraph (a), the lower basin is hereby given the right to increase its beneficial consumptive use of such waters by 1,000,000 acre-feet per annum.

"(c) If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado River system, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be borne by the upper basin and the lower basin, and whenever necessary the States of the upper division shall deliver at Lee Ferry water to supply one-half of the deficiency so recognized in addition to that provide din paragraph (d).

"(d) The States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series beginning with the 1st day of October next succeeding the ratification of this compact.

"(f) Further equitable apportionment of the beneficial uses of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October 1, 1963, if and when either basin shall have reached its total beneficial consumptive use as set out in paragraphs (a) and (b).

"ARTICLES VI AND VIII, COLORADO RIVER COMPACT

"ART. VI. Should any claim or controversy arise between any two or more of the signatory States:

"(a) With respect to the waters of the Colorado River system not covered by the terms of this compact;

"(b) Over the meaning or performance of any of the terms of this compact;

"(c) As to the allocation of the burdens incident to the performance of any article of this compact or the delivery of waters as herein provided;

"(d) As to the construction or operation of works within the Colorado River Basin to be situated in two or more States, or to be constructed in one State for the benefit of another State; or

"(e) As to the diversion of water in one State for the benefit of another State, the governors of the States affected, upon the request of one of them, shall forthwith appoint commissioners with power to consider and adjust such claim or controversy, subject to ratification by the legislatures of the States so affected.

"Nothing herein contained shall prevent the adjustment of any such claim or controversy by any present method or by direct future legislative action of the interested States.

"ART. VIII. Present perfected rights to the beneficial use of waters of the Colorado River system are unimpaired by this compact. Whenever storage capacity of 5,000,000 acre-feet shall have been provided on the main Colorado River within or for the benefit of the lower basin, then claims of such rights, if any, by appropriators or users of water in the lower basin against appropriators or users of water in the upper basin shall attach to and be satisfied from waters that may be stored not in conflict with Article III.

"All other rights to beneficial use of waters of the Colorado River system shall be satisfied solely from the water apportioned to that basin in which they are situate."

Mr. DEBLER. The compact (art. III (a)) apportions to each of the upper and lower basins in perpetuity a total of 7,500,000 acre-feet for beneficial consumptive use annually and (art. III (b)) grants the further right to the lower basin to increase its beneficial consumptive use by 1,000,000 acre-feet annually. This division does not apportion the total annual water yield of the system, but (art. III (c)) establishes the basis for supplying any right later recognized in Mexico and (art. III (f)) leaves the apportionment of any excess among the States after October 1, 1963. By the terms of the compact (art. III (d)), the States of the upper division cannot cause the flow of the Colorado River at Lees Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years.

The compact does not define "beneficial consumptive use," nor have the States acted under article VI of the compact to secure such clarification.

The compact in article III (d) does place a limitation on such "beneficial consumptive use" with respect to the upper basin in periods of low run-off by designating a specified minimum 10-year delivery of water at Lees Ferry, the downstream limit of the upper basin. It appears only reasonable to conclude, then, that the intention in article III (a) was to permit the upper basin to deplete the flow of the Colorado River at Lees Ferry by an average of 7,500,000 acre-feet per year. The average annual flow of Colorado River at Lees Ferry, under virgin conditions, is estimated at 16,270,000 acre-feet by the Bureau of Reclamation in the report on the Colorado River in March 1946, page 55. With a depletion of 7,500,000 acre-feet by the upper basin, an average annual flow of 8,770,000 acre-feet remains at Lees Ferry. As later explained, it was also apparently the understanding by Congress, at least, that the lower basin was similarly apportioned a "depletion" of the flow of the stream to the extent of 8,500,000 acre-feet per year.

Average annual virgin flow at Lees Ferry after deduction of upper basin depletion of 7,500,000 acre-feet leaves 8,770,000 acre-feet. The average annual gain from Lees Ferry to international boundary under virgin conditions is 1,450,000 acre-feet, as reported in the same 1946 report by the Bureau. That leaves the burden on water arriving at Lees Ferry a supply of 10,220,000 acre-feet per year.

The apportionment to lower basin is 8,500,000 acre-feet; waters accorded to Mexico by treaty, with delivery at international boundary, 1,500,000 acre-feet; and that leaves a surplus of waters unapportioned and available for apportionment after October 1, 1963, of 220,000 acre-feet.

Senator DOWNEY. Mr. Debler, may I interrupt there?

Would the allowance in the treaty of an additional 200,000 feet to Mexico, under certain conditions, cut down, in your opinion, the hypothetical surplus that you have just mentioned?

Mr. DEBLER. Without attempting to express a legal opinion, Senator, as I read the treaty with Mexico, Mexico is entitled to 200,000 acre-feet a year of waters that are surplus to the needs within the United States. That is not, in my opinion, an apportionment.

Senator DOWNEY. I would prefer a categorical answer, because I have no opinion on it myself. I just want to know your opinion. Do you think that that tentative allowance to Mexico under certain conditions, of 200,000 feet, above the primary right of a million five hundred thousand, might tend to absorb this hypothetical surplus of 200,000 that you have mentioned? "Yes" or "No."

Mr. DEBLER. On the assumption that that is a tentative allowance, I would say "Yes."

Senator DOWNEY. Well, all right.

No further questions, Mr. Chairman.

Senator MCFARLAND. That would be only on condition that we did not need it in the United States.

Mr. DEBLER. That is my interpretation of the situation.

Senator MCFARLAND. That is all.

Senator DOWNEY. We haven't got very much of a hypothetical surplus there, have we?

Mr. DEBLER. Not very much.

The accumulating stream-flow records now indicate periods of as much as 20 years, with upper-basin obligations limited to a delivery at Lee Ferry under article III (d) of the compact averaging 7,500,000 acre-feet per year, plus such additional water for Mexico as may be required by the circumstances, under article III (c), and leaving no unallotted surplus at such times.

Now the pertinent provisions of the Boulder Canyon Project Act, approved December 21, 1928.

(Secs. 4 and 5 follow:)

"SEC. 4. This Act shall not take effect * * * until the State of California * * * shall agree * * * that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of Article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact. * * * This Act shall not take effect * * * unless and until (1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact, * * * or (2) if said States fail to ratify the said compact within six months from the date of the passage of this Act then, until six of said States, including the State of California, shall ratify said compact * * * and, further until the State of California, by act of its legislature, shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming * * * that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed four million four hundred 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 compact, such uses always to be subject to the terms of said compact.

"The States of Arizona, California, and Nevada are authorized to enter into an agreement which shall provide (1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of Article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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, but if, as provided in paragraph (c) of Article III of the Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be

supplied to Mexico by the lower basin, and (5) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses, and (6) that all of the provisions of the Colorado River compact and (7) said agreement to take effect upon the ratification of the Colorado River compact by Arizona, California, and Nevada.

"SEC. 5. That the Secretary of the Interior is hereby authorized * * * to contract for the storage of water in said reservoir and for the delivery thereof at such points on the river. * * * Contracts for irrigation and domestic uses shall be for permanent service. * * * No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated."

Mr. DEBLER. Congress, in section 4 (a) of the Boulder Canyon Project Act, in providing that the act should not take effect nor water rights claimed thereunder unless and until California had agreed to limit California uses for the benefit of other States, uses the words "annual consumptive use (diversions less returns to the river) of water of and from the Colorado River." Congress here defined consumptive use as the depletions of the river—meaning the Colorado River. As this definition was made only 6 years after the signing of the Colorado River compact, and at a time when there was full and frank discussion of the numerous contentions and interpretations of the compact, it must be concluded that it was intended that all apportionments were to be based on their effect on Colorado River flows. That interpretation is, therefore, hereinafter used.

The words "one-half of any excess or surplus waters unapportioned by said compact" could refer only to such surplus waters as might become available for use by California and Arizona jointly.

TREATY WITH MEXICO

A treaty relating to the division of the waters of the Rio Grande and of the Colorado and Tijuana Rivers was signed by representatives of the two Governments on February 3, 1944, and, together with the protocol signed November 14, 1944, and clarifying reservations, were ratified by the United States Senate on April 18, 1945, and by the Mexican Senate on September 27, 1945.

The treaty guarantees Mexico a delivery of 1,500,000 acre-feet annually collectively at a number of points on the international boundary in the vicinity of Yuma. This quantity may be reduced in time of extraordinary drought to the same degree that consumptive uses are reduced in the United States.

Mexico is also to receive, without acquiring a permanent right thereto, up to 200,000 acre-feet of additional water when a surplus exists in the supply for users in the United States.

CONTRACT BY THE STATE OF ARIZONA WITH THE UNITED STATES FOR WATER

By an agreement dated February 9, 1944, with the United States, Arizona contracted for the storage of water in Lake Mead and for the delivery thereof at points on the Colorado River to be agreed upon, for irrigation and domestic use. The portions of the contract particularly pertinent to the central Arizona project are as follows:

"Subject to the availability thereof for use in Arizona under the provisions of the Colorado River Compact and the Boulder Canyon Project Act, the United States shall deliver and Arizona, or agencies or water users therein, will accept under this contract each calendar year from storage in Lake Mead, at a point or points of diversion on the Colorado River approved by the Secretary, so much water as may be necessary for the beneficial consumptive use for irrigation and domestic uses in Arizona of a maximum of 2,800,000 acre-feet.

"The United States also shall deliver from storage in Lake Mead for use in Arizona, at a point or points of diversion on the Colorado River approved by the Secretary, for the uses set forth in subdivision (a) of this Article, one-half of any excess or surplus waters unapportioned by the Colorado River Compact to the extent such water is availble for use in Arizona under said compact and said act, less such excess or surplus water unapportioned by said compact as may be used in Nevada, New Mexico, and Utah in accordance with the rights of said States as stated in subdivisions (f) and (g) of this Article.

"The obligation to deliver water at or below Boulder Dam shall be diminished to the extent that consumptive uses now or hereafter existing in Arizona above Lake Mead diminish the flow into Lake Mead, and such obligation shall be subject

to such reduction on account of evaporation, reservoir, and river losses, as may be required to render this contract in conformity with said compact and said act.

"Arizona recognizes the right of the United States and the State of Nevada to contract for the delivery from storage in Lake Mead for annual beneficial consumptive use within Nevada for agricultural and domestic uses of 300,000 acre-feet of the water apportioned to the Lower Basin by the Colorado River Compact, and in addition thereto to make contract for like use of 1/25 (one twenty-fifth) of any excess or surplus waters available in the Lower Basin and unapportioned by the Colorado River Compact, which waters are subject to further equitable apportionment after October 1, 1963, as provided in Article III (f) and Article III (g) of the Colorado River Compact.

"Arizona recognizes the rights of New Mexico and Utah to equitable shares of the water apportioned by the Colorado River Compact to the Lower Basin and also water unapportioned by such compact, and nothing contained herein shall prejudice such rights.

"Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an act of its Legislature (Chapter 16, Statutes of California of 1929) upon which limitation the State of Arizona expressly relies."

ARIZONA SHARE OF APPORTIONED WATERS

Mr. DEBLER. Arizona, California, and Nevada have not entered into a compact or agreement for a division of lower-basin apportionments of water as authorized by section 19 of the Boulder Canyon Project Act, nor are they in agreement on such a division.

In arriving at the share of Arizona in available waters, the following factors have been taken into consideration:

(a) The compact intended to permit the lower basin under articles III (a) and III (b) to deplete stream flow by 8,500,000 acre-feet as heretofore discussed.

(b) California, under the terms of section 4 (a) of the Boulder Canyon Project Act, and its conforming statute, is limited to an aggregate annual consumptive use (diversions less returns to the river) of 4,400,000 acre-feet plus one-half of any surplus that may be apportioned to the lower basin.

(c) Congress, by section 4 (a) of the Boulder Canyon Project Act, authorized an agreement by Arizona, California, and Nevada providing (1) for division of the 7,500,000 acre-feet of III (a) water, with Arizona apportioned 2,800,000 acre-feet and Nevada 300,000 acre-feet, (2) Arizona may use one-half of the unapportioned waters, (3) Arizona to have exclusive beneficial consumptive use of Gila Basin waters within its borders.

Since the California limitation statute limits that State to the use only of III (a) and surplus waters, it follows that the 8,500,000 acre-feet of Colorado River depletion apportioned by articles III (a) and III (b), in the absence of a lower-basin agreement, are available to the States as follows: To California not more than 4,400,000 acre-feet; to Arizona and other States, not less than 4,100,000 acre-feet. Arizona by the water contract of February 9, 1944, recognizes the right of Nevada to a beneficial consumptive use of 300,000 acre-feet of apportioned water, and the rights of Utah and New Mexico to equitable shares of lower basin apportioned water. While the shares of these latter States have not been fixed by agreements, the report "The Colorado River," dated March 1946, by the Department of the Interior and the Bureau of Reclamation, page 184, presents the estimated ultimate depletion by the lower basin portions of these States as follows:

	Acre-feet
New Mexico	[1] 13,000
Utah	101,300
Total	114,300

[1] Exclusive use of Gila River Basin waters.

Nevada in the same report is estimated to be able to deplete the stream by 256,800 acre-feet annually, compared with an Arizona recognition in its contract with the United States of 300,000 acre-feet. Allowing for a combined use by

Nevada, Utah, and New Mexico of 400,000 acre-feet, leaves for Arizona 3,700,000 acre-feet of apportioned water.

Arizona depletion of Colorado River flows by reason of use of Gila Basin waters will average approximately 1,100,000 acre-feet, leaving the relative consuming uses of main stream water below Lake Mead, by California and Arizona in the ratio of about 4,400,000 acre-feet to 2,600,000 acre-feet.

WATERS AVAILABLE TO ARIZONA

Colorado River Basin run-off records started in a small way in 1895 in the upper basin. The Yuma record dates from 1902 and Lee Ferry from 1921. The earlier records marked the close of a period of low run-off which ended in 1904 and was followed by a 25-year period of much higher run-off. A period of low run-off beginning with 1930 has not yet ended. While the average run-off of the period of record is more than adequate to meet the present apportionments to the two basins together with waters accorded Mexico by treaty, that is not true in protracted periods of low run-off like that of 1930 to date, which may reach a length of 20 years.

In such a period the upper basin would be expected to deliver at Lee Ferry its minimum obligation of 75,000,000 acre-feet in any 10-year period plus its proper share to meet requirements for Mexico. In making such delivery, the upper basin would necessarily draw upon reservoirs which must be built to enable the upper basin to comply with that requirement. The flow at Lee Ferry would then average 7,500,000 acre-feet plus the upper basin obligation for meeting the Mexico requirement.

Not until 1934 was a satisfactory gaging station established near Boulder Dam which would enable a satisfactory determination of inflow to the Colorado River in the Lee Ferry-Boulder Dam section. From 1935 to 1938 Lake Mead was filled for the first time, and the resulting filling of bank storage for the first time so obscured stream flow as to make the records of doubtful value for determining tributary inflow. The period of 1939–45 is, however, very satisfactory in this regard in that Lake Mead contents were nearly the same at the beginning and the end of the period, while Colorado River inflows during that period from the Little Colorado and Virgin Rivers, principal source of Lee Ferry-Boulder Dam inflows, had almost the same average flows for the 1939–45 and the 1930–45 periods. Bright Angel Creek, representative of much inflow in the Grand Canyon National Park area, likewise had like average flows for these two periods.

I refer there, Mr. Chairman, to table 1, which is a part of this paper, but which table, together with the following tables, I do not intend to read.

Senator MCFARLAND. May they be incorporated in the record, Mr. Chairman?

Senator MILLIKIN. They will be incorporated in the record.

Mr. DEBLER. Analysis of the 1939–45 operations at and above Lake Mead to Lee Ferry (table 3) indicate an average net gain, in the absence of Lake Mead, of 810,000 acre-feet per year. Under virgin conditions, the gain would be as follows:

	Acre-feet
Actual 1939–45	810,000
Existing depletions (from p. 184, March 1946 report on the Colorado River):	
New Mexico	13,000
Arizona	64,000
Utah	45,000
Nevada	44,000
Total	166,000
Which indicates a gain under virgin conditions in period of low run-off	976,000

At the start of a low run-off period Lake Mead would be filled, and it would be emptied during such period. At a time 100 years distant the reservoir capacity may be reduced one-third from the present, with a remaining active capacity of 20,000,000 acre-feet, of which 4,000,000 might then be held for flood control, leaving 16,000,000 acre-feet to be withdrawn. Bank storage, by reference to table 2, would yield 2,000,000 acre-feet additional water.

As basin development nears maturity it will become incumbent in Colorado River Basin interests to conserve water by retaining hold-over storage in the higher altitudes with their low evaporation rates, so far as practicable, at all times. Lake Mead should be drawn down promptly at the beginning of a drought period. Allowing for silt deposits at that time in the lower part of the reservoir

sufficient to reduce water areas by one-third, a content of 5,000,000 acre-feet will result in an average water level of 1,042 and an average area of 50,000 acres, with an average reservoir evaporation loss of 400,000 acre-feet per year, about one-half the long-time acreage loss. While such operation will reduce power output at Hoover Dam materially, that project will by that time be paid out, making high power revenue unnecessary and the saved water will have a value relatively greater than that of the lost power.

By that time Marble Canyon, Bridge Canyon, and Davis Dam would be built and operating with losses as indicated in table 5.

Senator MILLIKIN. What is the time now that we are looking forward to?

Mr. DEBLER. This is a period 100 years hence.

Senator MILLIKIN. Go ahead, please.

Mr. DEBLER. Losses from Hoover Dam to the international boundary (see table 4) have increased materially since 1934, when a gaging station was established near Hoover Dam. The low loss of 1934 may be disregarded as that was a year of water shortage. The average loss was 1,305,000 acre-feet in 1935 to 1939 and 1,656,000 acre-feet in 1941 to 1945. The increase of 351,000 acre-feet is due to—

(*a*) Operation of Lake Havasu with an average depletion of 69,000 acre-feet, by reference to table 5.

(*b*) Silting of river channels with extensive water logging and swamping of areas at the heads of Lake Havasu and the Imperial Reservoir.

(*c*) Increased diversions for Parker Valley——

Mr. Chairman, should I attempt to read this?

Senator MILLIKIN. Run through those. That is interesting.

Mr. DEBLER. Increased diversions for Parker Valley, about 50,000 acre-feet, and Palo Verde Valley, about 100,000 acre-feet, with inadequate drainage to effect return to Colorado River of waters not beneficially used.

Losses from Hoover Dam to the international boundary in recent years, while stream flows have been held steady by Lake Mead control, closely resemble future conditions except:

(*a*) Davis Dam not constructed and water losses in that area are expected to increase from a present loss of 45,000 acre-feet to a future loss of 164,000 acre-feet.

(*b*) With Davis Dam operating and releasing only clear water, and with reasonable stream improvement work, a narrow channel will in time develop through Needles Valley with salvage of fully 60,000 acre-feet in present losses in the waterlogged area at the head of Lake Havasu.

(*c*) At the head of the Imperial Dam reservoir area, and between Imperial and Laguna Dams conditions are similar to that at the head of Lake Havasu, and salvage of 40,000 acre-feet in the existing losses may in time be expected.

(*d*) Irrigation development is incomplete with the following amounts of present depletion, and of added depletion with full development of the valley lands:

The different States of Nevada, California, and Arizona has possibilities of irrigation projects, as presented in the March 1946 report of the Bureau, which projects are here listed:

	Depletion in 1,000 acre-feet		
	Present	With full development [3]	Increase
Big Bend and Fort Mohave, Nev.	0	6	6
Mohave Valley, Ariz.	0	21	21
Parker (Colorado River Indian), Ariz.[1]	50	170	120
Palo Verde Valley, Calif.[2]	100	139	39
North and South Gila, Ariz.	20	26	6
Yuma project:			
California	31	31	0
Arizona	130	130	0
Total	331	523	192

[1] Little of present average diversion of 80,000 acre-feet is returned to river, for lack of suitable drains and wasteways.

[2] Of present average net diversion of 270,000 acre-feet (diversion less waste returns), much returns to the river through drains.

[3] From table 6.

It will be noted that I have omitted from this table areas outside of the valley proper—that for the reason that I am developing here the relative gains and losses below the Hoover Dam under existing conditions and under the conditions of full development. From a study of these conditions, I here present this estimate of the present uses, the uses with full development, and the increased depletion of the Colorado River by reason thereof.

The result of that is an increase from the present to the future, a net increase of 192,000 acre-feet of depletion of the Colorado River.

Are you ready to proceed?

Senator MILLIKIN. Yes.

Mr. DEBLER. Present losses in the Hoover Dam—international boundary section thus are as follows:

		Acre-feet
Average loss 1941–46 (Gila and Bill Williams Rivers excluded)		1,656,000
Less water to be salvaged above Lake Havasu, Imperial and Laguna Reservoirs	100,000	
Evaporation at Lake Havasu, Headgate Rock Dam, Imperial Dam, and Laguna Dam Reservoirs, exclusive of temporary waterlogging at heads of Lake Havasu and Imperial Reservoir (table 5)	98,000	
Irrigation uses	331,000	
		529,000
Net unsalvageable loss		1,127,000

which, by way of explanation, would be expected to continue in the future.

The water available for compact apportionment of 8,500,000 acre-feet to the lower basin and for delivery of 1,500,000 acre-feet of treaty water in Mexico, except Gila River depletions of 1,100,000 acre-feet, in a 20-year of low run-off, would then be as follows:

Upper basin delivery at Lee Ferry, exclusive of water furnished for Mexico, 7,500,000 acre-feet.

Undepleted gain, Lee Ferry to Boulder Dam, 976,000 acre-feet, that figure being taken from page 10.

Draw-down at Lake Mead, including bank storage 18,000,000 acre-feet in 20 years, 900,000 acre-feet, that figure being 10,000,000 acre-feet of visible storage to be withdrawn—storage to be withdrawn divided into 20 years.

Unsalvageable losses Hoover Dam to international boundary, Gila and Bill Williams Rivers excluded, 1,127,000 acre-feet, which is taken from the top of page 13.

Inflow from Bill Williams River, 119,000 acre-feet.

Usable inflow to Colorado River from Gila River, 92,000 acre-feet. That item, by note 1, is derived by taking the figure of 154,000 acre-feet annually of Gila River water which must be pushed out of the basin for salinity control, as developed by Mr. Larson in his testimony, and of these 154,000 acre-feet of water, 60 percent, or 92,000 acre-feet, can be expected to enter the Colorado River.

The net gain or loss, then, from the Hoover Dam to the international boundary is a gain of 960,000 acre-feet; making a water supply, a total water supply available for depletion by lower basin and for delivery to Mexico, exclusive of depletion of Gila River of 8,460,000 acre-feet.

I have heretofore developed that with the State of Arizona depleting the Gila River by 1,100,000 acre-feet, the burden on the lower river for the lower basin and Mexico is 8,900,000 acre-feet a year.

That results, then, in a 20-year low period deficit of 440,000 acre-feet.

In view of the deficiency in water to fully meet lower basin apportionments together with a full supply to Mexico, the situation would warrant invoking the Mexican treaty provision for prorating shortages in water supply.

The upper basin is going to be very short of water in such a period when it attempts to make use of 7,500,000 acre-feet and also supplies 7,500,000 acre-feet at Lee Ferry. As a result of that situation, it is tentatively estimated by me that the upper basin will in fact be short an average of 1,000,000 acre-feet a year during such a period.

The indicated deficiency for the lower basin and Mexico, except in the Gila Basin water, is 440,000 acre-feet. The total deficiency, then, is 1,440,000 acre-feet, and this amount is 8.8 percent of 16,400,000 acre-feet, being 17,500,000 acre-feet of apportioned and treaty water less 1,100,000 acre-feet depletion of Gila River.

Mexico's share of the deficiency would be 132,000 acre-feet.

The resulting water supplies except by depletion of Gila Basin run-off would be:

Delivery by upper basin at Lee Ferry, 7,654,000 acre-feet. That is derived by deducting from 440,000 acre-feet of apparent deficiency the amount that Mexico is to be shorted in the amount of 132,000 acre-feet; the remaining deficiency of 308,000 acre-feet is then prorated to the upper and lower basins with each to supply 154,000 acre-feet, making the necessary delivery by the upper basin 7,654,000 acre-feet.

There would be available for the lower basin and Mexico 8,614,000 acre-feet.

There would be delivery to Mexico of 1,368,000 acre-feet and available for depletion by the lower basin the difference of the last two quantities, or 7,246,000 acre-feet.

The division of main stream depletions contemplated by the Boulder Canyon Project Act, as heretofore discussed, is 4,400,000 acre-feet to California and 4,100,000 acre-feet to other States, leaving 2,600,000 acre-feet for depletion by Arizona after deduction of 400,000 acre-feet for depletion by Nevada, Utah, and New Mexico, exclusive of Gila River depletion by New Mexico, and an average Gila River depletion of 1,100,000 acre-feet by New Mexico and Arizona. The low run-off period depletion of 7,246,000 acre-feet would then be divided as follows:

Available for depletion, 7,246,000 acre-feet.

Less main stream reservoir losses Marble Canyon to Laguna Dam inclusive, 870,000 acre-feet normal loss from table 5 less 400,000 acre-feet reduction in reservoir loss in such a period of low run-off at Lake Mead, leaving net 470,000 acre-feet.

Uses by New Mexico, Utah, and Nevada, 392,000 acre-feet. Four hundred thousand acre-feet less 2-percent deficiency, 2 percent being in the same proportion as the deficiency for the other users of lower basin water, making a deduction of 862,000 acre-feet and leaving for a net supply for other uses by Arizona and California 6,384,000 acre-feet, of which Arizona's share is 2,600,000 acre-feet, divided by 7,000,000 acre-feet, or 2,371,000 acre-feet.

CONTEMPLATE DEPLETIONS OF MAIN STREAM WATER, EXCEPT WATER ORIGINATING IN GILA BASIN, BY ARIZONA

Available for depletion to Arizona in low run-off period, 2,371,000 acre-feet.

Uses now proposed, including Gila and central Arizona projects: Tributaries above Lake Mead, 125,000 acre-feet.

Mohave Valley project, 21,000 acre-feet.

Parker (Colorado River Indian) project valley lands, 90,000 acres (table 6), 170,000 acre-feet.

Higher lands 10,000 acres at 3 feet, 30,000 acre-feet.

Gila Valley project including Yuma Mesa, North Gila, and South Gila Valleys and Wellton-Mohawk Division in accordance with S. 483, Eightieth Congress, first session, 600,000 acre-feet.

Central Arizona project, diversion of 1,200,000 acre-feet less added return of 133,000 acre-feet to Colorado River, 60 percent of 222,000 acre-feet required to remove additional salts brought into central Arizona area by Colorado River water and added use of Gila Basin waters, leaving net depletion of Colorado River by that project of 1,067,000 acre-feet.

Yuma project, Arizona portion, 130,000 acre-feet.

Making a total of 2,143,000 acre-feet and leaving unallotted by Arizona 228,000 acre-feet.

In periods of average, or better, run-off, such as 1905–29, additional water would be available.

Senator MILLIKIN. No questions?

Senator DOWNEY. Mr. Chairman, my mind not being as penetrating as that of the chairman, I must admit I do not entirely understand the effect of these figures. It may be that I would not want to ask Mr. Debler any questions. I would like to right to reserve the right to recall him to the stand perhaps later after I have been able to analyze these figures. Probably it wouldn't be over 10 or 15 minutes' cross-examination, if any questions arise in my mind.

Senator MILLIKIN. Will you be here tomorrow, Mr. Debler?

Mr. DEBLER. I will.

Senator MCFARLAND. No questions.

Senator MILLIKIN. Then that will close your testimony, Mr. Debler.

Senator MCFARLAND. Except, Mr. Chairman, I would like the privilege of inserting in the record following Mr. Debler's testimony a copy of the Arizona contract.

Senator MILLIKIN. All right.

(Tables 1 to 6, inclusive, appended to Mr. Debler's statement, follow:)

TABLE 1.—*Colorado River tributaries, Lee Ferry to Parker*

[Annual discharges, 1,000 acre-feet]

Run-off year	Bright Angel Creek (1)	Little Colorado at Grand Falls (2)	Virgin River at Littlefield (3)	Williams River at Planet (4)	Gila River at Dome (5)
1930	20.5	189.3	188.1	33.0	15.6
1931	16.9	165.2	119.4	108.9	103.0
1932	42.4	465.8	381.9	319.6	266.0
1933	17.1	129.2	127.4	13.3	1.2
1934	13.5	71.0	78.0	11.6	0.2
1935	31.6	215.4	164.8	110.2	5.9
1936	25.3	165.1	131.0	21.8	0
1937	41.9	339.5	240.3	252.9	153.7
1938	44.3	170.2	278.6	113.0	45.9
1939	25.9	83.2	154.9	231.5	3.5
1940	31.5	132.2	173.7	30.8	0
1941	64.4	586.8	400.0	436.8	589.7
1942	29.3	149.0	215.0	26.8	0
1943	33.8	103.0	178.1	14.2	13.5
1944	26.3	129.0	182.7	114.3	14.2
1945	26.7	159.5	166.3	60.1	11.8
Averages:					
1934–38, inclusive	31.4	192.2	178.5	101.9	41.1
1939–45, inclusive	34.0	191.8	210.1	130.6	90.4
1930–40, inclusive	31.1	193.3	185.3	113.3	54.1
1930–45, inclusive	30.7	203.5	198.8	118.7	76.5

ANNUAL RUN-OFF DATA FROM USGS WATER-SUPPLY PAPERS

	Average 1939–45, inclusive	Average 1930–45, inclusive
Little Colorado, and Virgin	401.9	402.3
Little Colorado, Virgin, and Bright Angel	435.9	433.0
Little Colorado, Bright Angel, Virgin, and Bill Williams	566.5	551.7

TABLE 2.—*Bank storage in Lake Mead*

[Units, 1,000 acre-feet]

Water year (1)	Colorado River at Grand Canyon (2)	Virgin River at Littlefield, Ariz. (3)	Lake Mead content at end of year (4)	Colorado River below Boulder Dam (5)	Net loss in Lake Mead area (6)	Evaporation by Lake Mead (7)	Unmeasured inflow less bank storage in Lake Mead (8)
1934	4,656	78	0	5,058	+324	0	+324
1935	10,220	165	4,140	5,556	−689	100	−589
1936	12,320	131	6,414	6,282	−690	350	−340
1937	12,410	240	12,432	5,826	−806	520	−286
1938	15,630	279	21,065	6,168	−1,108	660	−448
1939	9,618	155	21,749	8,473	−616	865	+249
1940	7,435	174	21,144	7,694	−520	870	+350
1941	16,940	400	26,150	11,730	−604	920	+316
1942	17,260	215	25,430	17,880	−315	975	+660
1943	11,430	178	24,070	12,500	−468	950	+482
1944	13,530	183	22,860	14,450	−473	915	+442
1945	11,870	166	21,620	12,940	−336	858	+522
Average, 1939–45							+432

Discharges and reservoir contents from water supply papers of USGS reservoir contents at close of 1936 and thereafter exclude 3,207,000 acre-feet of dead storage resulting from gate closure in that year.

	Acre-feet
Loss 1935–38, inclusive	1,663,000
Assuming run-off conditions alike for 1935–38, inclusive, and for 1939–45, inclusive, gain in 1935–38, inclusive, would have been 4 x 432,000 acre-feet or	1,728,000
Bank storage in Lake Mead for active capacity of 21,000,000 acre-feet is	3,391,000

Virgin River flows at Littlefield were 15 percent lower in 1934–38 period than in 1939–45 period. Bright Angel Creek, more representative of inflow in Grand Canyon-Boulder Dam area was 15 percent higher in 1934–38 period than in 1939–45 period. It is concluded that the derived bank storage of 3,391,000 acre-feet may be accepted. With silting of the reservoir, bank storage will increase. The operating levels of the reservoir will gradually rise with reduction in flood-control capacity enabled by increasing upstream storage, utilizing ground storage on some 15,000 acres additional reservoir area. Considering also that of the 1934–38 loss supplied to dry soils hygroscopic water will not return, recoverable bank storage is estimated at 2,000,000 acre-feet.

TABLE 3.—*Colorado River loss and gain—Lees Ferry to Hoover Dam*

[Units 1,000 acre-feet, water-years

Calendar year (1)	Colorado River at Lees Ferry plus Paria (2)	Colorado River below Hoover dam (3)	Lake Mead content at end of year (4)	Historical gain (+) or loss (−) Lees Ferry to Boulder Dam (5)
1934	4,395	5,058	0	+663
1935	9,912	5,556	4,140	−216
1936	11,965	6,282	6,414	−202
1937	11,897	5,826	12,432	−53
1938	15,436	6,168	21,065	−635
1939	9,404	8,473	21,749	−247
1940	7,091	7,694	21,144	−2
1941	16,048	11,730	26,150	+688
1942	17,030	17,880	25,430	+130
1943	11,259	12,500	24,070	−119
1944	13,219	14,450	22,860	+21
1945	11,446	12,940	21,620	+254
1946	8,730	----------	19,011	----------
1947	----------	----------	----------	----------
Average 1934 to 1938, inclusive	----------	----------	----------	−89
Average 1939 to 1945, inclusive	----------	----------	----------	+104

Discharges and Lake Mead contents from Water Supply Papers of USGS except for 1946.

In and after 1936 indicated contents exclude 3,207,000 acre-feet dead storage.

	Acre-feet
Estimated average evaporation 1939–45, inclusive, at Lake Mead	908,000
Less loss in reservoir area under virgin conditions	202,000
Net new reservoir loss	706,000
Average recorded gain 1939–45	104,000
Average gain Lee Ferry to Hoover Dam, 1939–45, inclusive, with dam not built	810,000

TABLE 4.—*Colorado River loss and gain—Boulder Dam to international boundary*

[Units 1,000 acre-feet—water years]

[All data from USGS water supply papers]

Water year	Inflow, except Williams and Gila Rivers				Outflow					Total, out	Loss
	Colorado River below Boulder Dam	Williams River at Planet	Gila River at Dome	Total in columns 2, 3, and 4	Metropolitan diversions	Colorado at Rockwood heading	Imperial Canal below Pilot Knob	Returns from Yuma Valley	Change in storage at Lake Havasu		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1934	5,058	12	0	5,070	0	3,762	0	200	0	3,962	1,108
1935	5,556	110	6	5,672	0	4,250	0	200	0	4,450	1,222
1936	6,282	22	0	6,302	0	4,721	0	200	0	4,921	1,381
1937	5,826	253	154	6,233	0	4,708	0	200	0	4,908	1,325
1938	6,168	113	46	6,327	0	4,830	0	200	+25	5,055	1,272
1939	8,473	232	4	8,709	122	6,664	3	192	+526	7,385	1,324
1940	7,694	31	0	7,725	121	6,133	7	172	−71	6,241	1,484
1941	11,730	437	590	12,757	52	9,986	980	167	−41	11,092	1,665
1942	17,880	27	0	17,907	13	14,094	2,237	194	−151	16,374	1,533
1943	12,500	144	14	12,528	52	7,757	2,518	195	+364	10,834	1,694
1944	14,450	114	14	14,578	37	10,120	2,537	196	−17	12,836	1,742
1945	12,940	60	12	13,012	66	8,525	2,663	162	+18	11,368	1,644
Average 1941 to 1945, inclusive											1,656

Column 2. Willow Beach station to 1938.

Column 7. Sum of Colorado River at Yuma, Yuma main canal wasteway, California drain, and Pilot Knob wasteway with California drain estimated at 20,000 acre-feet per year prior to 1939.

Column 8. All-American Canal above Pilot Knob wasteway less flow in wasteway.

Column 9. Sum of Cooper, Eleven Mile, Twenty-one Mile, west main canal, and east main canal wasteways together with main drain flows; prior to 1939 estimated, in absence of dependable records at 200,000 acre-feet.

TABLE 5.—*Colorado River lower basin mainstream reservoirs—comparison of losses before and after development—average conditions*

Reservoir	Total area, acres in 1,000	Virgin conditions					Developed conditions					Increase in loss, 1,000 acre-feet
		Water area		Land area		Annual loss, 1,000 acre-feet	Water area		Land area		Annual loss, 1,000 acre-feet	
		Acres in 1,000	Loss rate in feet	Acres in 1,000	Loss rate in feet		Acres in 1,000	Loss rate in feet	Acres in 1,000	Loss rate in feet		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Marble Canyon	5.0	1.6	5.0	3.4	0.5	10	4.8	5.0	0.2	1.5	27	17
Bridge Canyon	16.7	3.4	6.0	13.3	.5	27	12.7	6.0	4.0	2.0	84	57
Lake Mead	162.7	6.6	7.0	156.1	1.0	202	110.0	6.5	52.7	1.5	794	592
Davis	27.7	5.0	7.0	22.7	1.0	58	24.0	6.5	3.7	2.0	164	106
Lake Havasu	25.1	4.5	7.0	20.6	1.5	63	18.0	7.0	1.6	4.0	132	69
Headgate Rock	4.0	1.2	7.0	2.8	2.0	14	4.0	7.0	0	0	28	14
Imperial	7.0	3.3	7.0	3.7	2.0	30	4.0	7.0	3.0	4.0	40	10
Laguna	5.6	.8	7.0	4.8	3.0	20	1.5	7.0	4.1	3.5	25	5
Total						424					1,294	870

Losses do not include rainfall.

EXPLANATION

Areas in column 2 from reservoir topography.

Areas in column 3 reflect river stage at 10,000 second-feet, taken from 1902 topography by USGS for areas below Black Canyon and from USGS river profile surveys of 1923 for areas above Black Canyon. Column 5 equals column 2 minus column 3.

Areas in columns 8 and 10 anticipate 20,000,000 to 30,000,000 acre-feet regulating capacity above Lee Ferry to enable compliance with compact requirement for delivery of 75,000,000 acre-feet in any 10-year period, including reservoirs at Bluff and Coconino sites for flood and silt control. Consequently minor regulating storage will be utilized at Marble Canyon and Bridge Canyon Reservoirs. Lake Mead would be held relatively low to minimize evaporation and hold-over storage would be held in cooler upper basin reservoirs so far as practicable. Average storage level at Lake Mead estimated at 1,170 with original area of 130,000 acres at that level reduced to 110,000 acres by silting. Davis Reservoir would be used for seasonal regulation only, filling and emptying each year. Lake Havasu would be held at average elevation 448 to minimize pumping head with remaining storage capacity utilized to coordinate power and irrigation uses; original water area of 23,500 acres at elevation 448 reduced to 18,000 acres by silting. Alamo Reservoir assumed built for flood control only. Headgate Rock water level to be held constant for power head. Imperial and Laguna assumed largely silted. All silted areas at heads of reservoirs estimated to use water heavily no matter how utilized.

Evaporation pans at Lake Mead indicate loss of 10 feet with class A pans and 8 feet from partially submerged floating pans from which rate of 6.5 feet adopted for Lake Mead; others adjusted thereto considering temperatures, operating conditions, and reservoir areas.

TABLE 6.—*Comparison of losses in Colorado River Valleys below Davis Dam before and after development (exclusive of reservoir areas)*

(A) UTILIZED AREAS

Irrigation project (Valley area only)	Gross area, 1,000 acres	Virgin conditions		Developed conditions					Change in annual loss, 1,000 acre-feet
				Irrigable land		Nonirrigable land		Annual loss, 1,000 acre-feet	
		Loss rate, feet	Annual loss 1,000 acre-feet	Area, 1,000 acres	Loss rate, feet	Area, 1,000 acres	Loss rate, feet		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Big Bend, Nev	1.0	1.0	1	0.5	2.5	0.5	1.5	2	1
Fort Mohave, Nev	3.6	1.0	4	2.6	3.0	1.0	1.5	9	5
Mohave Valley, Ariz	11.0	1.0	11	10.0	3.0	1.0	2.0	32	21
Parker (Colorado River, Indian), Ariz	100.0	1.2	120	90.0	3.0	10.0	2.0	290	170
Palo Verde Valley, Calif	80.0	1.2	96	75.0	3.0	5.0	2.0	235	139
North Gila, Ariz	6.0	1.5	9	5.4	3.5	.6	2.0	20	11
South Gila, Ariz	8.4	1.5	13	7.6	3.5	.8	2.0	28	15
Yuma, Calif., part	17.1	1.5	26	15.0	3.5	2.1	2.0	57	31
Yuma, Ariz., part	53.2	1.5	80	50.0	4.0	3.2	3.0	210	130
Total			360					883	523

NOTE.—The project areas here included represent only the valley areas which might be using some river water under virgin conditions either by direct inundation by extreme floods or through subirrigation, and which would be included within protecting levees or within irrigation district boundaries (existing in some cases).

The rates of loss (of river water only, precipitation not included) with virgin conditions represent estimated rates considering character of vegetation.

The rates of loss, developed for irrigated lands are in accord with findings in Lowry-Johnson Paper on Consumptive Uses.

For nonirrigable ands rates are estimated by comparison with irrigated lands considering probably vegetation.

(B) NONUTILIZED AREAS

Locality	Total area, 1,000 acres	Virgin conditions					Developed conditions					Decrease in annual loss, 1,000 acre-
		Water area, 1,000 acres	Rate of loss, feet	Land area, 1,000 acres	Rate of loss, feet	Annual loss, 1,000 acre-feet	Water area, 1,000 acres	Rate of loss, feet	Land area, 1,000 acres	Rate of loss, feet	Annual loss, 1,000 acre-feet	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Davis Dam-Lake Havasu	41.4	3.6	7.0	37.8	3.5	158	2.7	7.0	38.7	2.5	116	42
Headgate Rock-Imperial Reservoir	92.4	11.5	7.0	81.0	3.5	364	8.6	7.0	85.8	2.5	275	89
Laguna Dam-International boundary	29.7	2.5	7.0	27.2	3.5	113	1.9	7.0	27.8	2.5	83	30
Total						635					474	161

NOTES.—Table covers valley areas not in reservoirs or within irrigation projects; the water areas upon development estimated 25 percent less than under virgin conditions through elimination of braiding of channels when silt loads are largely eliminated. The rate of loss for land areas is reduced by development as the land areas will largely be inundated with a controlled river.

Mr. CARSON. And also the testimony of R. J. Tipton, appearing in the same record at pages 522 to 548.

Senator MILLIKIN. That will be inserted immediately following the previous testimony.

(It is as follows:)

STATEMENT OF R. J. TIPTON, CONSULTING ENGINEER FOR THE STATE OF ARIZONA AND CENTRAL ARIZONA PROJECT ASSOCIATION

Senator MILLIKIN. Mr. Tipton, will you take a seat, and give the reporter your name, residence, and business.

Mr. TIPTON. Yes, sir.

My name is R. J. Tipton. I am a consulting engineer from Denver, Colo. I am appearing at this hearing in behalf of the State of Arizona and the Central Arizona Project Association. Among my clients is the Colorado Water Conservation Board for which I am consulting engineer. I am appearing with the full knowledge of responsible officials of the State of Colorado, including the Governor. I have no knowledge of the physical features or merits of the central Arizona project. My statement will be confined to a discussion of water supply and its availability under the Colorado River compact and related documents.

The statement of Mr. James H. Howard, presented to the committee on June 28, makes it necessary for me, in behalf of the State of Colorado, to correct certain impressions which he left with the committee as to Colorado's interpretation of some of the matters which affect the water supply available under the compact to the upper basin as well as to Arizona.

He quoted statements which I made in connection with the Mexican Water Treaty hearings and quoted from an official report of the State of Colorado which commented on the Colorado River Basin report of the Bureau of Reclamation. The Colorado report was signed by the Governor of the State of Colorado; Clifford H. Stone, director of the Colorado Water Conservation Board; C. L. Patterson, chief engineer of the board; Jean S. Breitenstein, attorney for the board; and myself as consulting engineer of the board. The interpretations which Mr. Howard accredited to me and to the State are directly opposed to the State's interpretation and my interpretation of the matters involved.

In my statement I desire to discuss the following phases of the problem: (1) Beneficial consumptive use; (2) water supply of the Colorado River Basin and the amount available for use by Arizona; and (3) the California situation.

Beneficial consumptive use as it is used in the Colorado River compact is interpreted by California to mean the aggregate of all the individual items of consumptive use at the points of use. Arizona interprets the term to mean depletion of main stream Colorado River water as a result of man's activities.

By California's interpretation, all of the water salvaged by man on tributaries of the Colorado River by converting natural losses to beneficial use would be charged against the amount of the basin's apportionment and against the State's equitable shares of such apportionment, this in spite of the fact that water so salvaged under virgin conditions never did reach the main stream and never could have been used by any other water user in the Colorado River Basin except the one who salvages the water.

Simply stated, California's position is that the upper basin's 7,500,000 acre-feet of annual beneficial consumptive use apportioned by the compact shall be determined by adding up all of the small increments of consumptive use along all of the tributaries, large and small, in the upper basin, each increment of consumptive use to be ascertained by the measurements of diversions from the stream and by deducting from the amount of the diversions the returns to the stream from which each individual diversion is made. California's interpretation would involve the measurements of the thousands of diversions in the upper basin and the measurements of the thousands of returns to the streams from the lands irrigated by those diversions.

The State of Colorado's position is that the upper basin under the Colorado River compact has the right to deplete the virgin flow of the Colorado River at Lee Ferry by 7,500,000 acre-feet annually. This difference in interpretation means a difference in the estimated water supply available to Arizona under the compact and related documents of over 1,000,000 acre-feet, all of which difference is involved in the application of the two interpretations to the use of water on the Gila River. In the upper basin a substantial amount of water is involved.

Mr. James H. Howard, in his statement, assumed the problem to be a simple one. He stated:

"No definition of the phrase 'beneficial consumptive use' is found in the compact, presumably because the term is a common one and well understood in water law as meaning diversions from a river minus return flow to the river. The words 'consumptive use' have been defined in other documents relating to the Colorado River."

Mr. Howard makes this statement despite the fact that the Supreme Court of the United States in an important interstate water case interpreted evidence with respect to consumptive use to mean to divert, take, and use. When in a subsequent case it was sought to have the Supreme Court interpret its decision, the Supreme Court said that it meant gross head-gate diversion, so apparently there is some legal confusion about the legal meaning of the term.

From an engineering standpoint, the conception of consumptive use as it affects the flow of the stream has gradually gone through a process of evolution since the term was first coined in the suit over the uses of water of the Laramie River, *Wyoming* v. *Colorado*. Much work is still being done on this subject by engineers who are studying the problem in various river basins.

In my discussion concerning the meaning of "beneficial consumptive use" as it appears in the Colorado River compact, I shall approach the problem, first, on the basis of intent of the Colorado River Compact Commissioners at the time the Colorado River compact was negotiated and, second, on the basis of the technical conception of consumptive use at the present time and the evolution which has brought about such conception.

The Colorado River Compact Commission at the time it apportioned the water between the two basins——

Senator MILLIKIN. Is it your contention that we should be governed by the present as distinguished from the then current conception of the meaning of the words "consumptive use?"

Mr. TIPTON. No. It is my position that we should be governed by the conception that the Colorado River Commission had of the term and the intent that the commission had in apportioning the water.

Senator MILLIKIN. What is the relevancy of the present conception of the words?

Mr. TIPTON. The reason for bringing that into the discussion, Mr. Chairman, is to make clear the meaning of Colorado's comments on the Colorado River report by the Bureau of Reclamation, which Mr. Howard quoted.

In my oral presentation, I need not dwell on the technical conception if it seems desirable, in order to save time—I mean during the hearing. But that is the only purpose.

Senator MILLIKIN. Proceed, please.

Mr. TIPTON. The Colorado River Compact Commission at the time it apportioned the water between the two basins was not thinking in terms of the technical meaning of "beneficial consumptive use" when it used such term in the compact. The commission used the term for legal reasons. The Colorado River compact commissioners were thinking in terms of dividing between the basins the virgin (termed by them reconstructed flow) of the river in the amount estimated at or near the international boundary. The 7,500,000 acre-feet apportionment to each basin was from the virgin flow at Lee Ferry. The Colorado River Compact Commission in considering the consumptive use of the Gila River was thinking in terms of the depletion of the river at the mouth. The Colorado River Compact Commission, when considering consumptive use in the upper basin was thinking in terms of the depletion of the flow of the river at Lee Ferry. The above conclusions with respect to the intent of the commission are plainly indicated in the minutes of the various meetings of the commission.

I am submitting herewith as appendix A excerpts from the minutes of the seventeenth meeting held in Santa Fe, N. Mex., on November 15, 1922, and the minutes of the eighteenth meeting held at the same place on November 16, 1922, all of which contain the discussion of the commission when it was considering the division of the water of the Colorado River.

In my discussion I wish to quote a portion of the minutes which show plainly the intent of the commission. The emphasis is supplied by me by underlining in the quotations as well as in the appendix.

Senator MILLIKIN. Is that excerpt similar to the one Judge Stone mentioned?

Mr. TIPTON. No, sir. It is entirely different.

Senator MILLIKIN. Proceed please.

Mr. TIPTON. The commission in its attempt to estimate the virgin flow of the river gave consideration to the recorded flow at Laguna, which was a gaging station on the river below the old Laguna Dam diversion and above the old Imperial diversion. In its studies the commission chose to add to that flow the consump-

tive use of the upper basin and the consumptive use in the Gila Basin plus its outflow at the mouth. At an early point in the minutes which I am attaching, the following statements were made:

"Mr. HOOVER. Then the problem also goes into the consumptive use in the upper basin. In order to reconstruct the river the consumptive use in the upper basin must be taken into account. It is true that the Laguna gagings include the Imperial Valley?

"Mr. A. P. DAVIS. Yes"

It may be noted that Mr. Hoover stated that in order to reconstruct the river the consumptive use in the upper basin must be taken into account. I quote the following from the minutes:

"Mr. HOOVER. And if you were to reconstruct the river you must also take account of the consumptive use of the upper basin and add that to the Laguna gagings, and ought to add also the Gila flow. Have you a rough idea as to what the flow of the Gila would be if it had not been used for irrigation, or what the consumptive use, plus the present flow, is?

"Mr. A. P. DAVIS. I can estimate that fairly closely. The mean annual flow as measured during the last 20 years is 1,070,000 acre-feet. The areas that are irrigated there are given in this document, 142, and we can apply a duty of consumptive use of water on that area and approximate fairly well, I believe, the consumptive use in the Gila Basin, if that is what is wanted.

"Mr. HOOVER. My only point on that is, Does it approximate, possibly, the amount of consumptive use in the upper basin?

"Mr. A. P. DAVIS. Oh, no. It is smaller. The consumptive use in the upper basin is on that table I gave you.

"Mr. HOOVER. About 2,400,000?

"Mr. A. P. DAVIS. In 1920 the consumptive use was about 2,400,000 acre-feet.

"Mr. CARPENTER. This is a progressive increase from 0 up?

"Mr. A. P. DAVIS. Yes

"Mr. CARPENTER. You would think the Gila consumptive use would be something over a million and a half feet?

"Mr. A. P. DAVIS. Very likely less than a million and a half. But I am not sure about that till I figure on it a little.

"Mr. CARPENTER. In other words, there might be——

"Mr. A. P. DAVIS (interrupting). There would be a good deal less.

"Mr. CARPENTER. There might be, then, a million acre-feet to go into this calculation for translating back from Laguna gagings?

"Mr. A. P. DAVIS. To include the Gila; yes. It doesn't seem like it would apply to the Little Colorado as its contribution is offset by evaporation. There is very little outside the Gila Basin that is not thus offset.

"Mr. CALDWELL. Mr. Davis, just where is the Gila measured?

"Mr. A. P. DAVIS. There have been different points; one at Dome.

"Mr. CALDWELL. Tell me where it is with respect to the mouth?

"Mr. A. P. DAVIS. Dome is about 12 miles above the mouth, and that was changed on account of difficulties of measurement, but not very materially.

"Mr. CALDWELL. This million seventy thousand you speak of is an average flow, is it?

"Mr. A. P. DAVIS. Yes.

"Mr. CALDWELL. Average annual flow over how many years?

"Mr. A. P. DAVIS. Eighteen years, I believe. It is all published in Senate Document 142."

Particular attention is directed to Mr. Hoover's question where he asked Mr. Davis:

"Have you a rough idea as to what the flow of the Gila would be if it had not been used for irrigation, or what the consumptive use, plus the present flow, is?"

It is significant that Mr. Hoover's intent was to determine what the flow of the river would have been to the Colorado River had there been no irrigation on the river. He considered consumptive use and depletion as synonymous because he suggests that the flow before irrigation would be the consumptive use plus the present flow (at the mouth). This is subsequently made plain.

Attention is directed particularly to Mr. A. P. Davis' statement to the effect that:

"It doesn't seem like it would apply to the Little Colorado, as its contribution is offset by evaporation. There is very little outside the Gila Basin that is not thus offset."

In other words, the commission in estimating the amount of water available for apportionment was not considering any of the water which did not reach the main stream of the Colorado River, and as a matter of fact in considering any

contributions that in the virgin state did not reach Laguna and the mouth of the Gila.

I call attention to the following statement by Mr. Hoover taken from the minutes of the meeting as shown in appendix A:

"Mr. HOOVER. What would be added here, as a rough guess, would be the flow and consumptive use of the Gila and Little Colorado and the consumptive use of the Colorado below Lee Ferry and above Laguna. This all comes to about a million and a half, and the consumptive use in the upper basin is 2,400,000 so it would be a credit of water to the Laguna readings of approximately a million feet, something like that."

He considers that the flow of the Gila River plus the contribution of the Little Colorado, plus the consumptive use of the Colorado below Lee Ferry and above Laguna amounted to about 1,500,000 acre-feet. Mr. Davis had already stated that the Little Colorado contributed nothing and that there was very little contribution except by the Gila. It is apparent, therefore, that the 1,500,000 acre-feet which the commission was to add to the flow at Laguna was to represent the virgin flow of the Gila River made up of 1,070,000 acre-feet at the mouth (at Dome, about 12 miles above the mouth) plus approximately 500,000 acre-feet of consumptive use. It is interesting in view of information we now have to check Mr. Davis' estimate of the consumptive use on the Gila and of its virgin flow.

Table CXLVI on pages 284 and 285 of the March 1946 report of the United States Department of the Interior and the Bureau of Reclamation report on the Colorado River shows the estimated virgin flow of the Gila River at the mouth. This is shown in the last column in the table. For the 18 years mentioned by Mr. A. P. Davis, the estimated virgin flow was 1,920,000 acre-feet. This may be compared with the 1,500,000 acre-feet mentioned by Mr. Hoover, cited above. In further explanation of the 1,920,000 acre-feet, that is merely the arithmetical mean of the 18 years, mentioned as taken from the last column of the table which was cited as appearing in the Bureau's 1946 report.

If from the 1,920,000 acre-feet there is subtracted Mr. Davis' estimate of the flow of the Gila at the mouth, there results the value of 850,000 acre-feet of indicated depletion of the Gila River at the mouth for the 18-year period.

And at that point I might say that the 850,000 acre-feet would be Colorado's interpretation of the beneficial consumptive use on the Gila at that time, using more complete estimates that are available to us as to the virgin flow which occurred for the 18-year period.

The mean annual total water supply at the point of use in central Arizona for the same 18-year period is indicated by values in the table to have been 3,100,000 acre-feet.

This, again, is an arithmetical mean of the values, appearing in the Bureau's table.

By the California interpretation, the consumptive use in the Gila River during the 18-year period would have been 2,030,000 acre-feet. This may be compared with the 850,000 acre-feet arrived at above. It may be noted that the difference in the Gila consumptive use arrived at by the one interpretation as opposed to the other interpretation again is something over 1,000,000 acre-feet. It does not appear that the commission was interpreting "consumptive use" in the same fashion that California is.

The following is quoted from the minutes which appear in appendix A:

"Mr. HOOVER. I should think for matters of discussion we could take it that the reconstructed mean at Lees Ferry is a minimum of 16,400,000 and perhaps, with this elaborate calculation, half a million above, i. e., 17,000,000. Therefore we would come to a discussion of a 50–50 basis on some figure lying between 16,400,000 and 17,000,000.

"Mr. S. B. DAVIS. With all due respect to these eminent gentlemen, I am still from Missouri, I have to be shown, but I am willing to enter into a discussion on that line.

"Mr. HOOVER. I should think the result of the deliberations and of our advices on that matter have been to establish the 16,000,000 as a sort of least mean.

"Mr. S. B. DAVIS. As the average mean at Lees Ferry.

"Mr. HOOVER. Yes; and that an apportionment of a minimum would be half that sum, 8,200,000 acre-feet instead of the 6,260,000 feet as suggested by Mr. Carpenter—so that this would be the question of your proposal, delivering approximately 82,000,000 acre-feet in 10-year blocks."

It may be noted that the commission, after going through the various calculations to reconstruct the flow of the river at Lee Ferry, arrived at a minimum estimate of 16,400,000 acre-feet per year which Mr. Hoover mentioned might be as high as 17,000,000 acre-feet. At that point in the deliberation the commis-

sion was considering a 50–50 division of the water supply. Mr. Hoover therefore suggested an apportionment of a minimum of the 8,200,000 acre-feet to the lower basin, which was one-half the estimated minimum reconstructed flow at Lee Ferry of 16,400,000 acre-feet.

It is apparent, therefore, at this point the commission was engaged in apportionment of the virgin flow of the river between the two basins. The final apportionment so far as the division of the water at Lees Ferry is concerned was made on that basis as evidenced from the following discussion quoted from the minutes which appear in appendix A:

"Mr. HOOVER. In our discussions yesterday we got away from the point of view of a 50–50 division of the water. We set up an entirely new hypothesis. That was that we make, in effect, a preliminary division pending the revision of this compact. The seven and a half million annual flow of rights are credited to the south, and seven and a half million will be credited to the north, and at some future day a revision of the distribution of the remaining water will be made or determined.

"An increasing amount of water to one division will carry automatically an increase in the rights of the other basin and therefore it seemed to me that we had met the situation. This is a different conception from the 50–50 division we were considering in our prior discussions.

"Mr. NORVIEL. If this includes reconstruction of the river, then, I concede it is a more nearly fair basis. But if it does not—if it is a division of the water to be measured at the point of demarcation, I still insist that it is not quite fair, because it is simply dividing what remains in the river.

"Mr. HOOVER. We are leaving the whole remaining flow of the basin for future determination.

"Mr. NORVIEL. What I am getting at is this: That the upper basin takes out and uses a certain amount of water, and as this reads, it proposes to divide the rest of it, 7,500,000 acre-feet per annum.

"Mr. HOOVER. No.

"Governor CAMPBELL. That is inclusive, Mr. Norviel.

"Mr. NORVIEL. It reconstructs the river?

"Governor CAMPBELL. Yes; in effect, as I understand it.

"Mr. NORVIEL. Well, if it does that, then my objection will be removed.

"Mr. HOOVER. Any other comment? If not all those in favor of this clause 7 as read please say 'aye.'

"(Thereupon a vote having been taken upon the paragraph No. 7. the same was unanimously passed.)"

It may be noted that 7,500,000 acre-feet was apportioned to each basin from the reconstructed flow of the river at Lee Ferry. Mr. Norviel was concerned because he feared that the discussion related to the division of the flow of the river at "the point of demarcation" (Lee Ferry) without its being reconstructed or brought to virgin conditions. When he was assured that the intent was to apportion the reconstructed flow of the river in terms of 7,500,000 acre-feet to each basin, he stated that he would remove his objections. The commission then unanimously voted to adopt such apportionment.

Judge Stone has already shown that the Colorado River Compact Commission used the words "beneficial consumptive use" in the compact to avert implying that the commission was dividing the corpus of the water. The use of the term was for legal reasons and had nothing to do with the technical conception of consumptive use at the present time. In the interest of saving time I shall not read all my discussion on the present technical conception of consumptive use.

Senator MILLIKIN. You might state the end point, Mr. Tipton.

Mr. TIPTON. Summarizing then, it is recognized by definition that there is "farm consumptive use," there is "project consumptive use," there is "valley consumptive use," and there is "basin consumptive use."

Consumptive use is measured by inflow to an area minus outflow from the area; for a farm, consumptive use is diversions minus the return; for a project area, it is the diversions by the main canals minus the return; for a valley, it is the inflow to the valley minus the outflow. For a basin it is likewise the inflow minus the outflow.

The man-made consumptive use or depletion within incremental areas will reflect itself at the mouth of a valley or a basin as depletion, and the difference between the consumptive use of a valley in the virgin state as evidenced by the inflow minus the outflow, and the consumptive use after man has developed the valley evidenced by the then inflow minus outflow represents the beneficial valley consumptive use.

Valley consumptive use so measured is a smaller item than the sum of the incremental consumptive uses in the valley because of the salvaging of water. The same is true for the basin as a whole. The basin consumptive use is less than the sum of the valley consumptive uses on account of the salvaging of water within the valleys which never did reach the mouth of the basin under virgin conditions.

That is, virtually, the substance of my technical concept, the depletion factor of consumptive use. In the middle of page 15 of my written statement is the sentence "Valley consumptive use is determined by measuring inflow to the valley and deducting the outflow."

At that point I desire to submit a definition which appears in the Report of the Joint Investigation on the Upper Rio Grande to make the problem somewhat clearer. I will not read it at this time but, with the chairman's permission, I would like to submit that as part of my testimony.

Senator MILLIKIN. All right.

Mr. TIPTON. I shall resume, then, reading my written statement.

To get further insight to the Commissioner's thinking, I wish to quote an excellent statement of Mr. Delph Carpenter's made at the eleventh meeting of the commission held in Santa Fe on November 11, 1922:

"Mr. CARPENTER. When you proceed to reduce the adjustment to one of a definite fixing of quantities, or limitations of use as to each State, you have to proceed to a degree of refinement that is hazardous and at this time calls for a knowledge which no man possesses.

"We do not have and cannot obtain, except by long years of study hereafter, basic data upon which to work. Between States in either of these great divisions very different principles should be applied on each different and distinct river, and may have to be applied. The facts are different. *For illustration, some of the rivers rise in the mountains to wither away on the plains before they reach the lower States within a division.* Others are increasing rivers as they flow out from their original source. The territory is new, the conditions will develop and if allowed to develop naturally will call for the ultimate solution between the interested States as respects any particular river.

"In preparing the draft which I have submitted, I first proceeded upon the theory of the individual allocation. My advisers and I myself found ourselves in the position of saying that, as respects a virgin territory, we would be called upon to fix an artificial limitation that might work great injustice later. The river is new, the territory is new, and, thereby, after studying stream after stream that flowed out from the mouth, it became evident that *it would be unwise and imprudent to attempt to deal definitely with each detailed river, each individual tributary stream.*

"Proceeding upon that hypothesis, or proceeding upon that conclusion, it became then a problem of seeing if it could not be worked out on *a divisional basis, that division basis largely having been fixed by nature.* We have a great catchment basin like the receptacle basin of a funnel; we have the funnel neck, the canyon, and below the territory that receives the water through this funnel neck with certain additional supplies arising and flowing in that territory, so, in order to attempt to work the problem out and avoid the conflict that would invariably be provoked in his council if you were to attempt to go into detail with respect to each State, it was thought by us more prudent to strike at the root of the whole problem on *a divisional allocation of the waters of the river.*"

The italics are mine.

Mr. Carpenter's statement concerning some rivers which rise in the mountains and wither away on the plains before they reach the lower States within a division is quite significant. It appears that he recognized the waters of such rivers were not available for apportionment among the States. He came to the conclusion that it would be unwise to deal with each detailed river and each individual tributary stream and that there should be a divisional allocation of the waters of the river. He described the physical conditions of the canyon section between the two basins which made such a divisional allocation practicable.

It is my conclusion that the Colorado Compact Commission did apportion the virgin flow of the Colorado River and that it is considered beneficial consumptive use to be synonymous with depletion at Lee Ferry and that it did consider consumptive use on the Gila to be synonymous with the depletion of the Gila River flow at the mouth.

From a technical standpoint, consumptive use is the amount of water consumed by plants plus the incidental evaporation that takes place due to the irrigation of the plants. Consumptive use includes both the consumption of rainfall and

the depletion of stream flow. On a short-time basis, it may also involve a change in ground water from one season to the next. For the purpose of this discussion, I shall consider only that part of consumptive use which causes stream depletion due to man's activities. That is the element of consumptive use with which we are concerned and with which the Colorado River Commission was concerned at the time the compact was negotiated.

Since the term was first coined, engineers have given much study to consumptive use, its effect, and means of measuring it. A technical subcommittee of the irrigation division of the American Society of Civil Engineers gave some attention to the problem in the middle 1920's. This committee recognized the difference between consumptive use as applied to various sizes of areas ranging from individual farms to an entire valley. During the hearings in the last Arkansas River Supreme Court suit in the 1930's, *Colorado* v. *Kansas*, it was fully recognized that basin consumptive use was not equal to the sum of all the increments of consumptive use in the basin. It was recognized that a material salvage of water takes place as a result of the irrigation of a basin. Much work along the same line has been done since that time.

By definition, there is farm consumptive use, project consumptive use, valley consumptive use, and basin consumptive use. Farm consumptive use is the amount of stream flow actually consumed by plant growth and burned up by incidental evaporation on the farm. Project consumptive use represents the amount of water consumed on the project which causes depletion of the stream flow between the head of the project and the point where the return flow reaches the stream. In general, consumptive use, aside from rainfall, and disregarding annual change in ground water, is determined by measuring the inflow to an area and deducting the outflow.

For example, farm consumptive use is measured by deducting the flow of water leaving the farm from the diversion to the farm. This is ordinarily difficult because some of the return from the farm reaches the ground water and is not susceptible of measurement as it passes the boundaries of the farm.

Project consumptive use is measured by measuring the diversion through the main canals to the project and deducting therefrom the measured returns in drainage canals and waste ditches crossing the project boundaries.

Valley consumptive use is determined by measuring inflow to the valley and deducting the outflow.

"The following definitions are quoted from page 88 of Regional Planning, Part VI—Upper Rio Grande, February 1938, National Resources Committee:

" 'Definitions: The following definitions of consumptive use were used by the Bureau of Agricultural Engineering in its study:

" 'Consumptive use (evapo-transpiration): The sum of the volumes of water used by the vegetative growth of a given area in transpiration or building of plant tissue and that evaporated from adjacent soil, snow, or intercepted precipitation on the area in any specified time.

" 'Valley consumptive use: The sum of the volumes of water absorbed by and transpired from crops and native vegetation and lands upon which they grow, and evaporated from bare land and water surfaces in the valley; all amounts measured in acre-feet per 12-month year on the respective areas within the exterior boundaries of the valley.

" 'The valley consumptive use (K) is equal to the amount of water that flows into the valley during a 12-month year (I) plus the yearly precipitation on the valley floor or project area (P) plus the water in ground storage at the beginning of the year (G_s) minus the amount of water in ground storage at the end of the year (G_e) minus the yearly outflow (R); all amounts measured in acre-feet. The consumptive use of water per acre of irrigated land is equal to (K) divided by irrigation area (A_I); and consumptive use per acre of the entire valley floor is equal to (K) divided by the entire valley area. The unit is expressed in acre-feet per acre.

" 'Stream-flow depletion: The amount of water which annually flows into a valley, or upon a particular land area (I), minus the amount which flows out of the valley or off from the particular land area (R) is designated "stream-flow depletion" (I–R). It is usually less than the consumptive use and is distinguished from consumptive use in the Rio Grande studies.'

"The report from which the above is quoted gives results of the so-called Rio Grande joint investigation which was participated in by all of the major Federal agencies interested in water development. The interested States—Colorado, New Mexico, and Texas—cooperated in the investigation.

"The report indicates consumptive use, set up as a formula to be as follows:

$$K=1-R+P+(G_{\bullet}-G_{\bullet})$$

in which K is the consumptive use, I is the inflow to the area, R is the outflow from the area; P is the precipitation, $G_{\bullet}$ is the ground-water storage at the beginning of the period and $G_{\bullet}$ is the ground-water storage at the end of the period. In the equation, depletion is represented by $I-R$. The reason that depletion is usually less than consumptive use is apparent because consumptive use includes consumption of precipitation as well as depletion. Disregarding precipitation and change in ground-water storage, the equation indicates that consumptive use is synonymous with depletion. As I have indicated in my discussion, I am considering only that part of consumptive use which is represented is depletion.

"In a river valley the water supply is considered as the outflow from the valley. In the virgin state this would be considered the valley water supply. It is only reasonable to interpret valley consumptive use occasioned by man in terms of the depletion of the valley water supply as represented by the outflow from the valley."

Beneficial consumptive use by man in the valley from the valley standpoint is the difference between the valley consumption as it existed before man entered the valley and valley consumption as it existed after he made his water-consuming development. Valley beneficial consumptive use is a smaller amount than the aggregate of all the project and farm consumptive uses which is taking place within the valley. By like token, the sum of all the valley beneficial consumptive uses within a basin is a larger quantity than basin beneficial consumptive use measured as the depletion of the outflow from the basin by man's activities within the basin. This is true because of the salvaging and putting to beneficial use water which was lost under natural conditions.

Two major sources for salvage exist. One is the reduction of stream flow losses by diverting and putting the water otherwise so lost to beneficial use. The other is the conversion of natural losses of river water occurring on raw land to beneficial use after the land is irrigated.

The first type of salvage can best be illustrated by reference to a hypothetical transmountain diversion in the upper Colorado Basin. Assume that such a diversion exports from the headwaters of the Colorado River 500,000 acre-feet of water per year. The exporting of such amount of water represents a depletion of tributary flow of 500,000 acre-feet at the immediate point of exportation. It could be considered, so far as the Colorado River is concerned, as project consumptive use in the full amount at that point. However, the diversion out of the basin of the 500,000 acre-feet would not deplete the flow of the river at Lee Ferry by 500,000 acre-feet, because had this quantity been left in the river some of it would have been lost in transit by natural processes.

Many areas of raw land in the upper basin of the Colorado River were consuming water from the tributaries of that river in the state of nature before these areas were irrigated. The same is true with respect to many areas that will be irrigated in the future. This is particularly true with respect to native meadowlands such as exist in the Green River Basin in Wyoming and along the upper tributaries in Colorado and Utah. In the state of nature large areas of these lands were perennially overflowed by the streams which caused them to consume water. When man entered the picture, built his ditches, and started to apply water to the land artificially, the consumption of river water by those lands may not have caused much more depletion of the stream than was taking place under virgin conditions. He was merely putting to beneficial use some of the water that was being dissipated by nature in the virgin state. The effect of man's activities in this case on valley consumptive use and basin consumptive use would be the extent to which he increased the depletion of the outflow from the valley and the outflow from the basin.

The salvage of water in the upper basin by these processes after ultimate development has been made may be a substantial item. Testimony already before the committee indicates the item in the Gila River Basin amounts to some million acre-feet per annum. If California's theory were accepted, she would ask that all the small incremental items of consumptive use in the upper basin which occur on the farms and on the projects be added up and that this be considered the beneficial consumptive use that was apportioned to the upper basin under article III (a) of the Colorado River compact. By such process she would be charging the upper basin with natural losses which the upper basin will have

salvaged. This salvaged water never did reach the lower basin and never could have reached the lower basin in the state of nature. Nevertheless, California maintains that the equivalent of such salvage water shall flow past Lee Ferry in order to increase the amount of surplus or unapportioned water in the Colorado River Basin.

A hypothetical example may be given to show the effect of this on an individual State. Approximately 80,000 acres of native meadow land exists at the present time in the Green River Basin in the State of Wyoming. At the point of use these lands probably are consuming in the order of 100,000 acre-feet of river water per annum. In the state of nature before man entered the picture those lands probably were consuming about 60,000 acre-feet per annum. Man therefore has increased the consumption of river water by 40,000 acre-feet. All of the 40,000 acre-feet of water which man's activities are causing to be lost at the present time at the point of use did not reach Lee Ferry in the state of nature because some of it was lost in transit. Under California's theory, there would be charged against Wyoming's equitable share of the water apportioned to the upper basin the total of 100,000 acre-feet now being consumed by the lands although the citizens of Wyoming caused the flow to the lower basin to be depleted by less than 40,000 acre-feet. California would charge Wyoming with all of the natural losses estimated at some 60,000 acre-feet on those particular lands which occurred before Wyoming was settled and some of the river losses between the meadow lands and Lees Ferry which existed under virgin conditions. A similar situation exists with respect to the other upper basin States.

On the other hand, during periods of protracted droughts should it become necessary for the upper basin to curtail the use of water in order to deliver the 75,000,000 acre-feet (at Lee Ferry) in a 10-year period in accordance with article III (d) of the compact, the curtailment must be in sufficient amount to make up the deficiency at Lee Ferry. The increments of consumptive use which are curtailed will in the aggregate exceed the deficiencies at Lee Ferry by the amount of channel loss required to get the water to Lee Ferry. California therefore in the one instance would not permit the upper basin to enjoy the use of the river losses it salvages, but in the other instance would require that the upper basin make up the river losses by curtailing the increments of consumptive use an amount sufficient to supply such losses.

Mr. Howard in his statement quotes from the Mexican Water Treaty hearings where I call attention to the fact that the treaty uses the term "consumptive uses." Such term was deliberately used in the treaty to include consumptive uses on the various tributaries of the stream.

I want to call particular attention to the use of the word in the plural, "consumptive uses." It was used so that neither deliveries nor basin consumptive use would be the controlling item when the extraordinary-drought provision of the treaty is invoked.

Senator MILLIKIN. We will take a 5-minute recess.

AFTER RECESS

Senator MILLIKIN. All right, Mr. Tipton.

Mr. TIPTON. Such provision has no relation whatsoever to the apportionments of water made by the compact. The aggregate of the consumptive uses as used by me in connection with the treaty will be greater than the basin consumptive use because they include water salvaged which in the virgin state was lost by natural processes to the basin and did not reach Lee Ferry.

The same principle was recognized in Colorado's comments on the Colorado River report by the United States Bureau of Reclamation (project report No. 34-8-2). The Bureau understimated the water supply that would be available to take care of the aggregate of the consumptive uses in the basin by the amount of water that would be salvaged when the basin is entirely developed. The Bureau made an estimate of the consumptive use by each individual project, then added these estimates together and compared the sum with its estimate of the virgin flow of the river at the international boundary in order to determine whether sufficient water was available to supply the quantity of water represented by the sum of the individual project consumptive uses. Colorado's comments pointed out the technical error involved in such a process. Various increments of salvaged water which do not appear as a part of the estimated virgin flow of the Colorado River at the international boundary will be available to take care of some of the consumptive use of those projects which are constructed.

In my opinion, the basin beneficial consumptive use in the upper basin will reach a total of 7,500,000 acre-feet under the terms of the Colorado River compact when the depletion at Lees Ferry caused by man's activities equals 7,500,000 acre-feet. This will be less than the sum of the project consumptive uses in the basin.

Mr. Howard reached the interesting conclusion that California's interpretation of beneficial consumptive use as used in the Colorado River compact would be beneficial to the upper basin. He stated that such interpretation would increase the surplus water—water unapportioned by the Colorado River compact—which then would be available to supply the Mexican burden. In this way, he said the call on the upper basin to make up deficiencies in Mexican deliveries would be less frequent, and the amounts required to be supplied would be less. In the process, however, the upper basin would be deprived of the current use of a significant quantity of water which I recognize and concede, under California's interpretations, would fall in the category of surplus. California claims one-half of the surplus; Arizona has a water-delivery contract providing for use by her of one-half the surplus at least until 1963. Who finally gets the surplus on a permanent basis depends upon the results of negotiations by commissioners appointed by the governors of the seven States of the Colorado River Basin sometime after 1963. I am of the opinion the upper basin will be content to enjoy the use of the salvaged water under its interpretation of the compact and not permit the salvaged water under California's interpretation to fall into the category of surplus or unapportioned water.

California's witness, Mr. Raymond Matthew, apparently has the same conception of the compact meaning of "consumptive use" in the upper basin as has Colorado because he estimates consumptive use under the compact in terms of depletion at Lee Ferry. Mr. Matthew, on April 16, 1947, appeared before this same subcommittee in connection with hearings on S. 483, "Reduce the area of the Gila Federal reclamation project." On page 198a of the typewritten transcript of the hearings appears a table submitted by Mr. Matthew. Mr. Matthew states that—

"It (the table) is headed, 'Estimated available water supply for consumptive use in the upper basin under provision of the Colorado River compact.'"

Mr. Matthew then states, page 199:

"The water supply in the upper basin is best indicated by the flow at Lee Ferry."

The table submitted by Mr. Matthew was based on a critical period such as 1931–40, inclusive. The first item in the table is estimated virgin flow at Lee Ferry, 12,200,000 acre-feet average annually. The second item in the table represents the minimum flow required at Lee Ferry by the compact—7,500,000 acre-feet. The third item is designated as available water supply for consumptive use for upper basin without withholding storage—4,700,000 acre-feet.

As Mr. Matthew suggested:

"Item 3 is simply the arithmetical difference between items 1 and 2 and constitutes the available water supply for consumptive use in the upper basin without hold-over storage."

In other words, he is interpreting depletion of the flow at Lee Ferry to be synonymous with the available water supply under the compact for beneficial consumptive use in the upper basin. If Mr. Matthew were to apply exactly the same kind of analysis to the Gila River Basin, he would conclude from the last column of table CXLVI on page 285 of the Colorado River report, March 1946, of the United States Department of the Interior, that the average annual amount of water available in the Gila River Basin for beneficial consumptive use is 1,272,000 acre-feet, this being the natural (virgin) flow of the river at the mouth. From this quantity it would be necessary that he deduct whatever flow reaches the mouth, due to inability of Arizona entirely to deplete the flow.

I now pass to the subject of water supply of the Colorado River Basin and the amount available for use by Arizona.

Mr. E. B. Debler, consulting engineer for the State of Arizona, submitted a statement on water supply to this committee on June 27, 1947. I concur in Mr. Debler's conclusions with respect to water supply, because I collaborated with him in making the studies.

Mr. R. Matthew for California submitted to the committee his conclusions with respect to water supply and requirements of existing projects in the lower basin based on critical periods such as 1931–40, inclusive, and 1930–46, inclusive. His conclusions are contained in table No. 1, which he submitted with his statement. While Mr. Matthew stated that his table is only of an engineering nature

and is intended to show the estimated available water supply and the requirements of existing projects in the lower basin, nevertheless, it represents the results of the application of California's interpretation of the Colorado River compact and related documents.

The section of the table relating to Arizona projects has to do with requirements of existing (operating) and authorized projects. The section of the table having to do with California's requirements is labeled "California (as limited by existing contracts)." A similar section might have been placed in the table showing the Arizona requirements as limited by the existing water delivery contract between Arizona and the Secretary of the Interior. We believe that Mr. Matthew's table reflects California's legal theory as borne out by Mr. Howard's statement that the effect of his interpretation so far as available water is concerned would be presented by an engineer.

My major differences with Mr. Matthew is with respect to (1) his treatment of Gila River water, (2) his assumption that 200,000 acre-feet of excess delivery to Mexico will be required in order to fulfill the Mexican water treaty obligation, and (3) in the setting up in his table of California's water requirements for projects which under California's system of priorities have junior priorities and are therefore on an infirm status so far as water supply is concerned.

Under item 2, Mr. Matthew sets up Gila River water and tributaries as an item of water supply in the amount of 2,300,000 acre-feet. He states that this represents the amount of water supply available for consumption on the Gila River and its tributaries. Contrary to this, he sets up item 9 as a requirement on this water supply in the amount of 2,270,000 acre-feet. He suggests that instead of setting up the 2,300,000 acre-feet, had he used as a water supply the virgin flow at the mouth that is available for depletion by Arizona, that a corresponding amount would have been set up for item 9, and the final result of the table would have been the same. This is true. But the form of the table is misleading. Item 14 implies a present use and requirement by existing authorized projects in Arizona of 3,500,000 acre-feet. Although he insists that the table has nothing to do with the interpretation of the compact or any related documents, and that it is merely an engineering table, nevertheless the above quantity of water could be interpreted to mean the consumptive use by Arizona as intended under the terms of the compact.

I again submit that what the compact commission had in mind with respect to the Gila River and with respect to the upper basin at Lee Ferry was that depletion at the mouth was synonymous with beneficial consumptive use as such term is used in the compact. This being the case, the 3,550,000 acre-feet should be reduced by over 1,000,000 acre-feet which represents natural losses on the Gila River under virgin conditions with which California is charging Arizona by its interpretation.

In passing, I call attention to the fact that if his theory were correct Mr. Matthew's estimate of item No. 3 is wrong because he has used the long-time average and actually he is dealing with a period of low water supply. On this basis, this item should be less. However, he should have estimated consumptive use on the Gila, by taking the estimated virgin flow of the Gila minus the present flow of the Gila at the mouth.

Senator WATKINS. And the mouth is at this end of the Colorado.

Mr. TIPTON. Yes.

Senator WATKINS. It is theoretical because it does not actually dump any water in there now, does it?

Mr. TIPTON. Very little water comes in.

Senator WATKINS. What you are saying is more or less theoretical?

Mr. TIPTON. There is some. The estimated virgin flow of the river at the mouth by the Bureau of Reclamation is 1,272,000 acre-feet. That is a long-time mean. The estimated consumptive use on the Gila as made by the Bureau is 1,135,000 acre-feet. During the last 17 years there has been a drought. Prior to that there was a period of fairly good water supply which, if it recurred, might produce some flow out of the mouth of the Gila.

Shall I proceed?

Senator MILLIKIN. Yes.

Mr. TIPTON. Under item 5 Mr. Matthew assumes that it will be necessary to deliver to Mexico 1,700,000 acre-feet of water in order to insure Mexico's receiving 1,500,000 acre-feet in accordance with the scheduled delivery which she might set up. He states that this is necessary on account of the difficulty of measuring accurately the large quantity involved and of controlling precisely the rate of flow from points of release in the United States to the international

boundary. He suggests that this point of release is Davis Dam. Mr. Matthew is wrong in assuming that the rates must be precisely controlled. Article 15, paragraph A, of the treaty provides:

"The water allotted in subparagraph (a) of article 10 of this treaty shall be delivered to Mexico at the points of delivery specified in article 11, in accordance to the following two annual schedules of deliveries by months, which the Mexican section shall formulate and present to the Commission before the beginning of each calendar year."

It should be specifically noted that the schedules of delivery are by months and not by days. This is borne out again by paragraph F' of article 15 which reads as follows:

"Subject to the limitations as to rates of delivery and total quantities set out in schedules I and II, Mexico shall have the right, upon 30 days' notice in advance to the United States section, to increase or decrease each monthly quantity prescribed by those schedules by not more than 20 percent of the monthly quantity."

Since the accounting is on a monthly delivery basis, overdeliveries and underdeliveries are averaged out over the monthly periods.

Item 9 of Mr. Matthew's table purporting to show the requirements of California's projects in the amount of 5,362.000 acre-feet is misleading and unfair to Arizona and other States. Again Mr. Matthew says that this is a mere showing of water requirement and has no relation to interpretation of the compact or any related documents. Since Arizona also has an existing contract, the amount of water covered by it could also have been set up in the table even though it is recognized that the contract cannot be filled in its full amount. Mr. Matthew did state that the amounts shown in items 15 to 18 of the table as well as the total shown as item 19 are exactly the same as the amounts covered by the various water delivery contracts held by California interests with the Secretary of the Interior. Mr. Matthew failed to mention California's statute of self-limitation and the system of priorities which she has set up to account for the 5,362,000 acre-feet and the fact that 962,000 acre-feet of the so-called requirements are covered by junior priorities which are on an unfirm status.

Before leaving the water supply question and going to the California situation, I would like to comment on a part of Mr. C. C. Elder's statement made before the committee on July 1. Mr. Elder discusses the probable return flow from the central Arizona project and calls attention to the difference between the estimates made by Mr. Larson of the USBR and by Mr. E. B. Debler. He then concludes that none of the water from the Gila Valley released to take care of salt balance "will dependably reach the Colorado River or at such times as credit can be claimed under the terms of the Mexican Treaty." Mr. Elder then makes the following statement:

"It seems not unfair to recall that only 2 years ago, at the Senate's hearing on the Mexican Treaty, the burden of this treaty allocation on Lake Mead storage was testified to, by USBR and other Federal and State witnesses of distinction, as never to exceed 600,000 acre-feet annually, due to return flow and other related fallacies. In contrast, present USBR and Arizona statements, as well as 1946 and 1947 editions of the USBR Colorado Basin Comprehensive Report, all agree that this burden will be 1,500,000 acre-feet annually. Such sudden and unexplained variations of profound estimates and solemn, even if unsworn, testimony, should at least in some degree affect the weight now given to estimates, equally important and similarly unrelated to observable factual conditions."

Mr. Elder assumes that the Mexican burden on Lake Mead now is shown to be 1,500,000 acre-feet instead of the maximum of 600,000 acre-feet as testified to by witnesses in the hearings on the Mexican Water Treaty. It is inconceivable that an engineer of Mr. Elder's experience would knowingly make such a misleading statement. The USBR Colorado Basin Comprehensive Report as well as the testimony of both Arizona and California witnesses in this hearing dealt with the consumptive use of water when considering water requirements and the comparison of the aggregate of such requirements with the total available virgin water supply. No consideration was given to diversion requirements nor was consideration given to return flow as an element of water supply. Such was not necessary. Although the 1,500,000 acre-feet must come out of the original water supply of the basin because there is no other source, nevertheless, much of the 1,500,000 acre-feet can be and will be supplied by return flow from United States projects which now and will reach the stream too low to be used by gravity diversion in the United States. The testimony in this hearing together with the testimony in the hearing on S. 483 concerning the Gila Federal reclamation project indicates that the Mexican burden on water reaching Imperial Dam will not be greater than 600,000 acre-feet per annum.

I wish to call attention to Mr. G. W. Lineweaver's statement referring to the Gila project. He testified as to the total diversions to the various units of the project and the return flow that could be expected to reach the river from those units. His testimony is summarized in a table which I am submitting for the record, which is taken from page 70 of the hearings before the Committee on Irrigation and Reclamation on H. R. 5434, House of Representatives, Seventy-ninth Congress, second session.

(Table 2 above described follows:)

TABLE 2.—*Estimated diversion of water at Imperial Dam, return flow, and consumptive use in acre-feet—Gila project, Arizona*

Diversion	Area (acres)	Diversion at dam		Estimated return flow		Consumptive use	
		Per acre	Total	Per acre	Total	Per acre	Total
Yuma Mesa	51,000	11.0	561,000	7.0	357,000	4.0	204,000
Wellton-Mohawk	75,000	9.2	690,000	5.2	390,000	4.0	300,000
North and South Gila Valleys	15,000	6.0	90,000	2.0	30,000	4.0	60,000
Total	141,000		1,341,000		[1] 420,000		564,000

[1] Does not include return flow from Yuma Mesa as return flow within the United States from that area is not assured.

It may be noted that he estimates that there will return from the Wellton-Mohawk area 390,000 acre-feet, and from the North and South Gila 30,000 acre-feet. He also testified that the return from the Yuma-Mesa unit would be 357,000 acre-feet but he stated that there is some question whether this return would reach the river before it crossed the boundary into Mexico. S. 483, as reported out by the Senate subcommittee, has the effect of limiting consumptive uses by the Yuma-Mesa and North and South Gila to a total of 300,000 acre-feet per annum and likewise consumptive use by the Wellton-Mohawk unit to 300,000 acre-feet, making a total of 600,000 acre-feet. Assuming that none of the Yuma-Mesa returns do reach the stream in the United States, the following totals can be expected to reach the river below Imperial Dam and be available to satisfy deliveries to Mexico:

Source:	*Return acre-feet*
Gila project	420,000
Yuma project	190,000
Central Arizona project	225,000
Desilting water	100,000
Total	935,000

The burden on the water supply from above Imperial Dam to take care of Mexican delivery in its full amount on the above basis, therefore, would be 565,000 acre-feet. The Mexican delivery will be curtailed during a long drought period which existed for the period covered by Mr. Debler's study. If it is curtailed to the extent assumed by him and by me, the burden on the water above Imperial Dam to satisfy the Mexican delivery would be 433,000 acre-feet. It is reasonable to assume that ultimately the Yuma-Mesa unit of the Gila project will develop to the extent that it will consume 300,000 acre-feet less that which is being consumed by the North and South Gila units. It is assumed the acreage will be increased to the maximum extent possible even though to do this may require the construction of major drainage canals to insure that the return flow from the unit reaches the river in the United States.

The provisions in the Senate bill will further such procedure because any water that returns to the stream below the boundary will be classed as consumptive use, so it will be to the benefit of Arizona to construct drainage canals to insure that returns reach to the river above the boundary.

If this is done, an additional 357,000 acre-feet (Mr. Lineweaver's estimate) will return to the river below Imperial Dam and above the international boundary. This will reduce the burden on the water above Imperial Dam to satisfy normal Mexican deliveries to about 300,000 acre-feet. Under this condition 375,000 acre-feet would have to be delivered to Mexico past Imperial Dam on account of the

treaty provisions, which makes that the minimum delivery through the All-American Canal.

If, during a protracted drought period such as envisioned in Mr. Debler's study, the Mexican deliveries were curtailed to the extent estimated by him, very little water would be required to pass Imperial Dam to satisfy the Mexican burden. It would be limited to the minimum amount required to be delivered to Mexico through the All-American Canal.

The amount of return flow might be increased somewhat beyond that indicated above by seepage losses from the All-American Canal when increased amounts of water are carried by it.

Finally, with respect to the water supply available to Arizona for use by its central Arizona project during a critical water period, I am in agreement with Mr. Debler that the full consumptive use requirement of something over 1,000,000 acre-feet would be available.

I shall now pass on to the California situation.

Prior to the ratification of the Colorado River compact by the various States other than California, California was required to limit by statute the use of waters allocated under article III (a) of the Colorado River compact to 4,400,000 acre-feet per year and not over one-half of the surplus water not apportioned by the compact. California passed this self-limiting statute. A copy of the statute has been introduced in the record of these hearings and the committee is familiar with its terms.

California then set up a system of priorities covering the use of 4,400,000 acre-feet of article III (a) water and 962,000 acre-feet of unapportioned surplus water. The priorities as set up by California are given in the table which I present herewith. The table also indicates the estimated present use under each priority.

(The table submitted by Mr. Tipton follows:)

Priority No.	Description	Acre-feet	Total	Estimated present use under each priority (1945)
1	Palo Verde irrigation district, 104,500 acres			
2	Yuma project, 25,000 acres			
3	(a) Imperial irrigation district and lands under All-American canal in Imperial and Coachella Valleys. (b) Palo Verde irrigation district in lower Palo Verde mesa, 16,000 acres			
	Total for 1, 2, 3	3,850,000		2,794,000
4	Metropolitan water district of southern California and city of Los Angeles	550,000		66,000
	Total from III (a) water		4,400,000	2,860,000
5	(a) Metropolitan water district of southern California and the city of Los Angeles	550,000		
	(b) City and county of San Diego	112,000		
6	(a) Imperial irrigation district and lands under the All-American canal in the Imperial and Coachella Valleys. (b) Palo Verde irrigation district in lower Palo Verde mesa, 16,000 acres			
	Total for 6 (a) and (b)	300,000		
	Total from surplus		962,000	None
	Total of all priorities		5,362,000	2,860,000

Mr. TIPTON. Attention is called to the fact that the total priorities are 5,362,000 acre-feet and that the use of water under the priorities during the year 1945 was 2,735,000 acre-feet. I do not have the 1946 values. No water was used under the junior priorities.

California interests then negotiated contracts with the Secretary of the Interior for the delivery of water from Lake Mead to satisfy the several priorities.

The contracts for the delivery of water from Lake Mead are all made "subject to the availability thereof for use in California under the Colorado River Compact and the Boulder Canyon Project Act."

The contracts provide, further:

"The United States shall not be obligated to deliver water to the district when for any reason such delivery would interfere with the use of Boulder Canyon

Dam and reservoir for river regulations, improvement of navigation, flood control, and of states or private perfected rights in or to the waters of the Colorada River or its tributaries in pursuance of Article III of the Colorado River Compact; and this contract is made for the express condition and with the express covenant that the right of the district to the waters of the Colorado River or its tributaries is subject to and controlled by the Colorado River Compact."

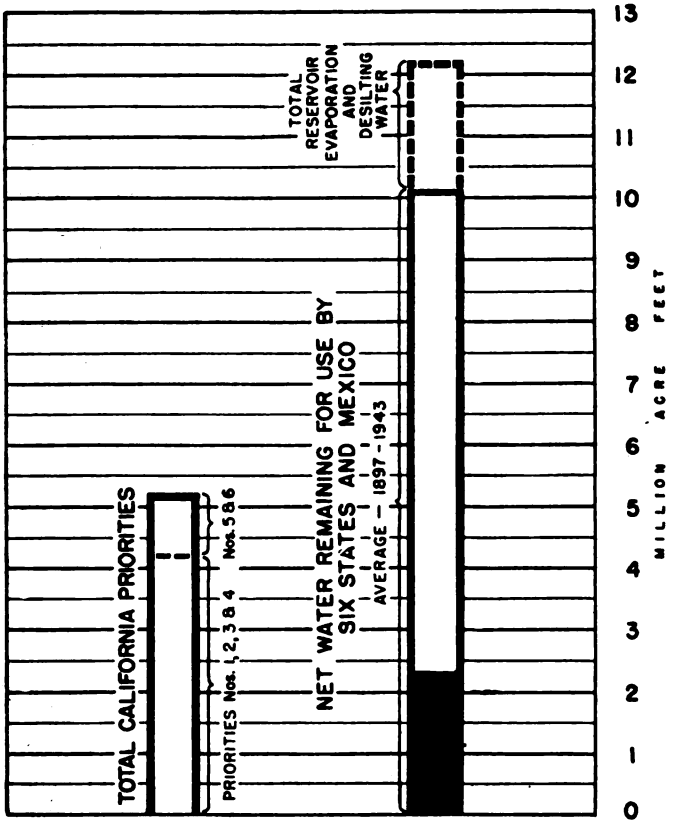
Attention is called to subsection (f) of article III of the Colorado River compact. This subsection provides that further equitable apportionment of the beneficial uses of the water of the Colorado River system unapportioned by paragraphs (a), (b), and (c) may be made after October 1, 1963, if and when either basin shall have reached its total beneficial consumptive use as provided in paragraphs (a) and (b) of article III of the compact. Therefore, until the upper basin is consuming its total allocation of 7,500,000 acre-feet or until the lower basin is consuming its total allocation of 8,500,000 acre-feet, no State in either basin can acquire any title to surplus, and it should be noted that any surplus apportioned in the future under subsection (f) must be from surplus after any treaty obligations are satisfied.

It is apparent, therefore, that the contracts held by California for the delivery of 962,000 acre-feet of surplus water are not firm contracts and are contingent upon what further apportionment might be made of waters of the Colorado River system after October 1, 1963. The water available for delivery under those contracts would not only be contingent upon the apportionment that might be made of the surplus after 1963, but it would appear that the availability of water might also be contingent upon agreement between the lower basin States as to the division of that part of the surplus apportioned to the lower basin after 1963. The status of the various California priorities in relation to the apportionment of water, as made by the Colorado River compact and as visualized by the Boulder Canyon Project Act, is shown graphically on drawing No. 803–2. The drawing is self-explanatory [exhibiting chart, which follows on p. 542]:

The bars below the first (lower) horizontal line on the drawing represent the water apportioned by article III (a) and (b) of the Colorado River compact. The left-hand bar represents the total apportionment of 8,500,000 acre-feet to the lower basin. It is divided into two parts. The upper part represents the 4,400,000 acre-feet of article III (a) water to which California by statute has limited herself. The lower part of the bar represents 4,100,000 acre-feet for Arizona, Nevada, Utah, and New Mexico. The 4,100,000 acre-feet is that which remains for those States out of the total water apportioned to the lower basin after taking out of it the amount to which California has limited herself. The right-hand bar on the graph represents the total allocation of 7,500,000 acre-feet to the upper basin. Above the first horizontal line is the water apportioned by article III (c). It represents the 1,500,000 acre-feet that has been allotted to Mexico by treaty. Above the second (upper) horizontal line appears a zone to represent surplus water to be apportioned in accordance with article III (f) and (g) of the compact. It is in this category that the 962,000 acre feet represented by the junior priorities of California are found. The bar extending above the second horizontal line represents the 962,000 acre-feet.

Mr. Debler's analysis checked by me indicates that during periods as long as 17 years or possibly up to 20 years there will be no water in the river to satisfy any such priorities. These priorities are not only unfirm due to the provisions of the compact and Boulder Canyon Project Act but they are unfirm from the standpoint of water supply itself. The water-delivery contracts provide for delivery of water from Lake Mead. During a protracted period of drought such as the one which commenced in 1930 and has not yet ended, under full development in the basin, there would be no surplus water in the meaning of the Colorado River compact to satisfy such junior priorities.

California has been making continuing efforts by various means to provide a firm water supply to satisfy such priorities. At the moment, by the interpretation of the Colorado River compact and related documents, she is attempting to carve out a water supply for such priorities from a water supply which, in my opinion, should go to Arizona and to the upper basin States under the compact. Her interpretation of the meaning of III (b) water probably would provide some 500,000 acre-feet for the junior priorities. Her interpretation of beneficial consumptive use would provide a substantial amount from Arizona and the upper basin water supplies.



CALIFORNIA PRIORITIES NOS 1 TO 6
vs.
NET WATER SUPPLY OF
COLORADO RIVER SYSTEM REMAINING

STATE OF ARIZONA
R. J. Tipton, Consulting Engineer
Denver, Colorado
June 1947
803-2

The following describes the situation as it would be if California were successful in her attempts. The total average annual virgin-water supply of the Colorado River Basin as estimated by the United States Bureau of Reclamation is 17,720,000 acre-feet. The Bureau's estimate of main-stream-reservoir losses is 1,701,000 acre-feet. Other reservoir losses together with desilting water probably would bring man-made losses close to 2,000,000 acre-feet. There would therefore remain a virgin supply of 15,720,000 acre-feet for net use.

By California's interpretation, she claims that she has a right to the use of 5,362,000 acre-feet from this net supply. There would remain for net use by the other six Colorado River Basin States and Mexico 10,358,000 acre-feet. California's supply would be more than one-half of that remaining for the six States and Mexico. In other words, the only State in the basin which produces no water is attempting to gain the right to use 35 percent of the total net available supply as against the compact and contract rights of the six remaining States and the Republic of Mexico. California by her interpretation would leave to Arizona out of the water supply indicated above only about 2,300,000 acre-feet, which is slightly over 14 percent of the total net water supply. Drawing No. 803–1 shows graphically the above situation [exhibiting chart 803–1, which faces p. 542]:

The left-hand bar on the drawing indicates the total of the California priorities in terms of net water consumption. The bar on the right indicates graphically the remaining total water supply. The top portion of the bar outlined by a dotted line represents total reservoir evaporation and desilting water. The balance of the bar outlined by a solid line represents the net water that would remain for use by the other six States of the Colorado River Basin and Mexico. The amount of water that would remain for use by Arizona under California's theory is shown as the black portion of the right-hand bar.

That finishes my statement, Mr. Chairman.

Senator MILLIKIN. Any questions?

Senator MCFARLAND. No questions.

Senator MILLIKIN. Thank you, Mr. Tipton.

Senator MCFARLAND. Mr. Chairman, we have one or two additional witnesses. We will abide by the wishes of the chairman; I would like to have one of them testify if agreeable. His testimony will consume about 10 minutes. I do not wish to burden the chairman and the members of the committee unduly.

(Appendix A: Excerpts from minutes of seventeenth meeting of Colorado River Compact Commission, R. J. Tipton:)

APPENDIX A

MINUTES OF THE SEVENTEENTH AND EIGHTEENTH MEETINGS OF THE COLORADO RIVER COMMISSION HELD IN SANTA FE, N. MEX., ON THE 15TH AND 16TH OF NOVEMBER 1922

Mr. HOOVER. My mind is a little mixed. In the first place, on page 5, Senate Document 142, are given the gagings at Laguna Dam, which do not include the Gila flow. Mr. Carpenter's calculation is based on the gagings at Yuma, which I understand include the Gila, and that is the difference between Mr. Carpenter's basis and the basis of the Laguna gagings. Is that not true?

Mr. CARPENTER. No; partly correct. I didn't deduct the loss in the river from Lee Ferry to Laguna.

Mr. HOOVER. I was saying the difference between your calculations and the Laguna gagings is simply the flow of the Gila. The Laguna gagings do include water which goes into the Imperial Valley.

Mr. CARPENTER. Yes, sir.

Mr. HOOVER. So that if we take the Laguna gagings instead of the Yuma gagings we will exclude the Gila flow.

Mr. A. P. DAVIS. We exclude the Gila flow, but we include the diversion for the Yuma project. The measurements at Yuma, on the other hand, do not include water diverted for the Yuma project, but include the Gila. When you measure at Yuma you are measuring above the Imperial diversion and below the Laguna Dam diversion.

Mr. HOOVER. The Laguna Dam gagings include water which goes to the Yuma project?

Mr. A. P. DAVIS. They do.

Mr. HOOVER. So they include the whole flow of the Colorado River at that point?

Mr. A. P. DAVIS. At that point; yes, sir. That is what they are intended to include, the whole flow there, which is above the Gila and, of course, excludes that.

Mr. HOOVER. Then the problem also goes into the consumptive use in the upper basin. In order to reconstruct the river, the consumptive use in the upper basin must be taken into account. Is it true that the Laguna gagings include the Imperial Valley?

Mr. A. P. DAVIS. Yes.

Mr. HOOVER. The Imperial Valley diverts below.

Mr. A. P. DAVIS. Yes.

Mr. HOOVER. Consequently, at Laguna you have the whole flow of the Colorado river at that point?

Mr. A. P. DAVIS. Yes.

Mr. HOOVER. Without deductions, except the Gila.

Mr. A. P. DAVIS. Yes.

Mr. HOOVER. And if you were to reconstruct the river, you must also take account of the consumptive use of the upper basin and add that to the Laguna gagings, and ought to add also the Gila flow. Have you a rough idea as to what the flow of the Gila would be if it had not been used for irrigation, or what the consumptive use, plus the present flow, is?

Mr. A. P. DAVIS. I can estimate that fairly closely. The mean annual flow as measured during the last 20 years is 1,070,000 acre-feet. The areas that are irrigated there are given in this document, 142, and we can apply a duty of consumptive use of water on that area and approximate fairly well, I believe, the consumptive use in the Gila Basin, if that is what is wanted.

Mr. HOOVER. My only point on that is, Does it approximate, possibly, the amount of consumptive use in the upper basin?

Mr. A. P. DAVIS. Oh, no; it is smaller. The consumptive use in the upper basin is on that table I gave you.

Mr. HOOVER. About 2,400,000?

Mr. A. P. DAVIS. In 1920 the consumptive use was about 2,400,000 acre-feet.

Mr. CARPENTER. That is a progressive increase from 0 up?

Mr. A. P. DAVIS. Yes.

Mr. CARPENTER. You would think the Gila consumptive use would be something over a million and a half feet?

Mr. A. P. DAVIS. Very likely less than a million and a half. But I am not sure about that till I figure on it a little.

Mr. CARPENTER. In other words, there might be——

Mr. A. P. DAVIS (interrupting). There would be a good deal less.

Mr. CARPENTER. There might be, then, a million feet to go into this calculation for translating back from Leguna gagings?

Mr. A. P. DAVIS. To include the Gila; yes. It doesn't seem like it would apply to the Little Colorado, as its contribution is offset by evaporation. There is very little outside the Gila Basin that is not thus offset.

Mr. CALDWELL. Mr. Davis, just where is the Gila measured?

Mr. A. P. DAVIS. There have been different points; one was at Dome.

Mr. CALDWELL. Tell me where it is with respect to the mouth.

Mr. A. P. DAVIS. Dome is about 12 miles above the mouth, and that was changed on account of difficulties of measurement, but not very materially.

Mr. CALDWELL. This 1,070,000 you speak of is an average flow, is it?

Mr. A. P. DAVIS. Yes.

Mr. CALDWELL. Average annual flow over how many years?

Mr. A. P. DAVIS. Eighteen years, I believe. It is all published in Senate Document 142.

Mr. CALDWELL. That is near enough.

Mr. HOOVER. On the table on page 5, Senate Document 142, take 1920, for instance, you have 21,000,000. That is the Laguna flow.

Mr. A. P. DAVIS. Yes.

Mr. HOOVER. What would be added here, as a rough guess, would be the flow and consumptive use of the Gila and Little Colorado and the consumptive use of the Colorado below Lees Ferry and above Leguna. This all comes to about a million and a half, and the consumptive use in the upper basin is 2,400,000; so it would be a credit of water to the Laguna readings of approximately a million feet, something like that.

Mr. CARPENTER. Yes; if there are others, like the Virgin and other rivers, that would be still more of a reduction.

79997—48——18

Mr. SCRUGHAM. I thought the Imperial Valley had a heading somewhere at Laguna. What was all the disturbance by the Yuma people?

Mr. A. P. DAVIS. They have contracted for building their canal and heading it at Laguna and have agreed to do that, but never have done it. They have never taken any water out above the Yuma project. The best use of the Gila, as I said yesterday, is in its own valley, and that probably will be accomplished some day.

Mr. HOOVER. Would it be possible for you to recast some figures in the light of the counter action of deducting the Gila flow and consumption from the upper-basin flow and consumption?

Mr. A. P. DAVIS. The lower-basin consumptive use, you mean, don't you? Make some approximation of a difference in consumptive use between the lower basin and the upper basin, exclusive of the Imperial Valley, and add that to these figures.

Mr. HOOVER. You would have to add to the consumptive use the flow of the Gila over and above its consumptive use.

Mr. A. P. DAVIS. Did you want the flow of the Gila included also?

Mr. HOOVER. It is a part of the drainage basin.

Mr. CARPENTER. You are now revolving as I revolved at one time and I decided consumptive uses had better offset one another and took the figures as printed.

Mr. A. P. DAVIS. I don't know how near they would do that. You don't mean to undertake to run that back over 20 years—take it as it is now; is that what you mean?

Mr. CALDWELL. Run it back over 20 years.

Mr. A. P. DAVIS. If given time, I could make an estimate that would be worth something. The present consumptive use we practically know. How that has grown is a matter of history.

Mr. HOOVER. I might phrase it in another way perhaps. On page 5 of Senate Document 142 your mean flow at Laguna is 16,400,000. Now, if you went into this elaborate calculation to account for the Gila consumptive use below and consumptive use above it might add a certain amount to that mean flow—it might add between 500,000 and a million feet. That is just a guess that might be the result of such an elaborate calculation.

Mr. A. P. DAVIS. That is true.

Mr. HOOVER. And if you took the low years as being 500,000 less than that, it probably wouldn't vary materially or affect the mean?

Mr. A. P. DAVIS. No.

Mr. HOOVER. So that you would get somewhere around 17,000,000 feet as the Lee Ferry flow?

Mr. A. P. DAVIS. Yes; 17,000,000 would be a correction in the right direction, probably not very far wrong.

Mr. HOOVER. I should think for matters of discussion we could take it that the reconstructed mean at Lee Ferry is a minimum of 16,400,000 and perhaps, with this elaborate calculation, half a million above; i. e., 17,000,000. Therefore, we would come to a discussion of a 50–50 basis on some figure lying between 16,400,000 and 17,000,000.

Mr. S. B. DAVIS. With all due respect to these eminent gentlemen, I am still from Missouri; I have to be shown, but I am willing to enter into a discussion on that line.

Mr. HOOVER. I should think the result of the deliberations and of our advice on that matter have been to establish the 16,000,000 as a sort of least mean.

Mr. S. B. DAVIS. As the average mean at Lee Ferry.

Mr. HOOVER. Yes; and that an apportionment of a minimum would be half that sum—8,200,000 acre-feet instead of the 6,260,000 acre-feet, as suggested by Mr. Carpenter—so that this would be the question of your proposals—delivering approximately 82,000,000 acre-feet on 10-year blocks.

Mr. NORVIEL. As the minimum average.

Mr. HOOVER. That's the total they agree to deliver in 10-year blocks. Then, just to further the discussion, if the Mexican deduction is to be borne by both sides, and we take the maximum Mexican position, it would mean, so far as the southern basis is concerned, their needs, as worked out by the Reclamation Service, including the projects in view, are 7,450,000 feet, so that 8,200,000 covers that with a comfortable margin.

Mr. A. P. DAVIS. It includes half the water to be delivered to Mexico on the basis of 800,000 acres.

Mr. HOOVER. So the southern basin would be protected as to their end and still have a margin of about 800,000 acre-feet.

Mr. NORVIEL. That would be for possible future development.

Mr. HOOVER. Or anything that may happen to you.

Mr. NORVIEL. Delivered at the point of delivery.

Mr. CARPENTER. Delivered at Lees Ferry; you may already have figured your evaporation on the river.

Mr. NORVIEL. Not this one. We figured that for the purpose of calculation.

Mr. CARPENTER. You told us that power was many times more valuable than any other use. We are letting you tear all the fire out of that water clear down to Laguna.

Mr. NORVIEL. You have more miles above and the fire will already have been torn out.

Mr. CARPENTER. It recovers itself; it's just as good; our evaporation is already taken out.

Mr. NORVIEL. The evaporation is not taken out of the 2,000,000 if it is to be delivered to us.

Mr. CARPENTER. If we use it for power above, our evaporation is already out.

Mr. NORVIEL. The evaporation has not been deducted from the million and a half acre-feet that you are going to deliver in Mexico. You have to make delivery at the point of delivery, not 600 miles above.

Mr. HOOVER. Mr. Norviel, you have a margin of 750,000 feet to take care of all needs all along. That's pretty liberal.

Mr. NORVIEL. That makes 8,200,000-acre-feet-a-year minimum.

Mr. HOOVER. That's the total to be delivered at Lees Ferry.

(Mr. Norviel requests time for consultation.)

Mr. NORVIEL (after recess). As I understand the proposition, Mr. Chairman, it is to divide the water so that the lower basin will receive—including the one-half to be furnished the Mexican lands—82,000,000 acre-feet per annum over a period of 10 years average, with 4,500,000 acre-feet minimum annual flow.

Mr. HOOVER. It might be worth discussion. I wouldn't want to put it in the mouths of the gentlemen from the North that it is their proposition.

Mr. CALDWELL. There is no proposition; there is recorded a "no" vote against that minimum yet.

Mr. CARPENTER. That's a subject of discussion.

Mr. NORVIEL. I thought when we retired we were to consider that on the basis of 4,500,00 acre-feet minimum annual flow.

Mr. CARPENTER. From the last poll of the vote on the minimum there were 5 for and 2 against, but the period was left undecided.

Mr. NORVIEL. Now we are fixing the period on the greatest number of years suggested, which is 10.

Mr. CARPENTER. We thought the period was left open. The minimum is for 1 year—an irreducible minimum predicated on no period. The low year goes regardless of period.

Mr. HOOVER. Supposing I take the onus of a suggestion for the consideration of the upper States—the 82 million 10-year block and a minimum flow for 1 year of 4½ million.

Mr. CARPENTER. If you crowd us on the minimum we will have to have a protecting clause on precipitation, because we can't control that. Nature will force us into a violation, any possibility of which we should strenuously avoid in our compact, because that would provoke turmoil and strife. The mere matter of 500,000 acre-feet as the minimum is small, but it might be decisive at such a time. It is not with the idea of trying to avoid delivering the water that I am suggesting the low figure, it is to avoid that which would result from nature's forcing a minimum that we could not control; therefore, we want to avoid that as nearly as we can.

Mr. HOOVER. You are seeking protection from a shortage on precipitation beyond that heretofore known. (Colorado River Commission, minutes of the sixteenth meeting, Bishop's Lodge, Sante Fe, pp. 19–29, Tuesday, 3 p. m., November 14, 1922.)

Mr. S. B. DAVIS. Mr. Norviel, in order that we may know how far apart we are in this matter—offer of 65,000,000 acre-feet in a 10-year period—would you state what you do consider a fair amount to be guaranteed to you at Lees Ferry?

Mr. NORVIEL. I think, inasmuch as your needs are practically even, we will accept the burden of the losses below Lees Ferry, and take a reconstructed river on an even basis at Lees Ferry. * * *

I will go back to the proposition made to us yesterday. We will accept 8,200,000 acre-feet, on a 10-year basis with a 4,500,000 minimum, while on a 5-year basis aa 4,000,000 minimum flow will be acceptable. * * *

Mr. CARPENTER. That is, for any 5-year period there is to be a minimum of 4,000,000 acre-feet per year?

Mr. NORVIEL. Yes. * * *

Mr. HOOVER. What Mr. Norviel means is for any 1 year the minimum shall not be less than 4,000,000 for a 5-year period, or less than four and a half a year for a 10-year period.

Mr. S. B. DAVIS. The difficulty with 82,000,000, as I have said, is that we have already experienced 10 years in which it would have been impossible for us to comply.

Mr. HOOVER. The difficulty is in guaranteeing in the fact of an unknown quantity.

Mr. S. B. DAVIS. Yes, sir. (Colorado River Commission, minutes of the seventeenth meeting, Bishop's Lodge, Santa Fe, pp. 12, 13, 14, Wednesday, 11 a. m., November 15, 1922.)

Mr. NORVIEL. Before we recess, perhaps, I might state another little proposition and let them give it consideration if they care to.

The State of Arizona proposes to allocate the waters of the Colorado River between the proposed upper and lower divisions upon a 50–50 division as follows:

The river is to be reconstructed annually by measing the flow at or near Lee Ferry in Arizona and by adding thereto the consumptive use of water in the upper basin, the total amount of water thus found to be the basis for an equal division between the two divisions, each division contributing equally to the amount that may hereafter be allotted to Mexico by international agreement or otherwise. In the event that the upper division should in any year exceed its percentage and thus deprive the lower division of its percentage the deficiency shall be compensated for during the next two succeeding years. * * *

Mr. CALDWELL. Just how would you determine the consumptive use in the upper basin?

Mr. NORVIEL. It is to be determined each year.

Mr. CALDWELL. Just a minute. Would you predetermine the consumptive use in acre-feet, or would you use the actual consumptive use?

Mr. NORVIEL. It would have to be measured.

Mr. CALDWELL. It would be very difficult, impossible practically.

Mr. NORVIEL. I think I said so in the beginning of our meetings.

Mr. CALDWELL. I think it would be impossible.

Mr. NORVIEL. Practically.

Mr. HOOVER. We will recess until 3 o'clock this afternoon.

(Thereupon the meeting adjourned to meet again at 3 p. m., November 15.)

CLARENCE C. STETSON,
Executive Secretary.

(Colorado River Commission, minutes of the seventeenth meeting, Bishop's Lodge, Santa Fe, pp. 24–25, November 15, 1922.)

(NOTE.—The caucus continued the afternoon and evening of November 15, the commission resuming executive sessions Thursday, November 16, at 10 a. m.)

Mr. HOOVER. * * * During the term of this compact the States in the upper division shall not deplete the flow of the river (at the point of division) below 75,000,000 acre-feet for any 10-year period, or below a flow of 4,000,000 acre-feet in any 1 year; provided, however, that the lower division may not require delivery of water unless it can reasonably be applied to beneficial agricultural and domestic uses; and the upper division shall not withhold any water which may not be applied within such divisions to beneficial agricultural and domestic use. * * *

Mr. NORVIEL. Mr. Chairman, I can't get away from the idea that the figures are too low. While there is in it an element of a guaranty it is lower tha the lowest 10-year period we have any knowledge of and it is also after the division is made—after the whole use in the upper division is taken out and would include the total use in the lower division. In other words, it is the excess over and above what the upper States have not heretofore used. It is less than half of the lowest 10-year period that has ever existed.

Mr. CARPENTER. That we have any record of.

Mr. NORVELL. Yes; and I rather think that former years, if they had been measured, would have shown perhaps a worse condition, so I can't think that that is a fair division over a 10-year period, nor one which gives the fullest protection.

Mr. HOOVER. In our discussions yesterday we got away from the point of view of a 50–50 division of the water. We set up an entirely new hypothesis. That was that we make, in effect, a preliminary division pending the revision of this compact. The seven and a half million annual flow of rights are credited to

the south, and seven and a half million will be credited to the north, and at some future day a revision of the distribution of the remaining water will be made or determined.

An increasing amount of water to one division will carry automatically an increase in the rights of the other basin and therefore it seemed to me that we had met the situation. This is a different conception from the 50–50 division we were considering in our prior discussions.

Mr. NORVIEL. If this includes reconstruction of the river, then, I concede it is a more nearly fair basis. But if it does not—if it is a division of the water to be measured at the point of demarcation, I still insist that it is not quite fair, because it is simply dividing what remains in the river.

Mr. HOOVER. We are leaving the whole remaining flow of the basin for future determination.

Mr. NORVIEL. What I am getting at is this: That the upper basin takes out and uses a certain amount of water, and as this reads, it proposes to divide the rest of it, 7,500,000 acre-feet per annum.

Mr. HOOVER. No.

Governor CAMPBELL. That is inclusive, Mr. Norviel.

Mr. NORVIEL. It reconstructs the river?

Governor CAMPBELL. Yes; in effect, as I understand it.

Mr. NORVIEL. Well, if it does that, then my objection will be removed.

Mr. HOOVER. Any other comment? If not, all those in favor of this clause 7 as read please say "aye."

(Thereupon, a vote having been taken upon the paragraph No. 7, the same was unanimously passed. (Colorado River Commission, minutes of the eighteenth meeting, Bishop's Lodge, Sante Fe, pp. 30–33, Thursday, 10 a. m., November 16, 1922.))

Mr. CARSON. Also the testimony of Gail Baker, pages 548 to 552.

Senator MILLIKIN. It will be inserted.

(The testimony is as follows:)

STATEMENT OF R. GAIL BAKER, STATE RECLAMATION ENGINEER, ARIZONA

Senator MILLIKIN. Mr. Baker, will you state your name, your residence, and your business to the reporter?

Mr. BAKER. My name is R. Gail Baker. I live in Phoenix, Ariz. I represent the State of Arizona on water matters as irrigation engineer. I have been associated with irrigation development in central Arizona for the past 25 years.

GILA RIVER WATER

Arizona maintains that the total use of Gila River water cannot exceed the natural flow at the mouth. These flows are recorded by the Bureau of Reclamation, Colorado River Report, March 1946, page 285.

Natural flow of Gila River at mouth 1897–1943, 1,272,000 acre-feet.

Low 10-year period 1931–40, 877,000 acre-feet.

Large flood flows that could not be completely regulated by reservoirs have continued, in part, to flow down to the mouth of the Gila River. Bureau of Reclamation records show an average depletion out of the natural 1,272,000 acre-feet of 1,135,000 acre-feet.

Senator MILLIKIN. How do you get a natural flow as of 1943?

Mr. BAKER. This is reconstructed flow.

Senator MILLIKIN. Reconstructed. All right.

Mr. BAKER. California states that 2,300,000 acre-feet is available from the Gila River, and that this amount of water is being used by Arizona. The Bureau of Reclamation records show that an average of 2,279,000 acre-feet per year flowed into the Phoenix area (1897–1943).

Since most of the regulating dams were completed, from 1928 to 1943, Bureau of Reclamation records show under natural conditions an average of 1,876,000 acre-feet would have entered the area. Actually, an average of 190,000 acre-feet passed out of the area over Gillespie Dam; 1,686,000 acre-feet was lost in the area by irrigation and stream losses.

Under natural conditions in this same period, Bureau records show 1,392,000 acre-feet would have passed over Gillespie Dam. Subtracting the 190,000 acre-feet of water actually passing over the dam, 1,202,000 acre-feet is indicated as increased depletions due to irrigation.

Actual diversions into all canals from the Gila River, 1930, to 1944, average 1,697,000 acre-feet. At least 200,000 acre-feet of this is measured as rediversion of return flows, leaving less than 1,497,000 acre-feet of original river water diverted. Part of this diversion returns to the river, and is lost through the same channel growth as under natural conditions. Therefore less than 1,497,000 acre-feet can be charged as beneficial consumptive use under California's interpretation.

It is concluded from these figures that California is in error, under her theory of beneficial consumptive use, in charging Arizona with 2,300,000 acre-feet from the Gila River, 1,202,000 acre-feet should have been used.

REPAYMENT PLANS

Mr. V. E. Larson, for the Bureau of Reclamation, has set up one plan of repayment for the proposed central Arizona project:

Power sold for an average of 4 mills per kilowatt-hour at load centers.
Irrigation water delivered at land for $4.50 per acre-foot.
Municipal water delivered to city for $50 per acre-foot.
Construction at 1940 prices plus 60 percent (estimated to be 1946 prices).
Using all revenue to repay investment (interest component used for repayment of irrigation investment).
Project will repay in 79 years.

Should the value of our dollar remain at the 1946–47 value, Bridge Canyon power can be sold at an average rate of 5 mills per kilowatt- hour. Selling power at 5 mills would pay the investment out as follows:

Power sold for an average of 5 mills per kilowatt-hour at load centers.
Irrigation water delivered at land for $4.50 per acre-foot.
Municipal water delivered to city for $50 per acre-foot.
Construction at 1940 prices plus 60 percent.
Paying power investment in 50 years with 2-percent interest.
Project will repay in 68 years. (See table 1.)

Should the value of our dollar increase to where prices are 30 percent above 1940 prices (19 percent below 1946 prices), Bridge Canyon power could be sold at an average rate of at least 4.5 mills per kilowatt-hour. This pay-out plan would be:

Power sold for an average of 4.5 mills per kilowatt-hour at load centers.
Irrigation water delivered at land for $4 per acre-foot.
Municipal water delivered to city for $40 per acre-foot.
Construction at 1940 prices plus 30 percent (1946 prices less 19 percent).
Paying power investment in 50 years with 2-percent interest.
Project will repay in 56 years. (See table 1.)

Should the value of our dollar increase to where prices are 30 percent above 1940 prices (19 percent below 1946 prices), Bridge Canyon power could be sold at an average rate of 4 mills per kilowatt-hour, resulting in the following plan:

Power sold for an average of 4 mills per kilowatt-hour at load centers.
Irrigation water delivered at land for $4 per acre-foot.
Municipal water delivered to city for $40 per acre-foot.
Construction at 1940 prices plus 30 percent (1946 prices less 19 percent).
Paying power investment in 50 years with 2-percent interest.
Project will repay in 69 years. (See table 1.)

TABLE 1.—*Length of time required to pay out the central Arizona project as set up in S. 1175*

Computing interest on power and municipal investments at 2-percent retired in 50 years.

Three cost estimates are listed for comparison:

(*a*) Estimate based on 1940 prices.

(*b*) Estimate based on 1940 prices plus 30 percent. These prices may prevail during construction period.

(*c*) Estimate based on 1940 prices plus 60 percent. These prices have been used by the Bureau of Reclamation (Mr. V. E. Larson) as 1946 average construction cost.

[All dollar figures are in $1,000 units]

Revenue from power:
1. Rate 4 mills; average first 50 years, $11,400 per year (BR).
2. Rate 4 mills; average next 30 years, $9,500 per year (BR).
3. Rate 4.5 mills; average first 50 years, $12,800 per year.
4. Rate 4.5 mills; average next 30 years, $10,600 per year.
5. Rate 5 mills; average first 50 years, $14,200 per year.
6. Rate 5 mills; average next 30 years, $11,900 per year.
7. Rate 5.5 mills; average first 50 years, $15,600 per year.
8. Rate 5.5 mills; average next 30 years, $13,100 per year.
9. Rate 6 mills; average first 50 years, $17,100 per year.
10. Rate 6 mills; average next 30 years, $14,200 per year.

	1940 prices (a)	1940 plus 30 percent prices (b)	1946–1940 plus 60 percent prices (BR) (c)
Revenue from water:			
Irrigation water	[1] $1,950	[2] $2,600	[3] $2,900
Municipal water	[4] 324	[5] 432	[6] 540
11. Total	2,274	3,032	3,440
Cost—operation, maintenance, and replacement:			
12	4,450	5,800	7,100
Cost—construction:			
13. Municipal (Power; Interest-bearing)	143,000	186,000	230,000
14. Irrigation interest free	196,000	255,000	312,000
Flood control; Silt control; Recreation; Fish and wildlife (Nonreimbursable)	38,000	49,000	63,000
Total	377,000	490,000	605,000
Cost, amortization power and municipal investment, at 2 percent in 50 years:			
15. (0.0318×13a), $4,550; (×13b), $5,900; (×13c), $7,300.			
Power, at 4 mills:			
Average revenue, first 50 years (1+11a)	13,674	[7] 14,432	[8] 14,840
Power and operation, maintenance, and repair (15a+12a)	9,000	[9] 11,700	[10] 14,400
Revenue for irrigation repayment	4,674	2,732	440
Irrigation investment (14a)	196,000	[11] 255,000	[12] 312,000
50 years or less	43	136,000	22,000
Average revenue next 30 years		129,000	290,000
Operation, maintenance, and repair		[13] 12,532	[14] 12,940
		[15] 5,800	[16] 7,100
Years to pay out	43	6,732	5,840
		19+50=69	50+50=100
Power, at 4.5 mills:			
Average revenue first 50 years		[17] 15,832	[18] 16,240
Power and operation, maintenance, and repair		[19] 11,700	[20] 14,400
Revenue for irrigation repayment		4,132	1,840
Irrigation investment		[11] 255,000	[12] 312,000
50 years		209,000	92,000
Average revenue next 30 years		46,000	220,000
Operation, maintenance, and repair		[21] 13,632	[22] 14,040
		[15] 5,800	[16] 7,100
Years to pay out		7,832	6,940
		6+50=56	32+50=82

See footnotes at end of table, p. 276.

	1940 prices (a)	1940 plus 30 percent prices (b)	1946—1940 plus 60 percent prices (BR) (c)
Power, at 5 mills:			
Average revenue first 50 years		[22] $17,232	[24] $17,640
Power and operation, maintenance, and repair	[25]	[25] 11,700	[26] 14,400
Revenue for irrigation repayment		5,532	3,240
Irrigation investment		[11] 255,000	[12] 312,000
50 years or less		46	162,000
			150,000
Average revenue next 30 years			[27] 15,340
Operation, maintenance, and repair			[16] 7,100
Years to pay out		46	8,240 18+50=68
Power, at 5.5 mills:			
Average revenue first 50 years		[28] 18,632	[29] 19,040
Power and operation, maintenance, and repair		[25] 11,700	[26] 14,400
Revenue for irrigation repayment		6,932	4,460
Irrigation investment		[11] 255,000	[12] 312,000
50 years or less		37	232,000
			80,000
Average revenue next 30 years			[30] 16,540
Operation, maintenance, and repair			[16] 7,100
Years to pay out		37	9,440 9+50=59
Power, at 6 mills:			
Average revenue first 50 years			[31] 20,540
Power and operation, maintenance, and repair			[26] 14,400
Revenue for irrigation repayment			6,140
Irrigation investment			[12] 312,000
50 years			307,000
			5,000
Average revenue next 30 years			[32] 17,640
Operation, maintenance, and repair			[16] 7,100
Years to pay out			10,540 1+50=51

[1] 650,000 acre-feet at $3.
[2] At $4.
[3] At $4.50.
[4] 10,800 acre-feet at $30.
[5] At $40.
[6] At $50.
[7] 1+11b.
[8] 1+11c.
[9] 15b+12b.
[10] 15c+12c.
[11] 14b.
[12] 14c.
[13] 2+11b.
[14] 2+11c.
[15] 12b.
[16] 12c.
[17] 3+11b.
[18] 3+11c.
[19] 15b+12b.
[20] 15c+12c.
[21] 4+11b.
[22] 4+11c.
[23] 5+11b.
[24] 5+11c.
[25] 15b+12b.
[26] 15c+12c.
[27] 6+11c.
[28] 7+11b.
[29] 7+11c.
[30] 8+11c.
[31] 9+11c.
[32] 10+11c.

Senator MILLIKIN. Any questions?
(No questions.)
Thank you, Mr. Baker.

Mr. CARSON. And the testimony of Clifford Stone I would like inserted, pages 513–521.

Senator MILLIKIN. It will be inserted.

(It is as follows:)

STATEMENT OF CLIFFORD H. STONE, DIRECTOR, COLORADO WATER CONSERVATION BOARD, AND COMMISSIONER FOR COLORADO ON THE UPPER COLORADO RIVER BASIN COMPACT COMMISSION

Senator MILLIKIN. Judge Stone, will you take a seat and give the reporter your name, your address, and your business?

Mr. STONE. My name is Clifford H. Stone. For a period of 10 years I have been identified in various capacities with matters which concern the Colorado River.

I am a lawyer and have practiced in Colorado for 28 years. At the present time I am director of the Colorado Water Conservation Board and commissioner for Colorado on the Upper Colorado River Basin Compact Commission. My work has entailed a study and consideration of the Colorado River compact, Boulder Canyon Project Act, California's Self-Limitation Statute, and various contracts and documents relating to the Colorado River.

The compact, legislative acts, contracts, and related documents have been described as the law of the river.

Any proposed legislation which involves an interpretation of the Colorado River compact is of concern to each of the seven signatory States to that compact. Such interpretation is injected in the hearings on S. 1175 now before this committee.

In my appearance here, I shall confine my statement to two principal issues dealing with interpretation of the Colorado River compact. They are:

1. Is the water covered by paragraph (b) of article III of the Colorado River compact excess or surplus waters unapportioned by the compact, and has California, by the terms of the Limitation Act, renounced any claim to the 1,000,000 acre-feet by which the lower basin may increase its beneficial consumptive use?

2. Is the measure of beneficial consumptive use of waters of the Gila River in Arizona the amount of depletion of the virgin flow of the river at its confluence with the Colorado River?

It is my position that the million acre-feet of water, covered by paragraph (b) of article III of the Colorado River compact, is apportioned water to the lower basin. It is not excess or surplus water unapportioned by the compact.

Paragraph (b), article III, reads:

"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."

This paragraph follows paragraph (a), which provides:

"There is hereby apportioned from the Colorado River system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist."

Article III contains a paragraph (f) which, since the compact was approved by the Congress in 1928, has been commonly understood as the only provision of the compact defining excess or surplus waters of the Colorado River system, unapportioned by other provisions of article III.

This paragraph is important, and I shall discuss it extensively. It reads:

"Further equitable apportionment of the beneficial uses of the waters of the Colorado River system"—and I wish the committee would note these reports—"unapportioned by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October 1, 1963, if and when either basin shall have reached its total beneficial consumptive use as set out in paragraphs (a) and (b)."

California makes the contention before this committee that III (b) water is a part of "excess or surplus waters unapportioned by the Colorado River compact."

In considering this question, the essential nature of an interstate compact must not be overlooked. A compact is an agreement or treaty of sovereign States. Under the Federal Constitution such a treaty or agreement may be made only with the consent of the Congress. After negotiation by representatives or commissioners of the compacting States, it may be effectuated only by ratification of the legislatures of such States. The terms and conditions of a compact must be construed and interpreted so as to reflect the understanding of the legislatures in the ratification of the compact.

The Colorado River compact, after ratification by six of the basin States, was approved by Congress by the Boulder Canyon Project Act, passed in 1928.

Senator MILLIKIN. Is it your contention that there is ambiguity in the compact requiring construction?

Mr. STONE. I am going to point that out to you. I take that up later, Senator.

The Supreme Court of the United States, in *Arizona* v. *California*, 292 U. S. 341, at page 359, held:

"The Boulder Canyon Project Act rests, not upon what was thought or said in 1922 by negotiators of the compact, but upon its ratification by the six States."

This same case holds that when the meaning of a compact is not clear recourse may be had to written statements and documents communicated to the respective governments of the negotiators or to their ratifying bodies. This rule, no doubt,

would also apply to written reports or communications transmitted to the Congress by a Federal representative who participated in the negotiation of a compact.

This rule is rational when it is kept in mind that it is the intent, purpose, and understanding of the ratifying bodies of participating State governments, which is of permanent concern. It is the will of the ratifying governments which gives effect to an interstate agreement. Compacts would be of little value, indeed, if their intent and purpose could be thwarted, changed, and modified by strained interpretations, founded on oral statements of negotiators and debates in Congress.

In any event, no resort should be made to written documents and legislative history of either the ratifying acts of the signatory States or of the Congress, if the language of a compact is clear, unambiguous, and unequivocal.

It is my position that the language of the Colorado River compact, respecting apportioned water and that which is unapportioned, is so clear and unambiguous that there is no necessity of going beyond the language of the instrument itself to understand its terms, conditions, and provisions, which were ratified by the legislatures of the signatory States.

That answers your question, Senator.

It is against all rules of legislative and judicial procedure to equivocate concerning an agreement among sovereign States, when the language of an agreement made by them is reasonably clear. In this case, we contend that the compact language is so unquestionably clear and unambiguous that any effort to change its patent meaning by interpretations, allegedly supported by collateral documents and statements is equivalent to an attempt to thwart the will of the States. Extreme caution should be exercised to prevent a State, signatory to an interstate compact, from circumscribing by this method its solemn agreement with sister States.

Let us look at the language of the compact on the subject under discussion.

First, we observe that the compact deals with all of the water of the Colorado River and its tributaries within the United States of America. This is shown by article II (a) of the compact defining the "Colorado River system." It is also shown by other language throughout the compact.

Second, article III clearly shows that all of the water of the Colorado River system, except that provided for Mexico and the unapportioned surplus as specified in paragraph (f), is apportioned between the upper basin and the lower basin, and no apportionment of water is made to any particular State of either of the basins.

Paragraph III (a) "apportioned" from the Colorado River system in perpetuity to the upper basin and lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum. Article III (b) provided that "in addition to the apportionment in paragraph (a)," the lower basin is given "the right to increase its beneficial consumptive use of such waters by 1,000,000 acre-feet per annum."

The words "such waters" in paragraph (b) refer back to the waters of the "Colorado River system" mentioned in paragraph (a).

The dictionary defines the word "apportion" as meaning "to divide and assign in just proportion; to portion out; to allocate." It is only common sense to conclude that when the compact used the word "apportioned" in paragraph (a), and the words "the lower basin is hereby given the right to increase its beneficial consumptive use," in paragraph (b), the probative effect in each instance was the same.

The compact itself recognized that these terms were used in a synonymous sense when it provides in paragraph (f), article III, that "further equitable apportionment of the beneficial uses of the waters of the Colorado River system 'unapportioned' by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October 1, 1963."

I think we cannot mistake that language.

Note that there, the negotiators of the compact, by their own language, which was subsequently approved by legislatures of the signatory States, used the word "unapportioned" to describe water which was not "apportioned" by either paragraphs (a) or (b) or (c). It is this paragraph (f) which covers "excess or surplus waters." By its own language, it excludes the water in paragraph (b) which, under the contention of California, is attempted to be added to it. If it is the position of California that there is some other type of "excess or surplus water" that is unapportioned, then may we point out that by the terms of paragraph (f) all water is covered except that specified in paragraphs (a), (b), and (c).

It is folly to speculate, or attempt to draw conclusions, as do the spokesmen for California, that there is any significance in the manner by which the compact covers apportioned water in two separate paragraphs. We suspect that there were reasons which are not disclosed by the language of the compact. This is unimportant, however, if the effect of either or both paragraphs is to actually divide, apportion, or allocate water to the two basins or either basin. Effect must be given to the plain wording of the compact.

Nor is there any support in the fact that paragraph (f) mentions paragraph (c), as well as paragraphs (a) and (b), as apportioned water. It is contended by those who support California's position that paragraph (c) does not apportion any water. The fact remains that paragraph (b) is described by paragraph (f) as apportioned water. Further, may we point out that paragraph (c) does affect the apportionment of water. It provides that in the event the United States of America should recognize in Mexico any right to the use of any of the waters of the Colorado River system such water shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be borne by the upper basin and the lower basin. The effect of paragraph (c) is to cut down the apportionment to each basin upon the happening of a certain contingency. Careful draftsmanship would surely dictate the inclusion of paragraph (c) in setting up in paragraph (f) what constitutes surplus water.

And may we call attention to the language of paragraph (c), which itself clearly supports the conclusion that the water mentioned in paragraph (b) is not excess or surplus water unapportioned by the Colorado River compact. This paragraph states that any water for Mexico shall be provided "first from the waters which are surplus over and above the aggregate of the quantities specified in (a) and (b)." The definition and meaning of "surplus" over and above the aggregate of the quantities specified in paragraphs (a) and (b) is clearly shown by the compact. This paragraph (c) also provides that any future right of Mexico should be supplied from water surplus over (a) and (b). It demonstrates beyond question that all unapportioned surplus water is covered by paragraph (f), which, according to the expressed provisions of the compact, is water "unapportioned by paragraphs (a), (b), and (c)."

We urge, therefore, that by clear and unambiguous language the Colorado River compact provided that III (b) water is not excess or surplus, but is apportioned. As a corollary to this conclusion, we submit that the will and understanding of the legislature which ratified the compact cannot be thwarted and changed by an attempt to vary its terms through collateral documents, statements, or by debate in the Congress when the Boulder Canyon Project Act was under consideration.

This language was not misunderstood by Herbert Hoover, Federal representative, who participated in the negotiation of the compact. He was Chairman of the Colorado River Compact Commission. On March 2, 1923, he transmitted a report of the proceedings of the Commission and of the compact to the Speaker of the House of Representatives (Doc. 605, 67th Cong., 4th sess.). In his letter of transmittal he stated:

"Due consideration is given to the needs of each basin, and there is apportioned to each seven and one-half million acre-feet annually from the flow of the Colorado River in perpetuity, and to the lower basin an additional million feet of annual flow, giving it a total of eight and one-half million acre-feet annually in perpetuity."

It will be noted that he used the word "apportioned" as applying both to the seven and one-half million acre-feet provided for the upper and lower basins and to the additional million acre-feet of annual flow for the lower basin. He also stated that the apportionment of these two amounts was an apportionment of a total of eight and one-half million acre-feet annually to the lower basin.

The Supreme Court of the United States supports the contention which we here make. In *Arizona* v. *California* (292 U. S. 341), the Court did not sustain Arizona's claim that the million acre-feet covered by III (b) water was specifically apportioned to Arizona alone. However, this same case held that III (b) water was apportioned to the lower basin. It also held that there is no ambiguity in article III (b) of the compact. It accordingly overruled the contention which California now makes that III (b) water is unapportioned. As we shall later show, under the California self-limitation statute, even though the compact does not apportion the million acre-feet specifically to Arizona, the effect of the compact in connection with that statute is to make such water available only to Arizona.

On page 358 of the Supreme Court case cited above it is stated (*Arizona* v. *California*, 292 U. S. 341, p. 358, sixth ground):

"Sixth. The considerations to which Arizona calls attention do not show that there is any ambiguity in Article III (b) of the Compact. Doubtless the anticipated physical sources of the waters which combine to make the total of 8,500,000 acre-feet are as Arizona contends, but neither Article III (a) nor (b) deal with the waters on the basis of their source. Paragraph (a) apportions waters 'from the Colorado River system,' i. e., the Colorado and its tributaries, and (b) permits an additional use 'of such waters.' The Compact makes an apportionment only between the upper and lower basins; the apportionment among the states in each basin being left to later agreement. Arizona is one of the states of the lower basin, and any waters useful to her are by that fact useful to the lower basin. But the fact that they are solely useful to Arizona, or the fact that they have been appropriated by her, does not contradict the intent clearly expressed in Paragraph (b) (nor the rational character thereof) to apportion the 1,000,000 acre-feet to the states of the lower basin and not specifically to Arizona alone. It may be that in apportioning among the states the 8,500,000 acre-feet allotted to the lower basin Arizona's share of waters from the main stream will be affected by the fact that certain of the waters assigned to the lower basin can be used only by her; but that is a matter entirely outside the scope of the Compact."

The Boulder Canyon Project Act, passed by the Congress in 1928, which provided for the approval of the Colorado River compact, included a section IV (a) which required California to pass what has been called a self-limitation statute. The effect of this statute, subsequently passed by the California Legislature, is to limit California's use of Colorado River water under the Colorado River compact. The act provided that it should not take effect, and there should be no authority exercised under it and no moneys expended in connection with the works authorized by the act, until California passed such a statute.

The act further provided that it would not be effective unless within 6 months the compact was ratified by all of the signatory States; or if not, by such unanimous ratification, until six of such States, including the State of California, had ratified the compact and consented to waive the provisions of the compact requiring approval by all six States. The act further specified that as a condition to its becoming effective, California "by act of its legislature, shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an expressed covenant and in consideration of the passage of this Act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, shall not exceed four million four hundred 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 Compact, such use always to be subject to the terms of said Compact."

It is my opinion that the statute passed in 1929 by California in conformity with this provison of secton IV (a) of the Boulder Canyon Project Act limits California to 4,400,000 acre-feet of water, plus one-half of the water unapportioned by paragraphs (a) and (b) of article III of the compact, exclusive of any water apportioned to Mexico by treaty. California, on the other hand, through its contention that water covered by paragraph (b) of article III is unapportioned water, takes the position that III (b) water is available as a part of excess or surplus water for use in the lower basin, including California.

We believe that we have shown that III (b) water is apportioned and that the only surplus or excess water is that specified in III (f) as being unapportioned by paragraphs (a), (b), and (c) of the compact.

Section IV (a) of the Boulder Canyon Project Act and the California statute on the subject clearly specify that the aggregate annual consumptive use "of water of and from the Colorado River for use in California" should not exceed 4,400,000 acre-feet of III (a) water, plus not more than one-half of the water unapportioned by the compact. This share of the apportioned water and of the unapportioned water makes up the total water supply which, under the compact and the self-limitation statute, is available to California from the Colorado River. III (b) is not included in the amount which may be used in this specification in California but, on the contrary, is expressly excluded from such use.

By the passage of the self-limitation statute, California renounced any claim to more than 4,400,000 acre-feet of water apportioned to the lower basin by the Colorado River compact, plus one-half of unapportioned water. Apparently, to get around this limitation, California now attempts to increase the amount of unap-

portioned excess or surplus water so as to include the water covered by paragraph (b) of article III of the compact. She thereby recognizes that unless she can sustain her claim that III (b) water is unapportioned, she must abide by the limitation in the use of III (a) water, plus the share of unapportioned water.

It must be noted in this connection that the confluence of the Gila River with the Colorado is so far down, no part of it can be used in California.

BENEFICIAL CONSUMPTIVE USE OF WATER UNDER THE COLORADO RIVER COMPACT

This is the second point, the question of the beneficial consumptive use of water under the Colorado River compact, which I am discussing.

It is contended by witnesses for California before this committee that beneficial consumptive use of water of the Gila River in Arizona is not measured by depletion of the virgin flow of the river at its confluence with the Colorado River, but is equal to the various increments of consumptive use at the points of use. If this principle is valid, it could be contended by California that it applied to the upper basin.

Technical phases of this subject will be discussed by other witnesses. The determination of this matter affects the amount of water which is available to Arizona, under the provisions of the Colorado River compact, to the extent of over 1,000,000 acre-feet.

Article III of the compact, which apportions water between the two basins, makes such apportionment for "beneficial consumptive use." Beneficial consumptive use, as applied to the compact, is nowhere defined in that document. An effort should first be made to determine the intended meaning from the compact itself. Patent evidence of what was intended by the States in making the compact is shown by article III (d), which provides:

"The States of the upper division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact."

It will be noted that in specifying the measure of beneficial consumptive use of the water apportioned by the compact to the upper basin, depletion at Lee Ferry was used. It cannot be assumed that a measure of beneficial consumptive use would be used for the upper basin differently from that for a large tributary of a river, such as the Gila. The use of the phrase, we believe, would be applied consistently throughout the compact.

Since the use of the term by the compact is not defined therein and because of the importance of its application, resort may be had to statements and documents concerning the compact which were available to the governments of the States in ratifying the compact. The minutes of the Colorado River Compact Commission are extremely enlightening on this subject.

Here I quote from Reuel Leslie Olson, and Reuel Leslie Olson prints a large part of the minutes in the back of his book, The Colorado River Compact. These statements no doubt are taken from them. At page 35, Mr. Olson states:

"The phrase 'exclusive beneficial consumptive use' and the word 'apportion' used in Article III, paragraph (a), defining the right of the Basins, gave great concern to the Commissioners. The first one of these terms, the phrase 'exclusive beneficial consumptive use' was taken by some of the Commissioners to raise the legal problem of whether or not representatives of the separate States could apportion or divide the corpus of the water. The second was selected to express the idea of division of the water between the Upper Basin and the Lower Basin because several of the Commissioners believed that its connotation was somewhat different from the meaning suggested by other terms. It was thought that the word apportioned did not imply appropriation and therefore did not raise the question of whether or not the interstate agreement would have any effect upon the existing system of vesting of water rights by appropriation under State law in the several States of the Colorado River area.

"* * * It caused much argument at the time the Compact was drafted, and in the minutes of the meetings of the Commission we find remarks forewarning us * * * of the controversy."

On page 36, we find this further statement on the subject, by Olson:

"The Commissioners sought to use language in the Compact which would avoid the issue. The phrase 'beneficial consumptive use' was decided upon as the most nearly satisfactory expression. It was supplemented by a statement inserted in the official records of the proceedings to the effect that 'the States of the upper division * * * wish to state affirmatively * * * that it is

the understanding that the use of the language in Article III constitutes no waiver on their part or on the part of any one of them to any claim of ownership which they may have to the corpus of the water or any recognition of any right or claim on the part of the United States to the corpus of any of the unappropriated water of the stream, it being the understanding of these States that the language used is the medial ground which in no way raises or affects the title of ownership.' This was subsequently adopted as the statement of all of the Commissioners."

The extended discussion of the matter appears from the Colorado River Commission minutes of the twenty-second meeting, November 1922, Bishop's Lodge, Santa Fe, N. Mex. Reference is made to the minutes on this subject, and as indicative of the discussion in support of the statement made by Mr. Olson, may I quote as follows:

"Chairman HOOVER. The whole proposition here is whether you are going to divide the corpus of this water or whether you are going to divide the use. If you are going to divide the corpus of the water you are going to be in a mighty lot of trouble before the Federal Government. If you are going to divide the use of the water, I don't see any difficulties in the matter at all. Now if you are going to divide the corpus of the water you are going to adopt the extreme State view. If you are going to the other extreme and adopt the extreme Federal view you would acknowledge in this pact the unappropriated water belonged to the Federal Government and that by this act the Federal Government consented to transfer its rights to the States and it would never get through Congress.

"The question is to find a medial ground which does not have either extreme, and finding that ground on the ground of use has struck me all along as being the medial ground which doesn't raise the question. If you are going to take Mr. Carpenter's view you are going to divide the corpus of the water. That is a contention I don't think the Federal Government would be inclined to stand for. It is not for me to decide, it is purely for you."

This conception of the reason for the use of the term "beneficial consumptive use" by the Colorado River compact, coupled with resort in the compact to "depletion" by article III as the measure of beneficial consumptive use in the upper basin, demonstrates that it is unjustified, unreasonable, and not in accordance with the compact to measure beneficial consumptive use of the Gila River in any manner other than by depletion at its mouth.

Mr. Howard, in his statement before this committee, quotes from the State of Colorado's views and comments on the Colorado River report of the Bureau of Reclamation. These Colorado statements are not inconsistent with the position which we take here. It is a technical matter which will be explained by engineering witnesses.

I might add Mr. Tipton will go into the matter in some detail.

Mr. Howard, in his statement before this committee, said that the phrase "beneficial consumptive use" is a "common one and well understood in water law as meaning diversions from a river minus return flow to the river." We most emphatically disagree with this statement.

From actual experience in compact making on other rivers, I know that the definition of "beneficial consumptive use" and the method of determining such use varies to apply to the specific conditions which are dealt with in a compact. The phrase has a very technical meaning and has been the subject of much study and discussion by the engineering profession. The technical use of the term is not well defined in the law. We do not believe that such technical use was understood or considered by the commissioners when they negotiated the Colorado River compact, nor by the States when it was ratified.

On the contrary, we have here submitted from the minutes of the compact commissioners what they had in mind when they considered the use of the term, and the only measure evidenced by the compact itself of beneficial consumptive use is that of depletion.

Then, in conclusion, the Congress, we believe, will not approve an unconscionable position in interpreting the Colorado River compact for the purposes of proposed legislation. Nor would a court give approval to any interpretation of a solemn agreement among States which would be inequitable. It cannot be assumed that the compacting States intended to apportion water between the upper and lower basins of the Colorado River by terms and conditions, the interpretation of which would limit one of the States to its existing uses of water when the compact was made with a comparatively small opportunity for future development. We submit that the States did not do so.

California, under the compact, has proceeded with extensive development. California, according to the statements made before this committee, now claims that there is no water for the proposed central Arizona project or any other water development—future development, I mean—in the State. The California spokesmen arrive at this conclusion through the interpretations of the Colorado River compact which they asked this committee to accept. May I submit that if these interpretations are approved by this committee or should be approved in the future by a court, the terms of the Colorado River compact would be held to deny one of the signatory States an equitable share of Colorado River water?

Senator MILLIKIN. Any questions?

Senator MCFARLAND. No questions.

Senator MILLIKIN. Thank you, Judge.

Mr. CARSON. I would like to have put in this record also my testimony, Charles A. Carson, pages 481 to 494.

Senator MILLIKIN. That will be done.

(It is as follows:)

STATEMENT OF CHARLES A. CARSON, SPECIAL ATTORNEY FOR THE STATE OF ARIZONA ON COLORADO RIVER MATTERS

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

Mr. CARSON. My name is Charles A. Carson. I live in Phoenix, Ariz. I am a practicing attorney and am special attorney for the State of Arizona on Colorado River matters.

The original statement that I made before the House committee last year, I understand, is incorporated in the record and will be printed as a part of the record.

Senator MILLIKIN. That is correct.

Mr. CARSON. So I want now to rebut some arguments here made by spokesmen for California interests.

The spokesmen for California interests argue three questions which I desire to briefly answer.

1. It is argued that the 1,000,000 acre-feet of water mentioned in article III (b) of the Colorado River compact is not apportioned to the lower basin.

I submit that the compact itself shows it is apportioned water; that the evidence in this record, including the testimony of Mr. Meeker, the statements of Mr. Carpenter, Mr. Hoover, Mr. Norviel, Mr. Lewis, and Governor Campbell, clearly disclose that the negotiators of the compact so regarded it and that the Members of Congress so regarded it when they approved the compact; and that the Supreme Court of the United States has held it to be apportioned water (*Arizona* v. *California*, 292 U. S., p. 341).

The particular ground of the decision to which I desire to call attention is the sixth ground of the decision reported on page 358.

Senator MILLIKIN. You will come to a further consideration of *Arizona* v. *California*?

Mr. CARSON. No. I can stop right now.

Senator MILLIKIN. I do not wish to interrupt. I just wanted to take a look at the record. But I do not need to do it right now. Go right ahead with the way you intend to state your case.

Mr. CARSON. I was trying to shorten it as much as possible.

2. It is argued that beneficial consumptive use is not measured by depletion of the Colorado River.

I submit that the negotiators of the compact were dealing solely with water flowing in a surface stream and that there is no way to measure beneficial consumptive use of water flowing in a surface stream except by the resulting depletion.

I further submit that article III (d) of the compact shows that the negotiators of the compact used depletion as the measure of consumptive use.

I further submit that the Boulder Canyon Project Act, the California Limitation Act, and the Arizona contract measure consumptive uses by the resulting depletion of the Colorado River.

The Arizona contract is in this record.

3. It is argued that reservoir evaporation losses are chargeable solely to Arizona; that California bears no part of them.

I submit that when water is stored in on-stream reservoirs or off-stream reservoirs, it is in equity diverted from the stream, and I further submit that equity requires that all parties benefiting from storage of water should bear ratably evaporation losses caused by such storage.

I further submit that section 8 of the contract between the United States and the Metropolitan Water District of Southern California is as follows:

"SEC. 8. So far as the rights of the allottees named above are concerned, the Metropolitan Water District of Southern California and/or the City of Los Angeles shall have the exclusive right to withdraw and divert into its aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said district and/or said city (not exceeding at any one time 4,750,000 acre-feet in the aggregate) by reason of reduced diversions by said district and/or said city: *Provided*, That accumulations shall be subject to such conditions as to accumulation, retention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final: *Provided further*, That the United States of America reserves the right to make similar arrangement with users in other States without distinction in priority, and to determine the correlative relations between said district and/or said city and such users resulting therefrom."

I would like by reference to have incorporated in the record of this hearing the contract between the United States and the Metropolitan Water District of Southern California, pages 209 to 306, inclusive, of the Hoover Dam Contracts by Wilbur & Ely.

Senator MILLIKIN. It will be incorporated in an appendix to the transcript.

Mr. CARSON. It is, therefor, clear that both the Metropolitan Water District and the Secretary of the Interior anticipated ratable sharing of such evaporation losses.

I further submit that by regulation dated February 7, 1933, the Secretary of the Interior, Mr. Ray Lyman Wilbur, offered to Arizona the contract for water set out in exhibit A of such regulation. The Hoover Contracts, by Wilbur & Ely, pages 373 to 378, which I desire incorporated in this record.

Senator MILLIKIN. They will be incorporated in an appendix to the transcript.

Mr. CARSON. Mr. Wilbur was at that time Secretary of the Interior and Mr. Ely was an assistant to the Secretary. That offer clearly shows that the Department of the Interior recognized that Arizona was entitled to 2,800,000 acre-feet of main-stream water in addition to the use of all water of the Gila River and its tributaries with which recognition every argument here made by California spokesmen is in direct conflict.

In order to make this matter clear, I desire to set forth here a bare outline of the legal basis of Arizona's right to water of the Colorado River.

The Colorado River compact ratified by the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming apportions 8,500,000 acre-feet of water per annum in perpetuity to the lower basin from the Colorado River system.

The lower basin comprises parts of California, Nevada, Utah, New Mexico, and practically all of Arizona.

California, as required by the Congress in the Boulder Canyon Project Act, by act of the California Legislature, has irrevocably and unconditionally limited herself to 4,400,000 acre-feet of the 8,500,000 acre-feet apportioned to the lower basin.

Nevada has a contract with the United States for 300,000 acre-feet.

The Bureau of Reclamation estimates that the ultimate possible uses in the portions of New Mexico and Utah which are in the lower basin will not exceed 131,000 acre-feet.

Arizona recognizes the rights of her sister States and does not attempt or intend to use any water to which any of them are entitled as herein outlined.

All of these figures deal only with apportioned water for the reason that any surplus which is over and above the apportioned water is, under the compact, subject to further apportionment after 1963.

There is thus left approximately 3,700,000 acre-feet of apportioned Colorado River water which cannot lawfully be used anywhere except in Arizona.

Arizona uses approximately 1,100,000 acre-feet from the Gila River and its tributarites and is entitled to use approximately 2,600,000 acre-feet of apportioned water from the main stream of the Colorado River, which water can lawfully be used in Arizona and nowhere else.

Arizona has a contract with the United States for delivery of sufficient water from storage in Lake Mead to enable the consumptive use in Arizona of 2,800,000 acre-feet subject to its availability under the Colorado River compact and the Boulder Canyon Project Act.

Approximately 2,600,000 acre-feet is available under the compact and the act and cannot lawfully be used anywhere except in Arizona.

In amplification, I call the attention of the committee to my testimony given last year bofore the Irrigation and Reclamation Committee of the House of Representatives on H. R. 5434, which is already a part of the record on this hearing.

I desire particularly to call the attention of the commitee to the quotations of the applicable compact provisions, statutory provisions, contract provisions, and the letter of Mr. Hoover and the picture of Mr. Hoover and the statements of Mr. Norveil, Governor Campbell, and Mr. Lewis which are there set out. And I think there can be no doubt of the intent of the negotiators of the compact nor the effect of the express language of the companct, which needs no interpretation, or of the provisions of the Boulder Canyon Project Act, which seem to me to be clear.

And when Congress required that California adopt its self-limitation statute, it did so in order to assure that there would be available for use in Arizona this 2,800,000 acre-feet of main-stream water plus all the water of the Gila River, as indicated by the succeeding paragraph in section 4 of the Boulder Canyon Project Act which, read with the California Limitation Act, established beyond peradventure of a doubt that that was the then intent of Congress.

Arizona has been in this situation. We desired more water than was permitted to us under the compact. Finally the compact was ratified. Congress passed the Boulder Canyon Project Act and we could get no relief and no water unless we ratified the compact and came into the proposition under the terms that Congress and the compact had provided. And when we did that we considered that the questions of the right of use of water in Arizona were settled.

Now, I submit to this committee that they are settled now provided only this, that California respect her own Limitation Act. These attempted changes in interpretation from the long-considered, accepted meaning of these terms, it seems to me, result only from the desire of California to escape its Limitation Act.

Now, there has been some mention here made of correspondence between Governor Warren of California and Governor Osborn of Arizona. I want to submit for this record copies of the letters of Governor Warren and the answers thereto of Governor Osborn, which express clearly, I believe, the official stand taken by the State of Arizona.

The first letter is from Governor Warren addressed to Governor Osborn and Governor Pittman, dated March 3, 1947. In that letter I desire to call to the attention of the committee that no statement is made of what claims California asserts or the basis of such claims, nor what controversies exist nor anything of the kind.

And then, answering that letter, under date of March 12, the letter of Gov. Sidney P. Osborn to Gov. Earl Warren in which Governor Osborn set forth clearly and succinctly the basis of the Arizona claim and of what we claim, and invited Governor Warren or any other governors of the basin to come over and talk it over. No further action was taken by Governor Warren to follow it up until, under date of May 16, 1947, he addressed another letter to Governor Osborn stating that it seemed to him a suit was necessary, but again setting forth no basis for any claim of California to water nor the amount of such claim.

And Governor Osborn's reply to that letter, dated May 23,1947.

Senator MILLIKIN. What was the gist of the Governor's reply?

Mr. CARSON. The gist of the Governor's reply is that in his letter of March 12 he had set forth the basis of the Arizona claim and the foundation upon which it rests, and it contains these two paragraphs, that, I think, I should read:

"I am sure if you will review my letters and the compact, statutes, contracts, and reports therein mentioned, you will recognize that the only thing required for cooperation between our great States in developing the use of the water of the Colorado River to which they are respectively entitled for their mutual benefit and for the benefit of the Southwest and the Nation, is for your great State to respect the agreements your State has already made.

"I request that you again review my letters and if in your opinion there is any error in the facts, reasoning, or conclusions stated in my letters, I will appreciate your advising me concerning the same."

Senator DOWNEY. Mr. Chairman.

Mr. CARSON. Just a moment, Senator.

Mr. Chairman, may these be incorporated in the record in the order of dates?

Senator MILLIKIN. At this point in the order of dates, at this point in the transcript.

Senator DOWNEY. I was going to suggest that, to complete the record at that point, the letter of Governor Pittman replying to Governor Warren be also inserted.

Senator MILLIKIN. Isn't that among them?

Mr. CARSON. No. It isn't there because Governor Osborn didn't receive a copy of that letter from Governor Pittman at the time it was mailed to Governor Warren. I think later Governor Warren sent him a copy, but I do not have it there.

Senator MILLIKIN. Do you wish to have it included as a part of your showing?

Mr. CARSON. No.

Senator MILLIKIN. Well, then, include it please at the direction of the Chair.

Senator DOWNEY. At this point in the record?

Senator MILLIKIN. At this point please.

(The letter to Governor Warren from Governor Pittman follows:)

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, March 3, 1947.

Hon. SIDNEY R. OSBORN,
Governor of Arizona, Phoenix, Ariz.
Hon. VAIL N. PITTMAN,
Governor of Nevada, Carson City, Nev.

MY DEAR GOVERNORS: We have just completed our review of the comprehensive plan for the Colorado River system as presented by the Bureau of Reclamation, and I am more than ever impressed by the staggering size and complexity of the proposal.

It is quite apparent, and it is admitted in the comprehensive plan, that the 134 projects inventoried will, if constructed, use more water than is available in the river system. This fact will undoubtedly emphasize the differences of opinion concerning the water to be made available to each State. It is therefore of the utmost importance to the lower-basin States that we reconcile our differences as soon as possible.

The negotiations of the past have failed to bring about agreement between Arizona and California but I am of the opinion that there must be some fair basis upon which their respective rights can be determined. The only methods that occur to me are (1) negotiation of a compact, (2) arbitration, and (3) judicial determination.

I would therefore like to suggest that we three Governors of the affected States endeavor first to enter into a compact which will resolve our differences and finally determine our respective rights.

In the event you believe for any reason that this cannot be done, I suggest that we submit all our differences to arbitration, agreeing to be bound by the results thereof.

If this is not feasible, I propose that we join in requesting Congress to authorize a suit to determine our rights in the Supreme Court of the United States, which suit could, if agreeable to the States, be submitted on an agreed statement of facts.

I believe that either method could produce the desired results. If you agree with me, I suggest that the three of us meet at some time and place mutually agreeable for the purpose of further exploring the subject. If we can place our three States in position to maintain a common front in urging the speedy and orderly development of the Colorado River system, we will have rendered a great service to our people.

Hoping that I may have your reaction to this proposal and with best wishes, I am,

Sincerely,

EARL WARREN, *Governor.*

EXECUTIVE OFFICE, STATE HOUSE,
Phoenix, Ariz., March 12, 1947.

Hon. EARL WARREN,
Governor, State of California, Sacramento, Calif.

MY DEAR GOVERNOR WARREN: I have your letter of March 3, addressed to Gov. Vail Pittman and myself, concerning the Report of the Bureau of Reclamation on the Development of the Water Resources of the Colorado River Basin.

I presume from your letter that you have completed and sent to the Bureau your comments on the above-mentioned report. I, too, have furnished the Bureau with my comments and am enclosing a copy to you herewith. It will be appreciated if you will furnish me with a copy of your report.

Ever since I have been Governor of Arizona I have endeavored to cooperate with all other States in the Colorado River Basin in all matters of common interest. Arizona has at all times been represented on the Committee of Fourteen and Sixteen, whose name has now been changed to the Colorado River Basin States Committee. Arizona is now represented on the Colorado River Basin States Committee, which committee as presently constituted and as heretofore constituted, has been been very helpful in all matters affecting the interests of the respective States in the Colorado River. Arizona is now cooperating in plans for the utilization of Colorado River water in the respective States within the allocation of water available to them.

I will be pleased to meet with you, or with you and Governor Pittman, or with the governors of other interested States, to discuss all matters of common interest to our respective States.

All seven of the Colorado River Basin States—Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming—five of which States are still represented on the Colorado River Basin States Committee, are parties to the Colorado River compact which apportions the water of the Colorado River system as between the upper basin and the lower basin and to Mexico. The compact contains provisions which make utilization of water over and above the apportionment made by the compact of interest to all of the States of the basin.

Portions of Utah and New Mexico are in the lower basin and are entitled to share in the apportionment made to the lower basin and in the use of any available water which is unapportioned by the Colorado River compact.

California, in consideration of the passage by the Congress of the Boulder Canyon Project Act and as a condition precedent to the taking effect of that act and the construction of Boulder Dam, Imperial Dam, and the All-American Canal, by chapter 16, California Statutes 1929, entered into a statutory agreement with the United States and for the benefit of each of the Colorado River Basin States, irrevocably and unconditionally limiting California's claim to water of the Colorado River to 4,400,000 acre-feet per annum of the apportioned water, plus not more than half of the water unapportioned by the Colorado River compact. The quantity of surplus water, that is, water unapportioned by the compact, varies from year to year and is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona recognizes the right of California to use the quantity of water to which California, by the statutory agreement, is forever limited.

Arizona recognizes the right of Nevada to use 300,000 acre-feet of apportioned water per annum, plus one twenty-fifth of available unapportioned water, subject to further apportionment of the unapportioned water by agreement between the compact States after 1963.

Arizona has a contract with the United States for delivery for use in Arizona from the main stream of the Colorado River, subject to its availability for use in Arizona, under the Colorado River compact and the Boulder Canyon Project Act, of so much water as is necessary to permit the beneficial consumptive use in Arizona of main stream water to a maximum of 2,800,000 acre-feet of the apportioned water, plus one-half of the available surplus, less such part of the one twenty-fifth thereof as Nevada may use, the quantity of which surplus, of course, varies from year to year, and which surplus is subject to further apportionment by agreement between all of the compact States after 1963.

Arizona does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which Nevada is entitled, and I am sure that Nevada does not claim the right to the use of any water to which California is entitled, nor the right to the use of any water to which

Arizona is entitled. It therefore appears that California and Nevada are now in a position to join Arizona in urging the speedy consideration and passage of S. 433 now pending in the United States Senate and H. R. 1598, its companion bill, now pending in the House of Representatives, which are authorization bills to authorize the construction of the central Arizona project, and H. R. 1597, which is an authorization bill to relocate the boundaries of the Gila project heretofore authorized.

I am certain that the passage of these bills and the construction of the works which they seek to authorize will be of great and incalculable benefit, not only to Arizona, but to California and Nevada and to the United States as a whole.

They are vitally necessary to the welfare and to the economy of the whole southwest region. They do not in any way interfere with the full use in California and in Nevada of the water to which California and Nevada are respectively entitled.

If either California or Nevada are interested in the promotion and construction of projects for the utilization of water to which they are respectively entitled, I would like to know it in order that I may render such aid as seems appropriate.

It is difficult for me to understand what, if anything further, need be done to place either California or Nevada or Arizona in position to support the utilization in our respective States of our respective shares of the water of the Colorado River, which shares have already been determined by the Colorado River compact, the Boulder Canyon Project Act, the California Limitation Act, the water-delivery contracts of the California agencies, the Nevada water-delivery contracts, and the Arizona water-delivery contract.

However, I will be glad to meet and discuss with you and the governors of the other Colorado River Basin States, jointly or severally, any matters of common interest, and if at such conference or conferences it should develop that there are any substantial differences, we can consider and perhaps resolve such differences and if it should develop that anything further is necessary, we can consider the proper course to pursue.

During your incumbency we in Arizona have not had the pleasure of a visit from you. We would like to see you over in our State and I will greatly appreciate it if you can arrange to come to Phoenix as soon as possible, either alone or with Governor Pittman, or with such other governors of the Basin States as you may desire to have present, in order that any matters which you may desire to further discuss can be gone into fully and thoroughly.

With all good wishes, I am,

Sincerely,

SIDNEY P. OSBORN, *Governor.*

EXECUTIVE OFFICE, STATE HOUSE,
Phoenix, Ariz., May 23, 1947.

Hon. EARL WARREN,
Governor of California, Sacramento, Calif.

MY DEAR GOVERNOR WARREN: I have received your letter of May 16 and appreciate your personal good wishes.

In my letter to you of March 12 and in my letter to William E. Warne, Acting Commissioner of the Bureau of Reclamation, of November 22, 1946, a copy of which I sent to you, I clearly stated the facts and the reasoning which in my opinion lead to the inescapable conclusion that the quantities of apportioned water available for use in Arizona, California, and Nevada, respectively, from the Colorado River, are already determined.

If you do not agree with such facts and reasoning and my conclusions, it is regrettable that you do not specify wherein you disagree.

On page 8 of the Views and Recommendations of the State of California on Proposed Report of the Secretary of the Interior entitled "The Colorado River" there purports to be a list of relevant statutes, decisions, and instruments affecting the Colorado River, but no mention is there made of the California Self-Limitation Act, chapter 16, California Statutes, 1929.

I discussed the California Self-Limitation Act as well as the other relevant compact, statutes, contracts, and reports in my letters, but in your letters to me you make no exception to any statements in my letters, nor do you set forth any statement of any facts, reasoning, or conclusions as to what claim to water of the Colorado River you intend to assert for California nor the basis for such claim.

California has unconditionally and irrevocably limited herself forever to the quantity of water set out the California Self-Limitation Act. Arizona has by contract recognized the right of California to the quantity of water set out in that act and Arizona does not intend to and will not attempt to utilize water to which California is entitled.

Arizona respects her commitments.

Any aspiration entertained in California to use water in excess of that limitation appears to be illegitimate. If California would be content with the use of the quantity of the water to which she has by solemn statutory agreement unconditionally and irrevocably limited herself forever all occasion for any feeling that any further compact, any arbitration or litigation is advisable would disappear.

I am sure if you will review my letters and the compact, statutes, contracts, and reports therein mentioned you will recognize that the only thing required for cooperation between our great States in developing the use of the waters of the Colorado to which they are respectively entitled for their mutual benefit and for the benefit of the Southwest and the Nation, is for your great State to respect the agreements your State has already made.

I request that you again review my letters and if in your opinion, there is any error in the facts, reasoning, or conclusions stated in my letters, I will appreciate your advising me concerning the same.

With all good wishes, I am,

Sincerely,

SIDNEY P. OSBORN, *Governor.*

STATE OF CALIFORNIA,
GOVERNOR'S OFFICE,
Sacramento, May 16, 1947.

The Honorable SIDNEY P. OSBORN,
Governor of Arizona, Phoenix, Ariz.

DEAR GOVERNOR OSBORN: I did not bother you during the time you were ill in our State concerning my suggestions for settling the differences of opinion of Arizona and California regarding their respective rights to the use of the water of the Colorado River. However, now that you have recovered sufficiently to return to your home, I would like to discuss your letter of March 12, 1947, and the accompanying copy of your letter to William E. Warne, Acting Commissioner of the Bureau of Reclamation, dated November 22, 1946.

I gather from these two letters that you believe it is unnecessary to try to write a compact between the lower-basin States or to have our respective claims arbitrated, because you consider the existing statutes, contracts, etc., have so settled the rights of Arizona, California, and Nevada in the Colorado River that there are no substantial differences between the States. It may well be that the suggestions of a compact and arbitration are not feasible at this late date, but I am of the opinion that there are such basic divergencies of interpretation of the statutes and documents mentioned above, particularly between Arizona and California, that without an authoritative determination as to which State is right, it is impossible for anyone to know what quantity of water either State is entitled to. If our States are to plan for their futures, they must know with certainty how much water is eventually to be made available to them, because everyone recognizes that there is not enough water in the river to fully serve the legitimate aspirations of both our States.

It seems to me that a suit in the Supreme Court of the United States, to which the lower-basin States and the United States are parties, is essential to supply the necessary answer. This would of course require a jurisdictional act of Congress, authorizing the United States to be made a party to such suit. Governor Pittman, of Nevada, has expressed a similar opinion in a letter to me dated March 6, a copy of which is enclosed. I am sure that such a procedure will eventually redound to the benefit of both of our States.

With best wishes for the continued improvement of your health, I am,

Sincerely,

EARL WARREN, *Governor.*

Senator MILLIKIN. Proceed, Mr. Carson.

Mr. CARSON. Mr. Chairman, in my testimony that I gave last year before the House committee I reviewed rather thoroughly the history of this controversy, the attempts that had been made to negotiate, the attempts that had been made to

arbitrate, and the attempts that had been made by Arizona in the Supreme Court of the United States to secure an equitable apportionment of this water.

Now, California opposed that suit, moved that it be dismissed. They have known clearly since 1944 of our purpose and plan and they have not again threatened a suit until after Senator McFarland and Senator Hayden began to press for the date for this hearing. So in that suit, as in any contemplated suit, there is a grave question as to whether or not the Supreme Court will take jurisdiction to adjudicate an equitable apportionment of water unless and until one State can allege that it is in danger of injury by a planned and going action of another State.

If California's spokesmen can by the threat of a suit so block Arizona and the congressional acts and the United States in the utilization of water, there will be no necessity for their suit. If this Congress goes ahead and authorizes this suit, before any money could be spent, California would have an opportunity to go into court and test the question on a firmer and sounder basis than they would have in the absence of any authorizations. What we are doing now is trying to get the authorization, and until somebody has some method of going ahead and diverting water, it is very doubtful if the Supreme Court would take jurisdiction, even in the face of the declaratory judgment statute. They have consistently refused to do so.

Senator MILLIKIN. Your theory is that the Supreme Court would require a showing of injury before taking jurisdiction?

Mr. CARSON. Take jurisdiction——

Senator MILLIKIN. A showing of injury or, I assume——

Mr. CARSON. Potential injury.

Senator MILLIKIN. Threat of injury.

Mr. CARSON. Threat of injury to a going project.

So that I think now that in mentioning the possibility of a suit these California spokesmen have merely in mind the effect on this Congress, because they refused to join when we tried to sue. I think it is for the purpose of confusion and delay that that statement is here injected.

Senator MILLIKIN. I am speaking now about the interpretation or construction of the compact. Is there any contention on behalf of Arizona that the compact in any way has been amended?

Mr. CARSON. No, sir.

Senator MILLIKIN. Does California contend that the compact has in any way been amended?

Senator DOWNEY. Will you repeat the question?

I prefer to have Mr. Shaw answer.

Senator MILLIKIN. I am passing questions of interpreting the compact or construing the compact, assuming but not conceding that there is ambiguity in it. Is there any contention that the compact by any subsequent procedures of any kind, subsequent instruments, subsequent doings or acts or in any other manner has been amended?

Mr. SHAW. It has been amended in one particular, in effect. By the terms of article IV of the compact, navigation was subordinated to other uses, that is, domestic, irrigation, and power. By the terms of section 6 of the project act, navigation was made superior to the other uses. But article IV of the compact itself permitted Congress to do that very thing, so that there has been no great violence, you might say, done to the terms of the compact since it was framed.

Senator MILLIKIN. That was a practical solution in order to make it possible to have a law, was it not?

Mr. SHAW. Yes, sir.

Senator MILLIKIN. Thank you.

Mr. Carson, what is the citation of this Arizona-California case?

Mr. CARSON. 292, page 358; the sixth ground, stated on page 358. The paragraph begins "Sixth."

Senator MILLIKIN. When did Arizona approve the compact?

Mr. CARSON. In February 1944.

Senator MCFARLAND. I was about to ask one question, Mr. Chairman.

Senator MILLIKIN. Proceed.

Senator MCFARLAND. Mr. Carson, the Boulder Canyon Project Act outlined the conditions under which it would become effective. The compact had to be ratified by seven States and failing to do so within 6 months by six States including California and provided California agree to certain conditions including the following: "And, further, that until the State of California by act of its legislature shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, Wyo-

ming as an express covenant to the consideration of the passage of this act, and that the aggregate annual consumptive use, diversions less return flow to the river of the water of and from the Colorado River," that that is all-inclusive, that wording?

Mr. CARSON. Yes.

Senator MCFARLAND. And that that is the only water they can take?

Mr. CARSON. That's right.

Senator MCFARLAND. Because it says "of and from the Colorado River."

Mr. CARSON. Yes.

Senator MCFARLAND. And for use in the State of California. There couldn't be used any of the Gila River water in the State of California, could there?

Mr. CARSON. No.

Senator MCFARLAND (reading):

"Including all uses under contracts made under the provisions of this act and all water necessary for the supply of any rights which may now exist, shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of article III of the Colorado River compact."

Now, the only exception to that condition, as I understand your interpretation, is this "plus":

"Not more than one-half of any excess or surplus water unapportioned by such compact, such uses always to be subject to the terms of said compact."

Now I will ask you if in the next paragraph the Congress itself doesn't interpret that provision by setting out what it will ratify if Arizona wants to come in and accept it by way of an agreement "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 the exclusive, beneficial consumptive use in perpetuity. And that the State of Arizona may annually use one-half of the excess or surplus water unapportioned by the Colorado River compact, and that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of the State, and 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 or Mexico, but if, as provided in paragraph (c)," and so forth.

In other words, as I understand your interpretation, the Congress of the United States, by setting out this, placed an interpretation on the California Limitation Act, provided for, as permitting that amount of use of water in Arizona.

Mr. CARSON. That's right. And that is emphasized, also, by the contract offered Arizona, to which I referred, by the Department of the Interior. It is already in the record, but I just want to read this much of it.

Senator MILLIKIN. You say "offered Arizona." Was the contract concluded? Was the contract made?

Mr. CARSON. No; this contract wasn't made. It was offered to Arizona by the Secretary of the Interior at that time.

It is article X:

"From storage available in reservoir created by Hoover Dam, the United States will deliver under this contract each year at points of diversion hereinafter referred to on the Colorado River so much available water as may be necessary to enable the beneficial consumptive use in Arizona not to exceed 2,800,000 acre-feet annually by all diversions effected from the Colorado River and its tributaries below Lee Ferry but in addition to all uses from waters of the Gila River and its tributaries."

Senator MCFARLAND. That is all the questions I have.

Mr. CARSON. Mr. Chairman, there is one more thing that I would like to volunteer.

Senator DOWNEY. Mr. Carson, before you leave that last subject, that contract that you just read and the part you have just read is followed by a stipulation that the contract does not in any way mean to interpret what shall be class A water and class B water?

Mr. CARSON. It has some clause in it that it is without prejudice of the claim of any State as to interpretations and so forth, I am sure, but I haven't it before me now.

Senator MCFARLAND. Is that in all the contracts?

Mr. CARSON. Yes; I think that is in all of the contracts. But, now, in this contract of the metropolitan water district, which is incorporated and will be placed in the record, it contains within it, as do all of the other California contracts, a statement as to the priority of their claims and that they are subject to the availability of water under the compact and the act to the same degree as we are. There is no difference there, this priority.

Senator MILLIKIN. May I interrupt you just a moment.

Has anyone ever put under single cover all of the contracts and all of the instruments and documents that bear on the legal questions involved in this case?

Mr. CARSON. Most of the underlying contracts, compact, and the act, and some of the opinions that were given up until the time this was published in 1933 are accumulated in this Hoover Dam contract by Wilbur and Ely. There is no other that is complete.

Senator MILLIKIN. Would you remind me, Miss McSherry, to ask Legislative Reference to assemble within two covers all of the contracts and documents including, of course, the compact, the California self-limitation statute, and any other laws that have legal bearing on the legal problems involved here and to submit their work before conclusion to the two Senators so that if anything is omitted it will be included, so that we may have one single source for ready reference to everything that is involved here as far as the legal questions are concerned.

Senator DOWNEY. Mr. Chairman, would it be appropriate to put in that compilation the different statements and interpretations that have been given by the Bureau of Reclamation and these responsible officials that we both here rely on?

Senator MILLIKIN. Let me rule on that in this way, that after Legislative Reference submits its tentative work to the two Senators that anything that either Senator thinks has relevant bearing may be included, and I ask for, and I know it will be forthcoming, a decent sense of restraint against unduly "padding" the record. But I would like to have under one cover everything that all of us consider relevant to the legal questions involved.

Mr. CARSON. May I just make a voluntary statement concerning this metropolitan contract? It contains all of the system of priorities that are set up in California internally that do not affect any other States.

The question here presented, in my judgment, is for California to respect its Limitation Act of 4,440,000 acre-feet per annum of apportioned water, and if it does, it is within California's power to readjust its internal priority agreement without injury to anyone and bring its present uses clearly within its 4,400,000 acre-feet. But they don't propose to do that. They propose to fight Arizona in order to irrigate 400,000 to 500,000 acres of new land on the east mesa and the west mesa of the Imperial Valley for which no distribution works have been built. True, it can be served through the All-American canal, but no distribution systems have been built and it is nearly all publicly owned land and they do not do it now without injury. But they propose to fight Arizona, and if I read them correctly, all of the other States of the basin, in order to assure that they themselves do not have to go in and readjust their own internal priority system.

Now, I am not familiar with California law, but Senator Downey states that they cannot condemn there without condemning everything in the Los Angeles Basin. I am sure if that is the case, the California Legislature can very easily correct it.

That is about all I can add at this time.

Senator MILLIKIN. I think I asked yesterday that there be put in by reference the priority scale California applies internally to these waters. I assume that will be put in.

Senator DOWNEY. Yes.

Mr. CARSON. It is all set out in this metropolitan contract and in each one of their other contracts.

Senator DOWNEY. Mr. Chairman, I have only one question.

I would like to read to Mr. Carson a paragraph of the Arizona-California case in the Supreme Court in 1933, and I would appreciate it if Mr. Carson could give me a "Yes" or "No" answer to my question. I think it simply admits of that, with any explanation that he wants thereafter.

In the opinion of the Court, October term, 1933, United States Reports, volume 292, appears this paragraph:

"The considerations to which Arizona calls attention do not show that there is an ambiguity in article III (b) of the compact. Doubtless, the anticipated physical sources of the waters which combine to make the total of 8,500,000

acre-feet are as Arizona contends, but neither article II (a) nor (b) deal with the waters on the basis of their source. Paragraph (a) apportions waters 'from the Colorado River system,' i. e., the Colorado and its tributaries and (b) permits an additional use 'of such waters.' The compact makes an apportionment only between the upper and lower basin; the apportionment among the States in each basin is left to later agreement. Arizona is one of the States of the lower basin and any waters useful to her are by that fact useful to the lower basin. But the fact that they are solely useful to Arizona, or the fact that they have been appropriated by her, does not contradict the intent clearly expressed in paragraph (b) (nor the rational character thereof) to apportion the 1,000,000 acre-feet to the States of the lower basin and not specifically to Arizona alone. It may be that, in apportioning among the States the 8,500,000 acre-feet allotted to the lower basin, Arizona's share of waters from the main stream will be affected by the fact that certain of the waters assigned to the lower basin can be used only by her; but that is a matter entirely outside the scope of the compact."

That is the end of the paragraph. Mr. Carson, do you either agree or disagree with the accuracy of the statement made in the Supreme Court decision?

Mr. CARSON. I agree with it.

Senator DOWNEY. That is all, Mr. Chairman.

Mr. CARSON. I want to explain that, Mr. Chairman, then. I brought that suit for Arizona to perpetuate testimony of what had occurred at the original compact negotiations in order to establish what was testified to here by Mr. Meeker in a form that we could later use in any litigation that might later arise. That it was clearly understood is shown by the letters of Mr. Hoover and the statements made by Governor Campbell, Mr. Norveil, and Mr. Lewis, and it was clearly understood at that time that immediately following the adjournment of that conference in Santa Fe, N. Mex., in 1922 there would be a tri-State agreement made between California, Arizona, and Nevada specifying that the million acre-feet of III (b) water was for Arizona.

But during the course of the years, when the California Limitation Act was passed, it became no longer necessary for us to support that position, because there is apportioned 8½ million to the lower basin, 8½ million acre-feet, of which California is limited to 4,400,000, which leaves for Arizona 3,800,000 less minor adjustments for Utah and New Mexico, of which amount we get a million acre-feet from the Gila and the balance from the main stream, so you come out the same.

Senator MILLIKIN. What was the date of the California Limitation Act?

Mr. CARSON. 1929.

Senator MCFARLAND. Do you agree, then, Mr. Carson, with Mr. Matthew when he stated here under cross-examination that if this III (b) water is apportioned water, California couldn't use it; under the California Limitation Act?

Mr. CARSON. That they could not use it, as under the California Limitation Act it is apportioned water.

Senator MCFARLAND. That was admitted by California in their testimony here.

Senator MILLIKIN. What treatment did the Supreme Court give to the California Limitation Act?

Mr. CARSON. It wasn't raised in this case. This was merely a unique bill to perpetuate testimony, and they did not permit us to perpetuate it on the ground, among others, of this sixth ground stated in their opinion. And there was no ambiguity, that it was apportioned to the lower basin but not to Arizona alone and, therefore, there was no necessity of perpetuating the testimony.

Senator MILLIKIN. The California limitation statute was not before the Court at all?

Mr. CARSON. No. There was just a question of perpetuating testimony.

Senator DOWNEY. Mr. Chairman, I would also like to read into this record a different volume than I read from before. It is a different edition but from the same case.

This is 298 U. S. 563 to 568, Eightieth Law Edition.

Mr. CARSON. That is a different case.

Senator DOWNEY. Which case is it? Is this another case between the two States?

Mr. CARSON. Yes. This is 292 U. S.

Senator DOWNEY. Well, I am away behind.

Very well. Mr. Carson is evidently away ahead of me.

Under 564 appears this statement, and I am reading now from the Complaint of Arizona and this allegation of the Complaint of Arizona, I am informed, was adopted as a finding by the Supreme Court.

Senator MILLIKIN. Now, what case is this? And what is the citation?

Senator DOWNEY. This is *Arizona* v. *California* (298 U. S. 563 to 565):

"* * * by the six defendant States, and the limitation upon the use of the water by California was duly enacted into law by the California Legislature by act of March 4, 1929, supra. By its provisions the use of the water by California is restricted to 5,484,500 acre-feet annually."

That is the opinion of the Court, deduced from the allegations of Arizona's complaint, which the Court's opinion adopted as its findings. That is the effect of the allegation made in Arizona's pleading.

Mr. Chairman, I have a luncheon engagement, so I think I will withdraw.

Senator MILLIKIN. We will close in just 1 minute.

Do you wish to make any comment on that, Mr. Carson?

Mr. CARSON. I haven't read the full opinion recently, but that was a case brought by Arizona to try to obtain a decision of the Supreme Court equitably to apportion the water of the river, the same kind of a case that they are talking about bringing now; but my recollection is that Arizona's allegations were not as stated by Senator Downey.

I had, previous to the bringing of that case, given an opinion to our people that we could not maintain it, and I did not participate in that suit.

But the Supreme Court refused to take jurisdiction, and made no decision on the merits.

Senator MILLIKIN. I think we should recess.

Mr. CARSON. I do not propose to go back over those arguments that have heretofore been made, but I want to call your attention to a few matters that I think make Arizona's rights clear. First, this resolution of the United States Chamber of Commerce, as I understand it, was a general resolution but had no specific application.

Arizona has complied with the first one, and we have negotiated a compact by which California is bound and by which we are bound. We also have complied in an informal way with the arbitration in the Governors' Conference in 1927 which was later incorporated in the Boulder Canyon Project Act, and we have tried to have it adjudicated, and California has always heretofore opposed, until we began to seek authorization of the central Arizona project.

Now, referring to particularly section 4 (a) of the Boulder Canyon Project Act, California and Nevada in their brief state on page 17 of that brief that the two paragraphs of section 4 (a) of the Project Act, the first dealing with the California limitation and the second with the proposed lower basin compact, must be read together as parts of the whole. With that statement I thoroughly agree. And reading them together, as a whole, it will be seen that the permissive tri-State agreement disposed of completely the 7,500,000 acre-feet apportioned to the lower basin by article III (a).

The statements to Mr. Breitenstein referred in the original minutes of the original Santa Fe conference show that that 7,500,000 acre-feet is tied to the minimum guaranty at Lee Ferry of III (d), and it is completely disposed of. There is 4,400,000 acre-feet to California, and 300,000 to Nevada, and 2,800,000 to Arizona, and Arizona in addition is to have the exclusive beneficial consumptive use of the Gila River and its tributaries within the boundaries of said State. That disposes of all of the water apportioned to the lower basin.

Now, Congress perhaps thought that this tri-State agreement could not be made or would not be made by California, and the Arizona Legislature passed an act offering to make this compact as here stated which California rejected, and Congress, fearing that they might not make that compact, imposed it upon California anyway, Senator, in

my judgment, by the requirement for the Limitation Act which they passed. I do not know that that has been emphasized, but I want to read it now to emphasize it.

Senator MILLIKIN. What is the background of the California Limitation Act?

Mr. CARSON. The Governors' Conference at Denver in the fall of 1927, in their award under an informal arbitration, Congress took it and incorporated it in this act, but took 200,000 acre-feet off the governors' recommendation for Arizona and added it to California.

Senator MILLIKIN. Does the debate in Congress throw any light on the subject?

Mr. CARSON. Yes. And the Governors' findings are incorporated in the central Arizona report hearing and were referred to this morning by Judge Howell. They follow right along with that one qualification.

Now, then, this limitation on California—and I want to emphasize it as clearly as I can—the purpose of it and what it provided, and further until the State of California, by act of its legislature, shall agree—

irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming as an express covenant and in consideration of the passage of—

this act—

that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California including all uses under contracts made under the provisions of—

this act—

and all water necessary for the supply of any rights which may now exist, shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower basin States by paragraph (a) of article III of the said Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact.

Now, the act does not mention specifically the III (b) water, but it limits California to 4,400,000 of the III (a) water, plus not more than half of the unapportioned. It is clear then that Congress at that time in the light of all of the past history, and referred to in this record and with the letter and the testimony of the people who negotiated the compact, applied the 1,000,000 acre-feet to Arizona as had the compact commissioners for the Gila River, and disposed completely of all water apportioned to the lower basin in that manner.

Now, that, therefore, means that III (b) water is apportioned water as was later held by the Supreme Court in the case to which Judge Howell referred, where it specifically holds that it was apportioned water.

It further means that this question of the consumptive use on the Gila River becomes entirely immaterial because Congress applied the 1,000,000 acre-feet to the Gila River, and specifically provided that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila and its tributaries within the boundaries of said State.

I do not see that anything could be clearer on those two questions of apportioned III (b) water and of the measure of beneficial consumptive use being depletion. Now, you must remember that this is a compact between sovereign States, and within their boundaries each State is free to handle its water rights on its own internal system of priorities,

and the only interest that any State can have in the amount of water used in the other State is the limitation on that State's use as a whole. The Boulder Act, section 18 says:

> Nothing herein shall be construed as interfering with such rights as the States now have, either to the waters within their borders or to adopt such policies and enact such laws as they may deem necessary with respect to the appropriation, control and use of the waters within their borders, except as modified by the Colorado River compact or other interstate agreement.

So, what this compact undertook to do and the only thing that it could undertake to do was to apportion water between basins or between States. No State has a right to go into any other State to say what it should do with the water apportioned to that State. Therefore, the measure of that State's rights is the depletion of the water at the control point on the river or in the case of interstate tributaries, at State lines. I think that that is clear.

Now, we know in Arizona that the burden is on us and it will be on any other State advocating the authorization of a project to show that there is ample water for the project. But I think Arizona, and I think every other State, has a right to assume, Senator, that Congress itself will construe the Boulder Canyon Project Act for the purpose of its own guidance in the authorization of projects, and I think that we have the further right to assume that Congress and the United States will require that California live within her limitation act, which you required by statutory agreement with the United States, and specifically for the benefit of the State of Arizona, and in reliance upon which the State of Arizona and all of these other States ratified the Colorado River compact, and in reliance upon which the Congress appropriated the money that built Hoover Dam, that built the All-American Canal; the only way that California could get it was by meeting the requirement that the Congress of the United States made, that she agree irrevocably and unconditionally as to the limit of her claim of water right.

She did agree, and I think that we have a right to expect that she will be held to that agreement. That congressional intent, I submit, is clear.

Now, there is one other thing. There has been some testimony offered here to make it appear that if Arizona gets her share of the water, which will be approximately all that Arizona has received by virture of her ratification of the compact, or the acts or the Boulder Act in this central Arizona project, except for that minor quantity at the Gila project, it will not amount to—we will have had nothing awarded to us under the California theory that we were not using prior to the compact. If we do not get that water, Arizona is in a terrible fix and will necessarily suffer an economic decline, as we think, to the detriment of the national interest and of our own, of course. But it has been made to appear here that if we do get it, we will in some unknown way interfere with the use of water in San Diego or Los Angeles. Now, it is none of our business, Senator, what California does with her share of the water within her borders. That is her business. But I know in my own mind that that argument is not sound, and it is based upon a false premise.

Our engineers advise us that the State of California could furnish every drop of water that the metropolitan areas require or claim a right to and enough water to adequately irrigate every acre of land in

California now irrigated by the water of the river, including the Coachella Valley, which is now being developed, if they merely recognized their limitation act and now make up their minds to live within it. They have it within their own power, within their own State, to so adjust that no kitchen faucets wil be dried up nor will any irrigated land in California now irrigated go back to the desert. So, it is put up here on a false basis.

Now, I do not care to go into the question of this justiciable controversy, because I think it has been adequately covered. I agree with what has been said. I do not think that there is any justiciable controversy now. If California thinks there is, she, of course, is at liberty to file a suit against Arizona, if she is so advised. She does not need this resolution nor does she need to try to make a catspaw out of Congress or the Attorney General to do something which she knows she cannot do herself, and I very much doubt if and when the central Arizona project is authorized that California can at that time state any justiciable controversy against Arizona, for this reason:

She has by this agreement forever limited herself to that 4,400,000 acre-feet, plus not more than half of the surplus, and the water we ask does not in any way infringe upon that right or that use. We specifically, in all of our figures, as our engineers will show, that I have referred to here, recognized California's right to that 4,400,000 acre-feet, and we do not take one drop, and it does not take one drop of her water for the central Arizona project.

There is another thing that I might cover while I am on this part of it: The California contracts, under its interstate system of priorities, they say, is for 5,362,000 acre-feet of water. Actually, every one of them is subject to the availability of that water for use in California under the compact and under the act, just as is ours. They have no firm contract for one drop of water, other than within the 4,400,000 acre-feet, which we say, and so far as I know, every other State says, California is entitled to have. Beyond that they are not firm, nor can they be made firm because of that limitation act; but even so, the Secretary of the Interior in making those contracts merely set out in these water contracts to California an intrastate California system of priority, and I would like to read a little of it. This happens to be the All-American Canal contract, but they are all similar in this respect:

The United States shall from storage available——

Senator MILLIKIN. Will you identify that part of that?

Mr. CARSON. The All-American Canal contract, executed by the United States, acting through the Secretary of the Interior, Ray Lyman Wilbur, and the Imperial Irrigation District, under date of December 1, 1932.

Senator MILLIKIN. Will you place it in the volume that you are reading?

Mr. CARSON. It is taken from the Hoover Dam contract by Wilbur and Ely:

The United States shall from storage created in the reservoir in the Hoover Dam deliver to the district each year at a point in the Colorado River immediately above Imperial Dam so much water as may be necessary to supply the district a total quantity, including all of the waters diverted for use within the district from the Colorado River, in the amounts and with priorities in accord-

ance with the recommendation of the chief of the division of water resources of the State of California, as follows:

Subject to availability thereof for use in California under the Colorado River Compact and the Boulder Canyon Project Act, the waters of the Colorado River available for use within the State of California under the Colorado River Compact and the Boulder Canyon Project Act shall be apportioned to the respective interests below named and in amounts and with priorities therein named and set forth as follows:

Then follows a system of priorities. Whatever water is available will be delivered in accordance with that system of priorities.

Nowhere in it is specified what water is available. At the time these were made, the California Limitation Act was in effect, the Boulder Canyon Project Act was in effect, and the Colorado River Compact was in effect. They made these contracts and whatever improvements they have made in California with full knowledge of the limitation on the use of water in California.

Now, this first priority is to the Palo Verde irrigation district, and the second to the Yuma project in California, and the third to the Imperial irrigation district and the Coachella Valley. Those first three priorities total 3,850,000 acre-feet. It was testified in the central Arizona hearing, and I know it was also in the Gila hearing, which was the hearing before the Committee on Irrigation and Reclamation of the House of Representatives, Seventy-ninth Congress, second session, on H. R. 5434, that the Imperial irrigation district plans to irrigate the east and west mesas of Imperial Valley, which are lands not now irrigated in California, but for which water is set aside in these first three priorities, which I am informed the soil analysts and agricultural economists of the University of California and the Agriculture Department have reported on adversely. It should not be irrigated. That is what they have reported.

Now, if California would revise that system of priorities and cut down that agricultural priority, they could furnish water to all of the lands that are now irrigated and to all of San Diego and Los Angeles. Now, of course, we in Arizona have not opposed and did not in any manner oppose the building of the aqueduct to San Diego. We know San Diego needs the water, but they must get it, as we see it, out of California's share. It appears to us that they have just joined with Imperial irrigation district to try to stop development in all of the other States so as to avoid the necessity of straightening out their own internal situation.

So, it seems to me that the fight is internal in California, and not against Arizona or any of these other States, if we assume, as we must, that California must live up to its agreement, limiting its use to 4,400,000 acre-feet.

Now, then, there is one other point on this same section 4 (a) of the Boulder Act, and that division of water. You will notice that those divisions divided the water in the main stream of the river completely, and there is no leeway left there for any of the evaporation losses. In other words, if California gets her 4,400,000 and Arizona gets her 2,800,000 and Nevada gets here 300,000, and all of the surplus disappears, so that it would be necessary to deliver a lesser quantity on account of any evaporation loss, no provision was made here for that, but I would assume, and I think that we are justified in assuming, that this having been made by the Congress as to its intent and interpretation, that in the event of any shortage from evaporation or any other

cause, we would share it ratably and proportionately. There is no priority here.

Then we have one other point, and then I think that I can complete this phase of what I have to say.

I am reading now from the metropolitan water contract, this contract for the delivery of water under date of April 24, 1930, between the Secretary of the Interior and the metropolitan water district of southern California. It is a provision which it seems to me has a direct relation to the question of evaporation loss or how it should be shared. In section 8 of that contract it is provided:

> So far as the rights of the allotees named above are concerned, the metropolitan water district of southern California and/or the city of Los Angeles shall have the exclusive right to withdraw and divert into its aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said district and/or said city, not exceeding at any one time 4,750,000 acre-feet in the aggregate by reason of reduced diversions by said district and/or said city: *Provided*, That accumulations shall be subject to such conditions as to accumulation, retention, and release and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final: *Provided further*, That the United States of America reserves the right to make similar arrangements with users in other States without distinction in priority, and to determine the correlative relations between said district and/or said city and such users resulting therefrom.

Now, what I have said up to date has been said for this reason, that in our view these matters are settled. That does not directly affect the question of this resolution now before you. If California contends they are not settled, why, of course, our answer is that the Congress of the United States passed this act and required the Limitation Act, and certainly the Congress of the United States has it within its power and jurisdiction to determine the effect and meaning of those documents for its own guidance in the authorization of projects. But, in any event, there could not now exist, in my judgment, a justiciable controversy that could be stated by California or by any of these basin States against any other State, for no State is now using the water which it is conceded it is entitled to.

California is using something over or approximately 3,000,000 acre-feet of its 4,400,000. Nobody is trying to prevent it using that additional water, and we say they are entitled to that. Arizona has not been able to use the water to which she is entitled, and neither have any of these other States, and there is no possibility in my view of any injury or threat of injury being alleged on the true facts.

The most that is sought would be an advisory opinion as to the meaning of an act of Congress which, in effect, they are asking Congress to request from the Supreme Court for the guidance of Congress. We think that we have a right to expect that Congress will go into these matters on its own and that under no conditions now could such a suit be maintained and that it would be very disastrous to the welfare of every other State in the basin.

Now, at any time that California may think they have any cause of action against Arizona, they are at liberty to bring it, and they do not have to have any authorization from Congress, nor do they have to ask the Attorney General to bring it. I think the purpose here is, as I would see it, to try to get some other vehicle which would permit this to go to court, with the result that there would be a long delay in the matters now before the Congress, which Congress has the

power and duty to decide, to present to a tribunal about which there is, to say the very least, grave question as to jurisdiction.

That is all that I have.

Senator MILLIKIN. Are there any questions?

Thank you, Mr. Carson. We are going to recess at 5 o'clock tonight.

Mr. Wilson is next on the list. How long do you anticipate it will take, Mr. Wilson?

STATEMENT OF FRED E. WILSON, REPRESENTATIVE OF NEW MEXICO ON THE COLORADO RIVER BASIN STATES COMMITTEE, ALBUQUERQUE, N. MEX.

Mr. WILSON. My name is Fred E. Wilson, and I live at Albuquerque, N. Mex., where I have resided and practiced law for the last 25 years.

While my name appeared on the list of witnesses, it was understood by Judge Howell and his subcommittee that this matter would be presented in behalf of the upper-basin States in the manner in which it has been presented. In other words, the presentation was made by Judge Howell, Mr. Breitenstein, and by Mr. Carson—insofar as he he was speaking for the upper-basin States—and our position is as set forth in the brief filed by the Colorado River Basin States Committee.

I was a member of the committee that prepared that brief, and I heartily concur in the position taken in the brief, that states the position of New Mexico officially, and I am authorized to so state by the Governor.

Following that, I merely want the record to show officially that New Mexico concurs in the position taken in the brief that is on file with this committee in reference to the resolution which the committee is now considering.

Senator MILLIKIN. Thank you, sir.

Mr. Wehrli, would it break in on you unduly if we recessed at 5 o'clock?

Mr. WEHRLI. I am sure that I will be through before 5 o'clock, Senator.

STATEMENT OF W. J. WEHRLI, SPECIAL COUNSEL FOR THE STATE OF WYOMING, CASPER, WYO.

For the purposes of the record, my name is W. J. Wehrli. I am practicing attorney at Casper, Wyo. I appear here as counsel, special counsel, for the State of Wyoming, by direction of the Governor of the State, the attorney general and his special counsel for the State engineer, who is our interstate streams commissioner ex officio.

Wyoming has joined as one of the upper basin States in the protest and opposition to this resolution, and by that fact concurs in what has been done by that committee as represented by the witnesses who have testified. In addition to that, Wyoming desires to have this committee know that it is opposed separately and on its own accord to the resolution. Senate Joint Resolution 145 is for the purpose of directing the United States to commence a suit. Nothing has been shown that I have been able to detect in yesterday's hearing or today's hearing that there is any controversy between the United States and any State, as far as I have been able to determine.

There is no controversy between the United States and California, between the United States and Arizona, and between the United States and New Mexico or Utah or Wyoming. The conflict that appears to exist is one between Arizona and California.

If there be no controversy between the United States and any one of these States, and that seems to be an admitted fact, then we are unable to see how the United States can commence a suit and prepare and file a petition or complaint, whichever is the proper term, which will set forth any cause of action or justiciable controversy. After all, justiciable controversy is a rather polished term. Lawyers more generally might speak of the matter as being a case. In other words, does the United States have a case against any one of these States? We think not.

We think there was no attempt made to even show that one of these States has done anything which has injured the United States or is doing anything or is about to do anything which threatens to injure the United States. If that be true, we are unable to understand how the United States can commence this suit and file a complaint which will constitute a cause of action against any one or all of these States.

We submit to this committee that unless the facts exist which constitute a cause of action or a complaint on behalf of the United States against these States or any one of them, the passage of a resolution by Congress cannot supply that deficiency. In other words, I do not believe that Congress by passing a resolution can create a justiciable controversy between the United States and any one or more of these States, or that Congress by passing a resolution can supply the facts or the basis of a suit. Therefore, it seems to us that the resolution is entirely improper in seeking, as it does, to have the United States commence a suit when no suit exists.

In the statement presented by Mr. Shaw, at page 21, I find the following:

> The litigation proposed by the pending resolution is within the original jurisdiction of the Supreme Court. A justiciable cause of action exists.

I do not agree that that statement is true, but if that statement be true, then there is no impediment to the commencement of a suit by the State of California against the State of Arizona. The answer to that which is propounded or which is offered, I should say, is that the United States may be a necessary party or would be a necessary party. We have no indication of any reluctance on the part of the United States to become a party if a suit is commenced. The report of the Department of Justice that has been submitted here discloses a willingness upon the part of the Attorney General to enter such a litigation if it be commenced, and it contains the suggestion that the Congress might adopt appropriate resolution or take such action as might be required, if any, to waive the immunity of the United States in such a case.

In *Nebraska* v. *Wyoming*, the North Platt suit, with which I had experience as counsel for the State of Wyoming, the United States was not reluctant, and did not require any action of the Congress, but intervened upon its own accord in that case. I think it reasonable to assume from the tenor of the Department of Justice report which has been presented to this committee that such action would follow here in the event of suit by California against Arizona, but if

it did not, I think then might be the appropriate time for California to request the Congress to pass a resolution waiving the immunity of the United States and directing the Attorney General to enter the litigation.

It seems to me that the situation is just as simple as that. Maybe I am ill advised, but that is the way it appears to us, and if California is right, that they have a case against Arizona, there is no impediment in their way of commencing such a suit, and I do not think that we need anticipate any reluctance on the part of the United States in becoming a party.

Now, there is another matter that I would like to mention briefly, and that is whether or not a suit, if commenced, will be in any way confined as to parties and whether or not Wyoming, for whom I speak, might not become a party. I doubt that very much. The resolution names all of the States in the basin except Colorado and Wyoming, but says "other parties." Regardless of what the resolution may say or what it may leave out, I do not believe that a controversy of this kind would be determined by the Supreme Court of the United States without Wyoming and Colorado being made parties to it.

Some one of the litigants would suggest that they are necessary parties or the United States would make that suggestion, and I do not believe that a suit can be commenced and proceed to its final conclusion without my State being one of the parties; and we desire to avoid that litigation. Wyoming, as far as I know, has no controversy with any one of the other States. The upper States, including Wyoming, are endeavoring to make a compact. We believe that we should be successful, but at this time Wyoming is not in conflict with any other State to any extent that requires any litigation.

The point is made that the litigation might be short and would be decided without factual questions coming into the matter. I think that that point has been fairly well discussed. I am wondering if anyone who has sat in this room yesterday and today and heard these proceedings at this time can believe that any suit could be started that would be terminated without the consideration of facts. We have been talking about facts for 2 days, quite a lot about law, but there has been a very liberal discussion of facts, and if in a discussion of this kind we find it necessary to resort to as many facts as we have, it seems utterly improbable that the Supreme Court of the United States can or will make any decision in any suit that may be brought without a consideration of the facts. And facts in these water cases take time and many pages of testimony.

The North Platte case, *Nebraska* v. *Wyoming*, involved the water supply of conservatively less than one-third of the amount of water that is involved in the Colorado River. I think it would be very much less than that; the area—the land area involved—would be very much less than the area of the Colorado River Basin. But we proceeded with the taking of testimony, and when we finished we had 29,500 pages of evidence.

Wyoming is particularly reluctant to be drawn into another litigation of that kind, that, because of the magnitude of the water supply here and the size of the basin and the magnitude of the interests, would probably run into a much longer record than the North Platte case. That suit was commenced, as has been stated, in 1934, and was terminated in 1945 by an open decree issued by the Supreme Court.

We in Wyoming are also convinced that any litigation at this point will serve to embarrass and delay the upper States in arriving at a compact. I believe the reasons for that have been quite clearly stated, and if the upper basin States are embarrassed and delayed in arriving at a compact, it will delay the development and the construction of projects in those States; and because of these reasons, Mr. Chairman, Wyoming desires to be placed firmly on record as against the proposed resolution.

Senator MILLIKIN. Are there any questions?

Mr. HOWELL. When we listed our witnesses originally, we listed the attorney general of the State of Utah, and when I made my opening statement, we were not sure that he could be here and he is here, and he could make his statement within the 5 minutes before 5, if you will permit.

Senator MILLIKIN. We are very glad to have you here.

STATEMENT OF HON. GROVER A. GILES, ATTORNEY GENERAL OF THE STATE OF UTAH

Mr. GILES. I appear on the brief on behalf of the Basin States Committee as a member of the committee from Utah, and I am here at the request of Governor Maw of Utah to enter our protest and opposition to the resolution independently and separately from the brief upon the basis of arguments presented by the opponents.

That is all that I have to say.

Senator MILLIKIN. Thank you very much, General.

We will recess until 10 o'clock tomorrow morning.

(Whereupon, at 5 p. m., the subcommittee recessed until 10 a. m., Wednesday, May 12, 1948.)

COLORADO RIVER WATER RIGHTS

WEDNESDAY, MAY 12, 1948

UNITED STATES SENATE,
SUBCOMMITTEE ON IRRIGATION AND
RECLAMATION OF THE COMMITTEE
ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in room 224 of the Senate Office Building, Senator Eugene D. Millikin (chairman of the subcommittee) presiding.

Present: Senators Millikin, Ecton, O'Mahoney, and McFarland.

Also present: Senator Johnson of Colorado.

Senator MILLIKIN. The hearing will be in order.

Mrs. Bush will you come forward, please.

STATEMENT OF MRS. NELLIE T. BUSH, REPRESENTATIVE OF THE STATE OF ARIZONA ON THE COLORADO RIVER BASIN STATES COMMITTEE, PARKER, ARIZ.

Mrs. BUSH. My name is Nellie T. Bush, and I live at Parker, Ariz. I practice law when I have to. I am a member of the Colorado River Basin States Committee, appointed by the Governor of the State of Arizona, more recently by the Interstate Stream Commission of Arizona.

I think Arizona's stand and position has been ably stated by the brief which the basin States have filed here, the Colorado River Basin States Committee, and later as explained by Judge Howell, Attorney Breitenstein, and Attorney Carson, regarding Senate Joint Resolution 145, which is now before your committee. It seems to us that it is unnecessary, of course, for Congress to ask that the Justice Department or the courts interpret either the compact which is the law of the Colorado River Basin and naturally a part of the contract between the States, or the Boulder Canyon Project Act, which the Congress itself has passed.

In other words, it seems rather foolish to me for Congress to say to the Justice Department, "Will you please tell us what we have said so that we will know how we can say it again." That is about what I think the resolution asks.

I think the Colorado River compact and the Boulder Canyon Project Act and the Limitation Act of California have all been definitely made a part of the law of the river and of the basin States of the Colorado River. At least all people who are in authority or have the brain to be authorities on the matter seem to understand them quite thoroughly

and are willing to accept them in making their contracts for the water from the Colorado River system.

I want to admit what California threw at us in their first day of testimony, that Arizona, being the baby State, had to grow up. We did take longer to ratify the compact than did the other basin States, but I rather think that as the more powerful and neighboring State and older child, California might have a bit of compassion and a little patience with our baby State, shall I say, in growing up and coming to an understanding of her possibilities and her liabilities and what she might gain by becoming a party to the Colorado River compact as written at Santa Fe, N. Mex., in 1922.

However, I want to further assure California and everyone else, and this committee in particular, that Arizona is not thinking of trying in any way to get out of her obligations after she has once decided on ratification. She meant everything she said, and is willing to take all of the responsibilities that come from the ratification. Of course, being a woman, I'd like to make a comparison between the young lady, who just because she refused the first offer of matrimony or several offers of matrimony, for that matter, gives no reason for the belief that when she has once accepted an offer, she is going to immediately sue for divorce, to get out of the responsibilities which come from that acceptance. Just so is Arizona. Arizona has grown up, although she may not be as powerful or as old in the Union or in the compact as some of the other of her neighbors. She relies upon them to be honest with her, as she expects to be honest with the other States, in all of these things.

Neither does Arizona propose to be thrown out on her ear from the union with these basin States on compact relations because she was late in ratifying. She expects to demand and merit each and every security and benefit, and take every responsibility that comes with the ratification of the compact and the contract between Arizona and her neighbor States. We in Arizona do not feel that just because another State wants to move in, maybe, and take over part of our rights that Arizona should be kicked out of the back door.

Arizona, as you all know, is a desert State and depends entirely upon her water supply for her existence. The Colorado River is the only water supply available to her. I will not go into the legal part of it and the engineering, as I am neither a very good attorney nor in any respect an engineer. The State of Arizona, however, is very dry, and depends upon Colorado River water now to stabilize and to maintain the civilization which there exists and even without looking to any future development, we must have Colorado River water to live.

We see no reason why we should let our people go thirsty, as some of the California reports have said their people are going to do if we get our share of the water, nor see our farms dry up because our water could possibly be used in an adjoining State. Arizona needs and is entitled to what she is asking for and feels no hesitancy in taking a firm stand for her needs. We shall try, of course, in every way to live peacefully with our neighbors, as the Bible says we should, and we hope our neighbors will reciprocate.

We also hope that we will not again and continuously be led up dark alleys, out of which no good seems to come and out of which we get nothing constructive, but just delay. We need this time, and we need this money badly to continue our existence, and all we ask is

that we be let alone to maintain that existence and develop as we should. We think that a resolution, such as this before your committee, is simply another dark alley. It does nobody any good, and no good can come from such a diversion and delay. Therefore, the State is naturally against anything of the sort.

It seems to me that it is always offensive to find a neighbor who is always and continuously so interested in formulating the plans of your home that strife is continually in your home. Now, I want to apply that very strongly to Arizona. I got an idea yesterday from Mr. Howard's statements that there is even another idea that is to by crystallized in our State. That is, that we are not even a party to the compact because of late raification. Now, we are a party to it, and we want to be taken as a party to it, and we do not want anybody interfering in our home affairs to such an extent that strife be stirred up and continue. I think that is all I have to say. It is perhaps nothing your committee needed to hear, but it is just an angle which I wanted to present in enforcing the fact that Arizona is definitely against Senate Joint Resolution 145 for we see endless and needless delay if same becomes law with little or no accomplishment because of the delay.

Thank you very much.

Senator MILLIKIN. Are there any questions?

Mr. HOWELL. That concludes the testimony so far as the committee is concerned, but I understand perhaps that Senator McFarland desires to make a statement.

STATEMENT OF HON. ERNEST W. McFARLAND, A UNITED STATES SENATOR FROM THE STATE OF ARIZONA

Senator MCFARLAND. At the beginning of my statement I would like to have the record show that Senator Hayden joins me in opposing Senate Joint Resolution 145, and concurs in what has been said against this resolution, and does not appear in person only for the reason that he is engaged in important hearings before the Appropriations Committee, as the committee well knows, which are under consideration at this time.

I do not know whether I can add anything to what has already been said on this subject, and for that reason I will make no effort to discuss the issues in any comprehensive manner, because they are contained in statements of others opposing this resolution. I will limit myself to a brief presentation of several of the pertinent elements, at least some of which may be voiced with particular propriety by a Member of the Congress.

The committee will recall that this resolution was offered on July 3, 1947, that being the last day of the hearings held by this very committee on S. 1175, the subject matter of which hearings included the identical arguments and issues now advanced by the proponents of Senate Joint Resolution 145 as grounds for the defeat of S. 1175, which is a bill to provide means for the use of Colorado River waters in Arizona.

The committee can judge the wisdom of supporting a practice which would block the course of a bill through Congress by means of the introduction by the opponents of such bill of a last minute hamstringing resolution, especially where a committee of Congress already

has jurisdiction of the issues inherent in the resolution, as is the situation in this instance.

The committee necessarily must contemplate, also, whether in the midst of contention and confusion it is not wise to recur to fundmental principle. Senate Joint Resolution 145 would require Congress, first, to encroach upon the executive power; second, to invade the province of the judicial branch; and third, to abdicate its own proper function.

I am a strong believer in our Constitution; I am a strong believer in the system established by it for the three separate but coordinate branches of our Government. History has demonstrated what now seems to have been the divinely inspired wisdom of the framers of our Constitution when they laid as the cornerstone of our Government this system of checks and balances which has made it the bulwark of the greatest Nation on earth.

In the Halls of Congress, as elsewhere throughout the land, criticism has been forcibly voiced when it appeared that the courts have read into the statutes things which were not intended by the Congress, and thereby as a sort of judicial legislation they have encroached upon the legislative power. The executive branch has not been free of verbal chastisement when it was thought that that branch had usurped powers properly reposing in the Congress or in the judiciary. But we in Congress certainly have no right to criticize either the executive or judicial departments of the Government if we ourselves encroach upon the duties of either of the other departments. The maintenance inviolate of the three separate branches is just as indispensable today as ever it was before in our national life, if not even more so.

This resolution, as I have noted, would have the Congress encroach upon the proper function of the executive branch, whose duty and privilege it is to determine when legal or political rights of the Nation are jeopardized, and to institute such actions at law as may be requisite.

The Attorney General of the United States does not require a mandate from Congress either to constrain him or enable him to file suit in the Supreme Court for the protection of interests of the Nation. He has now, always has had, and will continue to have the authority and power to institute action in any proper case. Yet by this resolution the Congress would dictate to him not only the necessity and propriety of litigation, but the actual form and nature thereof. And so I ask, Is this a wise and enlightened policy for the Congress to pursue? If it now determines that suit is required and now orders that proceedings be filed, will it in future make similar determinations and orders? If so, where will such a course lead?

In the classic case of *Marbury* v. *Madison*, decided by the Supreme Court in the year 1803, reported in 1 Cranch 137 et sequellae, it was laid down as an inflexible principle of our system of government that the executive department is invested with certain important political powers in the exercise of which it must necessarily use its own discretion and with respect to which it is accountable only to the Nation at large, and that in the exercise of such powers the executive branch is not subject to the control of the other coordinate branches of the Government.

The question there arose in connection with the issuance by the Supreme Court of a writ of mandamus requiring the Secretary of

State to deliver certain commissions. The Court drew a line between those actions of the executive branch requiring an exercise of discretion, and those which were purely ministerial in character. As to the latter, the various officers of the executive branch were held amenable to the direction of the judiciary in a proper instance, although the Court found itself, in the exercise of its original jurisdiction, without constitutional authority to issue a mandamus to the Secretary of State.

This principle of the inviolability of the executive branch to direction or control by either of the other branches in connection with the exercise of discretionary powers has been followed without deviation throughout the succeeding years. I earnestly suggest that it be followed now.

I would like, Mr. Chairman, to just read a small extract from that decision. It is found on page 165 of 1 Cranch Reports.

Senator MILLIKIN. What were the salient facts in the case, Senator?

Senator MCFARLAND. Well, the salient facts were that there was a petition filed with the Supreme Court to require the Secretary of State to issue some commissions to the petitioning parties. The question turned in part on whether the executive branch had proceeded with the appointments to an extent that it became the duty of the Secretary of State to issue the commissions. As the court pointed out, if the President had not completed the appointments, there would yet have been a degree of discretionary power which he, of course, could exercise, and it was his privilege to exercise under the Constitution; but if the appointments had in fact been made and it was just a matter of routine duty for the Secretary to make the written evidence thereof and to issue them, why, then that would become a ministerial duty which the court could in the proper instance direct him to perform. But the case turned upon the question of the original jurisdiction of the Supreme Court to issue a mandamus to the head of an executive department; and the court held that the power of the Supreme Court to issue the writ of mandamus in that instance was not conferred by the Constitution.

But the case is particularly important in that it points out, and it is the classic in pointing out, the respective powers of the three separate branches of our Government, and the duty to keep them separate, and the importance of keeping them separate. In that connection, on page 165 of the report, the Court said:

> By the Constitution of the United States the President is invested with certain important political powers in the exercise of which he is to use his own discretion and is accountable only to the country in his political character, and to his own conscience to aid him in performance of these duties. He is authorized to appoint certain officers who act by his authority and in conformity with his orders in such cases. Their acts are his acts, and whatever opinion may be entertained of the manner in which he exercises discretion may be used, still there exists and can exist no power—

I would emphasize that—

> to control that discretion. The subjects are political; they respect the Nation, not individual rights, and being entrusted in the Executive, the discretion of the Executive is conclusive.

Now, Mr. Chairman, in this present instance here is a discretion placed in the Attorney General, in the executive branch of our Government, for the handling of lawsuits. Now, the exercise of that discretion is an executive function, and I do not think that anyone would

dispute it. Whether suit should be brought is a matter which requires the judgment of the executive branch of our Government. Now, I will concede, as Mr. Breitenstein did, that there are instances when the Congress may direct the executive branch of our Government, but we can only do so, Mr. Chairman, when ministerial duties are involved. We cannot, where there is a discretionary power or a discretion in the exercise of judgment by the executive branch of our Government, we cannot direct that branch as to how that discretion should be exercised.

Now, that is fundamental. If we expect to keep the three branches of our Government separate and independent, that is fundamental. It would make no difference, in my way of thinking, whether a bill directing the filing of suit is signed by the President or not. The President of the United States has no authority by consent to such a bill to delegate the executive duties of his department or to waive the exclusive power and privilege of the executive branch to make the fundamental determination. If this act is an executive act, it remains such, and the fact that the President might veto or not veto a bill would make no difference. No branch of our Government, whether it be legislative or executive, can get rid of any of the duties imposed upon it under the Constitution by trying to delegate them or by trying to do something which our Constitution forbids.

Let us take, for instance, the appointment of Justices of the Supreme Court. The Constitution makes it the duty of the President to appoint the Justices of the Supreme Court. with the advice and consent of Congress. Let us suppose that Congress would pass a law directing the President to appoint John Doe as a Justice of the Supreme Court and that the President signed such bill. Would that make it a constitutional bill? I do not think anyone would dispute that it would not. If the President did not follow the mandate of such bill, even though he had signed it, and appointed someone else and sent his name up, it would then become the duty of the Congress to determine whether the individual so named by the President would be confirmed.

Senator MILLIKIN. What does the Constitution say, so far as the immediate matter here is concerned?

Senator MCFARLAND. Well, the Constitution, of course, divides the branches of our Government into administrative or executive and legislative and judicial branches.

Now, the power in question is clearly within the purview of the executive department of our Government.

Senator MILLIKIN. Your contention is that this particular matter is inherent in the executive branch of the Government?

Senator MCFARLAND. That is correct.

Senator MILLIKIN. Even though it may not be spelled out in the Constitution?

Senator MCFARLAND. That is correct; that is my contention, Mr. Chairman. And where the Chief Executive is vested with a discretion, the Congress of the United States cannot be telling him how to exercise his discretion.

Now, further than that, I would like to add this additional thought——

Senator MILLIKIN. I would like to have your comment on this: The Department of Justice is itself a statutory creation.

Senator MCFARLAND. That is correct, Mr. Chairman, but it is, nevertheless, an executive branch of our Government, and it has discre-

tionary powers in this instance; and once it has become vested with those discretionary powers, we cannot direct the exercise thereof under the Constitution. Granting that Congress can and does create courses of action which the Executive must pursue or cause to be taken, and in which it must exercise discretion, we cannot direct how, under the Constitution, that discretion must be exercised. We can repeal, probably, the laws which would give that discretion, but we cannot direct how the discretion shall be administered.

Just think of the dangers that would come from such a course. The Congress of the United States could be exercising all of the discretionary powers vested in the administrative branch of our Government, and I do not think for one moment that anyone would contend—I might be wrong—but I cannot see how anyone could contend that Congress could or would do that. And even if they could, let me say, apart from the constitutionality of this matter, I think it would be very poor policy for Congress to try to do that, and a very poor policy for Congress to try to follow, to try to direct the administrative branch of our Government in every step that it takes.

Now, if Congress is going to say to the Executive "You will file a petition of some kind," we had better write the petition in detail and say, "File that petition," making it a ministerial act.

Senator ECTON. You would say, as far as this resolution is concerned, Senator, that the question involved was not the administration of a law, or it was the administration of a law instead of a determination of certain legal interpretations?

Senator MCFARLAND. Well, Senator, the mechanical filing of the petition is administrative. The advance determination as to whether there is a justiciable issue, is purely an executive function which requires the exercise of judgment on the part of the executive branch of our Government.

Now, once a petition has been filed—the question of whether to file it is executive—and then once it is filed, it becomes a judicial matter, and I want to talk about that a little bit later. But the part of the transaction which directs the filing is purely executive.

Of course, the final determination of the issue, naturally, is judicial, and there we do not want to infringe upon the judiciary, either. I want to say a few words about that.

Does that answer your question?

Senator ECTON. Well; yes and no.

Senator MCFARLAND. In what part "No"? I will try to make it plainer, if I can.

Senator ECTON. I wonder if you can have proper administration of a law until you have a proper legal interpretation of that law; and I also wonder if that is not a question that is primarily involved in this resolution?

Sentor MCFARLAND. Well, before you can have a legal interpretation you have got first to have a justiciable issue, you have got first to have a question as to whether there is a cause of action, Senator; and before a suit is filed, there has got to be a question on issue as to whether there is an actual controversy in the legal sense, something being done or threatened to be done, of which the courts will take jurisdiction.

Now, I will try to elaborate on that a little bit more later on, but the decision as to whether a suit should be filed is executive, and then the conducting of that suit is judicial.

The point that I am making is that Congress cannot tell the Attorney General how or when to institute a lawsuit—if they can tell him to file it, why, then they could tell him, "Now, you make this argument, and you take this position and so on and so on."

Now, if some right is infringed, as has been pointed out yesterday, in circumstances which make a justiciable issue, which make a question cognizable by a court, then anyone whose rights are so infringed can file an appropriate action. But the present is a question as to whether there is bare legal power or authority to have the Attorney General, to direct the Attorney General, to file the suit.

Senator ECTON. Your contention is, as I understand it, that so far there has been no action that would be a reason for a justiciable issue?

Senator MCFARLAND. That is correct, and the mere filing of the complaint would not make a justiciable issue, although that is, in a way, an indication at least that the complainant thinks there is such an issue. I would like to comment on that just a little more in detail.

Senator MILLIKIN. I may say the chairman, at least, is very much interested in this question. I do not know how far you are going into it in this statement, and I am not making any suggestions to either side, but if either side feels that it has not been completely covered, the committee I am sure would welcome supplemental memoranda on it.

Senator MCFARLAND. I think, Mr. Chairman, that I understand what the chairman wants.

Senator MILLIKIN. So far, Senator McFarland has made two contentions: One, that we cannot do it as a matter of constitutional right; and second, that we should not do it as a matter of policy.

The policy question is much easier than the constitutional question, and I repeat again that if, when this hearing closes, either side is not fully satisfied with the presentation, the committee would welcome supplemental memoranda.

Senator MCFARLAND. Let me point out one difficulty in this matter. It is very difficult to find a case on what we lawyers call "all fours," for this reason: Even though Congress does not have this right under the Constitution, what Attorney General would refuse to file a complaint, whether the direction to do so was constitutional or not? He is not going to get himself in bad with the Congress by saying, "Well I am not going to file a cause of action." He will just go ahead and file it, because the Congress has so much power over him in the way of appropriations for his Department and otherwise. I have an idea if I were Attorney General or if the chairman were Attorney General, and the Congress desired an action filed, why, even though we might not think that they had that authority to direct us to do it, we would go ahead and do it anyway.

I would figure, if Congress wanted it filed, I will go ahead and file it.

And though congressional direction to file suit is a very unusual procedure, I have found one other instance, I have heard of one other instance in which it was done; but there Congress said the Attorney General should file such suit "as in his judgment"—and they used those words—I could go into this topic later on; but for the moment I say only that the Attorney General certainly would hesitate a long time to question the authority of Congress to do this, even though he in his own mind felt—and I am sure any Attorney General would ques-

tion it—that they did not have the authority. He would go ahead and do it anyway.

Therefore, it is very difficult to find cases which are on all fours, but in this case of Marbury versus Madison, the classic of them all, the doctrine of keeping the duties of the departments separated is enunciated in such a way that I do not believe that we can get around it.

Now, this enables me to pass to another point which I desire to urge upon the committee. The decision in that case also enunciated the principle that Congress cannot add to or subtract from the original jurisdiction conferred by the Constitution upon the Supreme Court. Perhaps no principle of our law is more familiar than that proposition. It is equally as well settled, of course, by reason of the language of the Constitution itself, that the Supreme Court has original jurisdiction in controversies between the several States. But granting that the Court possesses jurisdiction of the parties, no action is maintainable unless there is a justiciable controversy. Others, in their statements, have presented the more technical features of this aspect of the case; I will for the moment content myself by the assertion that there is no such controversy as to the apportionment of the waters of the Colorado River, nor can there be even a remote threat of injury to California until such time as the Congress may have authorized some project which would result in the diversion of waters to an extent sufficient to impinge upon the quantities claimed by California. My purpose at the moment is to invite the committee's attention to a fundamental consideration of sound government, by posing a question: Is it warranted by law, and is it wise as a matter of policy, for the legislative branch either to attempt to determine the peculiarly legal question as to the existence of a justiciable controversy of which the judiciary must accept cognizance, or by fiat seek to create such a controversy? Can Congress say, "Let there be a justiciable controversy," and by merely so saying, thereby create one?

Let me say this, Mr. Chairman, that the mere passing of an act such as this carries with it the implication that in the judgment of Congress, there is a justiciable controversy.

Senator MILLIKIN. Could I interrupt there, Senator McFarland, to say that I have a note:

Under Secretary Chapman says the Secretary has a draft of a letter and report on his desk, but it did not reach him before he left for New York last night. Accordingly, it cannot be signed until he returns tomorrow morning.

Pardon the interruption.

Senator MCFARLAND. That is all right.

I was just saying, and that has been emphasized before, that the mere passing of such a resolution is a determination, at least by implication, by Congress that there is a justiciable issue, and I submit, as I will point out later on, that that is something that Congress should not do.

Senator MILLIKIN. Do you claim that it has no right to do it?

Senator MCFARLAND. Yes; I claim it has no right to do it. That goes back to the other proposition. It is a question for the Supreme Court to pass upon alone.

I turn now to the self-evident proposition that Congress has already placed an unequivocal construction upon the Colorado River compact and by the promulgation of the Boulder Canyon Project Act it has clearly expressed its views and intentions as to the division of waters

of the Colorado River as between the States of California, Nevada, and Arizona. Congress authorized the making of the Colorado River compact; in due course, it approved the same; it also construed the compact, and required California to agree to its rights and obligations thereunder.

The act by its own terms, section 4 (a), was to become effective upon either of two conditions. The first of these was ratification of the Colorado River compact within 6 months by all seven of the States affected. The second was ratification of the compact by six of the interested States, including California, and the irrevocable and unconditional enactment by the legislature of the latter State, for the benefit of Arizona and the five other States, of a statute which should provide—

> that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed four million four hundred 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 compact, such uses always to be subject to the terms of said compact.

California promptly enacted a statute—Act 1492, California Statutes, 1929, page 38—sometimes spoken of as the Self Limitation Act, the pertinent part of which is verbatim with the language just quoted from the Boulder Canyon Project Act.

Section 4 (a) of the Boulder Canyon Project Act also unequivocally voiced the permanent intention of the Congress to define and limit California's maximum rights. Having limited California to 4,400,000 acre-feet per annum of the 7,500,000 acre-feet apportioned by article III (a) of the Colorado River compact, as I have already shown, and having further limited California to half of any excess or surplus waters unapportioned by that compact, Congress further provided 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 anually apportioned to the lower basin by paragraph (a) of article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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 * * *.

The purpose of Congress is readily demonstrated by consideration of the foregoing factors. Congress clearly intended that of the 7,500,000 acre-feet of Colorado River water apportioned by article III (a) in the compact, Nevada is to receive 300,000; Arizona, 2,800,000; and California, 4,400,000. It was specifically provided, of course, that Arizona should receive, in addition to the foregoing waters, all of the waters of the Gila River, both because of the insertion in the compact of its article III (b), which was intended expressly to compensate Arizona for inclusion of the Gila in the Colorado River system—as elsewhere shown—and because of the specific authorization of sec-

tion 4 (a) of the Boulder Canyon Project Act of the agreement whereby Arizona is to receive all of the water of the Gila and its tributaries within Arizona boundaries. It is manifest from the language in the Boulder Canyon Project Act that Congress proposed to California the terms of a contract for the explicit benefit of Arizona, Nevada, and the other interested States.

As California may not have more than 4,400,000 acre-feet of the water apportioned by article III (a) of the compact, the balance is for Nevada and Arizona, and Congress has in terms indicated its intent that Nevada have 300,000 and Arizona not less than 2,800,000. The water involved in article III (b) of the compact not only is "apportioned" water but is in effect apportioned to Arizona for the reason shown. The Colorado River water which is in excess of or surplus to that apportioned by articles III (a) and III (b) of the compact is to be equally divided between California and Arizona.

The position of Congress with relation to interstate compacts is a vital one; and in this instance Congress has most tangibly manifested its interpretation and intention. Congress knew its purpose, and still knows its purpose. It does not need any other agency of Government to explain to Congress what Congress meant and what Congress continues to mean with respect to a matter peculiarly its own. Should Congress now shun its power, duty, and privilege to interpret and give effect to its own actions, and transfer these prerogatives to a separate branch of the Government, Congress would indeed relinquish a function which should be inalienable. Will the committee find that Congress has neither the wisdom nor the power to effectuate its own purpose?

In its printed memorandum in support of this resolution California has chosen to expound its views on the legislative history and interpretation of section 4 (a) of the Boulder Canyon Project Act by the device of quoting short extracts from the Congressional Record, reporting statements made on the floor of the Senate at the time the bill was under consideration; and California has attempted by citing the fragments so selected to prove that certain Senators understood the Colorado River compact to mean that the article III (b) water was "excess or surplus waters unapportioned by said compact," to which California would be entitled to one-half under the provisions of the then prospective act. However, the reading of the full text of the statute, and of the whole Record of the Senate debate, plentifully demonstrates that the contrary is true.

Take, for instance, the remarks reported on page 389, volume 70, of the Congressional Record of the Seventieth Congress, second session, where Mr. King and Mr. Phipps are quoted as asking the following questions, and Mr. Johnson as having made the following answer:

Mr. KING. Does California agree there shall be a limitation if there is a seven-State compact?

Mr. PHIPPS. If there is a seven-State compact, in the terms of this amendment, yes. May I ask the Senator from California if I am correct?

Mr. JOHNSON. My impression is that the amendment provides, first, for a seven-State compact, and, secondly, for a six-State compact, in which event the Legislature of the State of California pledges itself never to use a greater amount than 4,400,000 acre-feet.

Mr. Johnson's statement leaves no doubt but that he understood that California was to be required to limit itself to 4,400,000 acre-feet of the water apportioned to the lower basin.

At a later point on the same page of the Record, Mr. Phipps explained his opinion upon the limitation in the following language:

Mr. PHIPPS. I have always understood the principal bone of contention to be the division of the water. Now, by vote of the Senate, if it is carried into effect by concurrence of the House, that figure is fixed. The maximum to California would be 4,400,000 acre-feet. There is every reason to believe that would be acceptable to California.

In its memorandum California refers to a part of the colloquy appearing on page 459 of the same volume of the Record, a portion of which I will now repeat to refresh the memory of the committee.

Mr. KING. If I may have the attention of the Senator from California and the Senator from Colorado, I direct attention to line 5, page 3, of the amendment offered by the Senator from Colorado. Let me read back a few words: "plus not more than one-half of any excess or surplus waters unapportioned by said compact."

I was wondering if there might not be some uncertainty as to what surplus waters were therein referred to. I think it was the intention to refer to the surplus waters mentioned in paragraph (b) of article III of the compact, being the 1,000,000 acre-feet supposed to be unappropriated.

Mr. JOHNSON. No; that is not quite my understanding. It is by no means certain that there is any other, and it is by no means certain that there is the 1,000,000; but the language referred to any other waters.

Mr. KING. Speaking for myself, I have no objection; but I was under the impression that the purpose was to link it with paragraph (b) so as to be sure that California was to receive one-half of the 1,000,000 acre-feet.

Mr. JOHNSON. Not necessarily. This gives one-half of the unapportioned water, and I think it is a better way to leave the matter.

Mr. KING. If it is sufficiently certain to suit the Senators of the lower basin, I have no objection.

Mr. JOHNSON. I think it is.

Now when this last series of remarks are compared with those which I have just quoted from page 389, it is clear that Mr. Johnson knew that California was to be limited to the 4,400,000 acre-feet, and that the waters embraced by the article III (b) of the compact were not in the class of excess or surplus waters. If he had not so understood, he would not have answered the question by saying, "No, that is not quite my understanding. * * *" Rather, had he in fact thought that to be the case, he would have definitely stated that article III (b) waters were excess or surplus waters, and that California would be entitled to half thereof, as well as half of any other surplus waters. In my opinion, Mr. Johnson did not state that the III (b) water was in fact excess or surplus water, first, because he knew that such an interpretation was incorrect and, second, because he realized that such an interpretation would only create additional opposition to passage of the bill so greatly desired by California.

The printed memorandum likewise attempted to take an answer made by Senator Hayden on page 460 of the same volume of the Record, and from the answer to render an interpretation to the effect that Mr. Hayden lumped the III (b) waters in with any other excess or surplus or unapportioned water, and that he expressed the view that all such waters were subject to the same disposition. To clarify the situation, I now quote the question preceding the one quoted by California, all of Mr. Hayden's answer thereto, and the remainder of the

colloquy, through the complete pertinent statement made by him, of which only a portion is quoted in said memorandum:

Mr. KING. And that is provided in the compact, is it not?

Mr. HAYDEN. Yes; and the compact has been so interpreted. If the Senator from Utah is interested in an interpretation of the meaning of surplus unapportioned water, I might well read to him an answer to a question I addressed to Mr. Hoover shortly after the compact was written. I asked Mr. Hoover:

"What is the estimated quantity of water which constitutes the undivided surplus of the annual flow of the Colorado River and may the compact be construed to mean that no part of this surplus can be beneficially used or consumed in either the upper or the lower basins until 1963, so that the entire quantity above the apportionment must flow into Mexico, where it may be used for irrigation and thus create a prior right to water which the United States would be bound to recognize at the end of the 40-year period?"

Mr. Hoover's answer to that question was:

"The unapportioned surplus is estimated at from 4,000,000 to 6,000,000 acre-feet, but may be taken as approximately 5,000,000 acre-feet."

He referred to the unapportioned surplus in both basins.

"The right to the use of unapportioned or surplus water is not covered by the compact. The question cannot arise until all the waters apportioned are appropriated and used, and this will not be until after the lapse of a long period of time, perhaps 75 years. Assuming that each basin should reach the limit of its allotment and there should still be water unapportioned, in my opinion, such water could be taken and used in either basin under the ordinary rules governing appropriations, and such appropriations would doubtless receive formal recognition by the commission at the end of the 40-year period.

"There is certainly nothing in the compact which requires any water whatever to run unused to Mexico, nor which recognizes any Mexican rights, the only reference to that situation being the expression of the realization that some such right may perhaps in the future be established by treaty. As I understand the matter, the United States is not 'bound to recognize' any such rights of a foreign country unless based upon treaty stipulations."

So Mr. Hoover, who was the chairman of the commission which made the compact, expresses it as his opinion that surplus and unappropriated waters above the allocation in the compact are unaffected by the compact, and are subject to appropriation in any State. I think that is not only a very important interpretation of the compact, but it is a sane, logical, and legal conclusion.

Mr. KING. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. KING. Does the Senator interpret the compact to mean that if there is any unappropriated water in addition to the 1,000,000 acre-feet referred to in the compact, that that is subject to the same disposition or division as the 1,000,000 acre-feet?

Mr. HAYDEN. There is no question about it, in the light of the statement I have just read which was written to me in answer to a specific question which I propounded to Mr. Hoover. * * *

In the light of a more complete disclosure of the discussion, there seems to be no doubt about Mr. Hayden's understanding of the fact that the surplus to which he was making reference was a surplus of waters above and beyond that referred to in articles III (a) and III (b).

I quote again portions of Mr. Hoover's answer to Mr. Hayden's question as follows:

The question cannot arise until all the waters apportioned are appropriated and used, and this will not be until after the lapse of a long period of time, perhaps 75 years. Assuming that each basin should reach the limit of its allotment and there should still be water unapportioned, in my opinion, such water could be taken and used in either basin under the ordinary rules governing appropriations, and such appropriations would doubtless receive formal recognition by the commission at the end of the 40-year period.

Obviously, Mr. Hayden, in the course of responding to Mr. King's question, would not have been referring solely to the III (b) water,

for Mr. Hayden well knew that such water could be used by the lower basin States. It is therefore clear that in his response to Mr. King's question, Mr. Hayden doubtless referred to the division of waters which might be in excess of those mentioned in articles III (a) and III (b), which were clearly not thought by Mr. Hayden to be surplus, as was manifest by the perusal of the two answers made by him, taken together.

To clinch the proof upon this point, I likewise will quote a question propounded by Mr. King at the foot of the self-same page 460, and the answer made by Mr. Hayden at the top of page 461 of the volume in question:

Mr. KING. Does the Senator interpret the compact to mean that if there should be, for instance, 16,000,000 acre-feet of water in the river, and by any treaty negotiated between the two Governments Mexico should be allocated a 1,000,000 acre-feet, that that 1,000,000 acre-feet should be taken from the million surplus; that is, the 16,000,000 and not any part of the 15,000,000 be called upon to meet that payment?

Mr. HAYDEN. The compact, from a literal interpretation of its words, means that the upper basin and the lower basin shall meet that deficiency equally, regardless of how much water is apportioned to each basin.

In further answer to the question of the Senator from Utah, the compact states that any water must first be supplied to Mexico out of the surplus or unapportioned water; but if it is necessary to supply Mexico with any water out of that water which is apportioned in each basin—that is to say, the 7,500,000 acre-feet apportioned to the upper basin and the 8,500,000 acre-feet apportioned to the lower basin—then the upper basin is burdened with furnishing one-half of the water, and these words I think, should convince the Senator. * * *

There could scarcely be a clearer indication as to what Mr. Hayden understood to be excess or surplus waters, and waters unapportioned by the compact. Patently, Mr. Hayden knew that article III (a) of the compact apportioned 7,500,000 acre-feet, and that article III (b) apportioned an additional 1,000,000.

Again, as in the hearings on S. 1175, I wish to refer to the volume entitled "The Hoover Dam Contracts", and more particularly to page 395 thereof, where there appears a question propounded by Mr. Clarence C. Stetson to Mr. Hoover, as well as Mr. Hoover's reply, the question being in the following language:

Why is the basis of division changed from the "Colorado River system" to the "river at Lee Ferry" in paragraph (d) of article III, the period of time extended to 10 years and the number of acre-feet multiplied by 10?"

The answer is:

I do not think there is any change in the basis of division as the result of the difference in language in articles III (a) and III (b). The two mean the same thing. By reference to article II (f) it will be seen that Lee Ferry, referred to in III (d), is the determining point in the creation of the two basins specified in III (a).

The committee will recall that a California witness attempted to explain this answer away by speculating that it was a typographical error. However, the fact remains that the question and answer were placed in the Congressional Record by Mr. Hayden as far back as January 30, 1923 (vol. 64, 67th Cong.) and remained unchallenged through all the years of consideration of this subject.

I have hesitated to burden the record of this hearing with some of the statements made on the floor in the course of the lengthy debates attendant upon the passage of the Boulder Canyon Project Act. However, I think it beyond question that the clear intent of Congress may be ascertained by perusal of such statements in connection with the

language of the Boulder Canyon Project Act itself; and the necessary conclusion is that it was the intention of Congress to limit California to 4,400,000 acre-feet of the III (a) water, and that Congress understood III (b) water was "apportioned" and so voiced its interpretation in the explicit text of the statute itself, which also demonstrates that the excess and surplus waters mentioned in such statute are waters above and beyond the 8,500,000 acre-feet embraced in article III (a) and III (b), as was clearly pointed out by Mr. Hayden, as just shown.

Now, I would like to emphasize one thing which I have covered in my statement at this point, that as to the intention of those who had charge of the legislation, when you read the record as a whole it is made plain.

I would like to say that it is not necessary to go back and read any part of the Congressional Record to find the intent of Congress, because in my opinion the act itself, the Boulder Canyon Project Act itself, which outlined the California Limitation Act which was adopted, and the compact itself, are plain and understandable and show what the intent of Congress was.

For emphasis, I would like to read again one question and answer which shows that Senator Hayden, the author of this resolution, knew what this III (b) water was. I would like to emphasize again this statement. This is a question by Mr. King:

> Does the Senator interpret the compact to mean that if there should be, for instance, 16,000,000 acre-feet of water in the river, and by any treaty negotiated between the two Governments Mexico should be allocated a million acre-feet, that that million acre-feet should be taken from the million surplus; that is, the 16,000,000 and not any part of the 15,000,000 be called upon to meet that payment?
>
> Mr. HAYDEN. The compact, from a literal interpretation of its words, means that the upper basin and the lower basin shall meet that deficiency equally, regardless of how much water is apportioned to each basin.
>
> In further answer to the question of the Senator from Utah, the compact states that any water must first be supplied to Mexico out of the surplus or unapportioned water; but if it is necessary to supply Mexico with any water out of that water which is apportioned in each basin—that is to say, the 7,500,000 acre-feet apportioned to the upper basin and the 8,500,000 acre-feet apportioned to the lower basin—then the upper basin is burdened with furnishing one-half of the water, and these words, I think, should convince the Senator.* * *

I want to emphasize that "8,500,000 acre-feet apportioned to the lower basin," which showed that that was Senator Hayden's apinion of it.

I want to emphasize again, Senator, that I do not think that we have to go to the Congressional Record to find the intent, because it is perfectly plain by the act itself.

Now, that brings us to the next point that California raises here, as to the need for the water. Arizona does not admit that California's claim that she needs this water has any proper place in this hearing. Even if she did, such need alone would not give her any right to water which belongs to and is needed by Arizona. So California's argument of need really has no proper place in this hearing. However, inasmuch as she has made it, I will point out facts which demonstrate that this alleged need does not in fact exist.

While contemplating the argument which would seek to influence action by a count of noses, so to speak, there are at least two great factors to bear in mind. First, California's asserted needs are for the future, to permit her to grow; Arizona's need is now, not to grow and expand, but to maintain and buttress what our people now have

and are in jeopardy of losing. Second, Los Angeles and San Diego may continue to drink, and her present farmers to farm in the areas now supplied by the Colorado River, if only California does not insist upon placing into cultivation an additional 300,000 as yet undeveloped acres in the so-called Imperial east and Imperial west mesas, which she has testified she expects to irrigate with Colorado River water. California does not deny that if she refrains from this project, she will have the water she needs.

That was brought out in the hearings on S. 1175.

This is a topic set forth in considerable detail in the Land Classification and Development Report on the Imperial East Mesa, which has been submitted to the Commissioner of Reclamation by the regional director, Mr. E. A. Moritz. The soil surveys upon which this report is based were conducted cooperatively by California's own university and the United States Department of Agriculture. The report on the Imperial west mesa has not yet been completed. This is perhaps due to the circumstance that the lands of the west mesa, taken at their best, are no more than equal to those of the east mesa, and probably are considerably inferior. Even so, most of the west mesa could be irrigated only by pumping water to elevations ranging upward to 300 feet.

Of the 225,300 acres covered in the report above mentioned, only 35,900 acres, or about 16 percent, are classified as irrigable; and of this number of irrigable acres only 5,350 acres were classified as class II lands, the remaining 30,500 acres being classified as class III lands, the poorest class of irrigable lands. The balance of the lands on the east mesa, comprising 189,400 acres, were classified as nonirrigable lands, defined as follows:

> Lands that appear to be permanently nonagricultural under the practices of irrigation farming (p. 49 of the noted report).

However, even as to the lands classified as irrigable, the Bureau of Reclamation has not made its recommendations as to feasibility for irrigation. The irrigable lands are spotted over the mesa in such a manner that the cost of irrigation thereof, if not prohibitive, is so high as to render irrigation unfeasible in view of their inferior quality.

The point that I desire to repeat is, that even assuming the same percentage of irrigable lands on the west mesa as are on the east mesa—which is probably not a permissible assumption because the lands of the west mesa are not as good as those of the east mesa—there would be only about 12,000 irrigable acres on the west mesa. The result is that of the total area of some 300,000 acres on both mesas, more than 250,000 thereof are nonirrigable, whereas only 48,000 are susceptible of irrigation. The amount of water estimated by the noted report as required to irrigate the irrigable area is 12 to 15 acre-feet per acre. (See question E, p. IV of the report.)

Senator McFarland. This accentuates why California cannot and does not deny that if these 300,000 acres were not subjected to cultivation, there would be plenty of the water in question for use in that State. Even if only the 48,000 acres classified as irrigable were to be placed in cultivation, the exclusion of the 252,000 nonirrigable acres would eliminate all consideration of the sufficiency of the water supply to meet California's needs.

It is interesting to note that practically all of the lands of the east and west mesas are owned by the Federal Government. It follows that no private individual would be injured by the failure to place into cultivation such federally owned lands as are classified as nonirrigable.

I likewise noted in my final statement in the hearings on S. 1175 that the amount of Colorado River water wasting into the Salton Sea from Imperial Valley irrigation activities, namely, some 1,074,150 acre-feet, is almost enough to supply the entire central Arizona project. I request that there be admitted as evidence in this hearing the table which I submitted as exhibit A with my final statement at the earlier hearings on S. 1175, which table was furnished by the Bureau of Reclamation at Yuma, Ariz., and which shows the number of acre-feet of water flowing into the Salton Sea from the Imperial irrigation district and from the Imperial Valley in Mexico. I also request that the two photographs which I submitted, as exhibits B and C, with my final statement at such earlier hearings on S. 1175, be admitted in conjunction with my present statement as evidence in the present hearing.

Senator MILLIKIN. They will be incorporated in the record, and will you indicate to the reporter exactly what you want?

Senator MCFARLAND. I will do that.

(The exhibits are as follows:)

EXHIBIT A

Year	Imperial irrigation district		Imperial Valley in Mexico				Return flow to Salton Sea	
	Land irrigated	Water delivered	Land irrigated	Water delivered			From Mexico at boundary	Total including that from Mexico
				Pilot Knob	Hanlon Heading	Total		
	Acres	*Acre-feet*	*Acres*	*Acre-feet*	*Acre-feet*	*Acre-feet*		
1936	424,202	2,270,550	201,282	.....	870,268	870,268	.....	.....
1937	437,017	3,026,632	226,244	.....	878,086	878,086	.....	.....
1938	416,180	2,973,593	200,619	.....	794,403	794,403	.....	.....
1939	419,826	2,757,015	172,040	.....	774,581	774,581	.....	.....
1940	416,709	2,270,550 [1] 79,200	131,808	.....	856,397	856,397	.....	.....
1941	399,287	1,491,041 [1] 1,095,958	159,668	.....	768,737	768,737	.....	875,563
1942	382,179	255,019 [1] 2,394,503	175,706	.....	734,381	744,381	64,102	709,740
1943	379,947	[1] 2,345,900	200,000	.....	1,152,106	1,152,106	58,022	1,073,004
1944	384,256	[1] 2,451,860	205,716	398,044	710,213	1,108,257	40,298	1,085,102
1945	393,699	[1] 2,494,860	221,068	681,658	383,483	1,065,141	37,902	1,068,424
1946	405,646	[1] 2,717,530	242,059	1,022,444	232,858	1,255,302	42,050	1,116,200

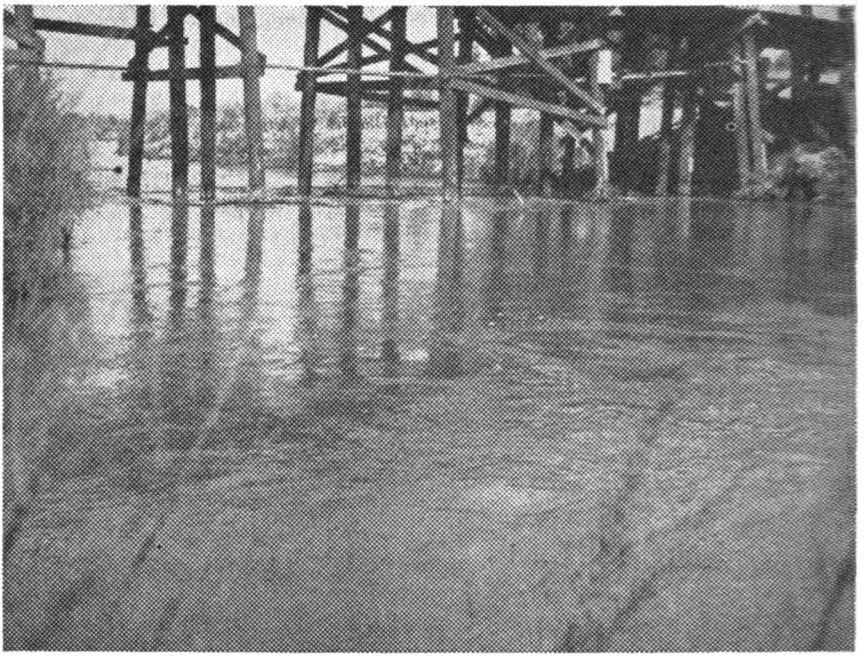
[1] U. S. Bureau of Reclamation figures for delivery past drop No. 1 through All-American Canal.

NOTE.—All figures are from Imperial irrigation district except as otherwise noted. Operation of All-American Canal began November 1940.

Senator MCFARLAND. Such photographs portray the New and Alamo Rivers carrying waste waters from irrigation activities in the Imperial Valley to the Salton Sea, such water having been originally diverted from the Colorado River.

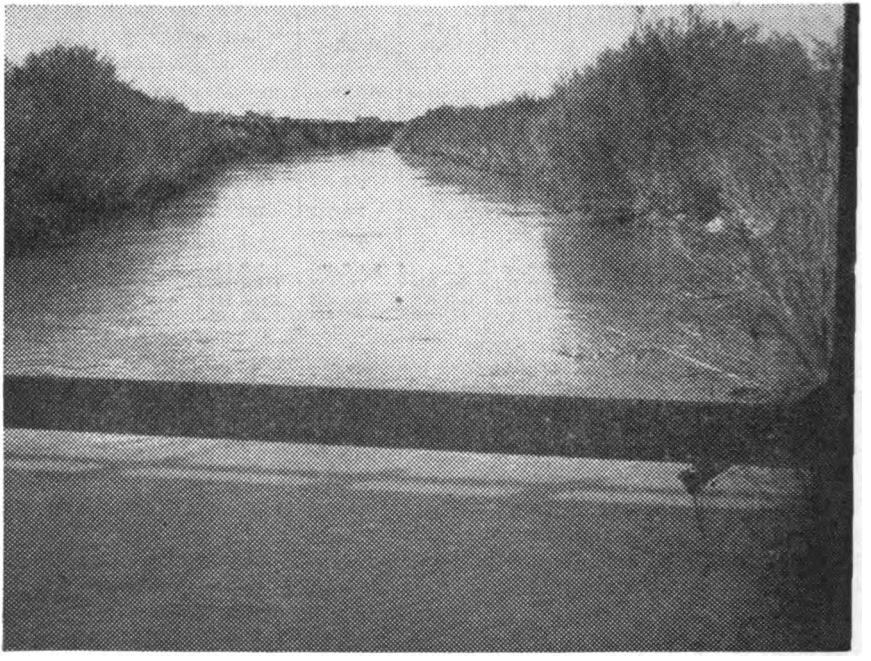
In conclusion, let me remind the committee that delay is to California's great advantage and to Arizona's great detriment. To whatever extent Congress fails to recognize and carry forward its own formulated policy as to the enjoyment of the waters of the Colorado

EXHIBIT B



New River carrying Imperial Valley waste water to Salton Sea, April 1947

EXHIBIT C



Alamo River carrying Imperial Valley waste water to Salton Sea, April 1947

River, whether by referring this or other issues to the courts, or otherwise, to that extent Congress plays California's game, wittingly or unwittingly, and to that extent withholds from Arizona its just share of waters desperately needed.

Now, Mr. Chairman, I would like to make one other little comment here, and I say this in all friendliness to our neighbors in California. I have a lot of friends in California, and I like the people of California, and I want to see Los Angeles and San Diego grow and our neighbors prosper. But, Mr. Chairman, I do not want to see any other State grow at the expense of our own State of Arizona, and I do not believe that Congress wants to see them grow at our expense.

As I have pointed out here, all they have to do is to fail to put in these 300,000 acres of new lands, and they have got all of the water they need.

They can talk about their own priorities of rights, but they can also reclassify them to meet their own needs. There is no question about that.

Now, what will happen if we have the delay? Through all of these years California has never asked any delay in the way of a suit when she wanted to develop a project for her own benefit. She has gone forward with Federal money and built her works and canals, and it is strange that now for the first time, when we come in and want to get a project authorized, that she would come in and object, and object at a time when, as the attorneys here for the upper basin States have well said, there is not a justiciable issue. And what would this do? It would delay the passing upon the authorization for projects needed by Arizona and other basin States, and it is their desire to delay. I do not question but what they will continue to oppose S. 1175 whether this act is passed or not—it would delay authorization for a period of years, and in the meantime what happens? Well, California, having already the facilities largely supplied at the expense of the Federal Government, could also supply her own money to a degree sufficient to put these waters to use. And once these waters are put to use, regardless of what the decision of the Supreme Court might be in the final outcome, the situation would then shape up in this way: that after all of this delay, California, who would then have this water and then be using it, would come back and say to Congress, "What are you going to do? Are you going to run the people out of California? Are you going to take away their drinking water? Are you going to run them out of their homes on the lands that have been developed?"

Now, Mr. Chairman, with all of the power that I have, I ask this committee to be fair to our State, to give our State the same consideration and fair consideration that they have given California, and not to block S. 1175 by approval of a resolution like this. Let us find out whether S. 1175 would pass anyway, and if Congress is not going to pass it for other reasons, what is the use of putting ourselves to an expensive lawsuit? What good would it do any of us?

And as has well been pointed out here, we can only determine this issue after S. 1175 has been passed, and California well knows this. They know that they can get into court then. I do not need to reiterate and emphasize that, if they can ever get in court. I doubt that they can ever get into court. But the settlement of the question as to whether they could would take a long period of time.

So I ask that this committee, and I ask that this Congress, having once construed the Boulder Canyon Project Act, their own act, and the compact, and having required adoption of the Limitation Act by California, that they go ahead and construe it again, in the name and spirit of fairness and not just because it is Arizona coming in, as Mrs. Bush said, the baby State, the State without all of the power that goes with a great State like California. And I am glad they are a great State. I will ask that the Congress be fair to the little State and to the State with less power.

I know that equitable treatment of Arizona and the other States was the basic intention, and it is my opinion that that was the intention of Congress in requiring the California Limitation Act, because it many times reiterated that if Congress did not do something to keep California from taking all of the water, California, being a powerful State, would go ahead and appropriate it all, and Arizona would get none. That was one of the fundamental reasons for the compact. The other States recognized the strength of the great State of California, that California would go ahead and take the water and then the others would be cut out. That was the reason for the compact.

So with this little plea, I leave the matter to the committee.

(Upon request, the chairman ordered that the following supplemental statement be included in the record:)

UNITED STATES SENATE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
June 12, 1948.

The SUBCOMMITTEE ON IRRIGATION AND RECLAMATION,
SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

GENTLEMEN: Lack of time and opportunity have prevented the earlier submission of the matters appearing on the enclosed supplemental statement, a circumstance which I greatly regret. However, if at all possible, I should be most grateful if the contents of such statement could be added to the text of the hearings on Senate Joint Resolution 145, which I understand have not yet been forwarded to the printer. If not, I request that this letter and such statement be added to the other matters constituting the record of such hearings, for consideration with the other materials constituting such record.

Copies of the supplemental statement have been furnished to the clerk of the committee for transmission to the representatives of the proponents of the resolution. Incidentally, these matters were presented by me in my testimony before the Judiciary Committee of the House; so they are already known to the proponents.

Yours very truly,

ERNEST W. MCFARLAND.

SUPPLEMENTAL STATEMENT OF ERNEST W. MCFARLAND, SENATOR FROM ARIZONA, IN OPPOSITION TO SENATE JOINT RESOLUTION 145

In the course of my testimony at the hearings upon Senate Joint Resolution 145 and at the earlier hearings on S. 1175, I had occasion to point out that if California would refrain from her proposed program to put under irrigation some 300,000 unimproved acres of the Imperial east and west mesas, there would be an abundance of Colorado River water available for her uses, present and future, well within the quantities to which she restricted herself in her Self-Limitation Act.

During the interim since that time, I have received a copy of the Economic Repayment Capacity Report for the Imperial east mesa, which report was prepared by the Department of the Interior and dated March 1948.

The report strongly etches and underlines the absolute unwisdom of an attempt to irrigate these areas. The following are self-explanatory excerpts from the summary and introduction prefacing such report:

"This report presents an analysis of the repayment capacity of lands classified as irrigable within seven potential development units on the Imperial east mesa division of the All-American Canal project in California. Irrigation water would be supplied from the Colorado River and delivered through the All-American and Coachella Canals. Of the 33,872 acres in the potential units, 32,440 acres are publicly owned lands withdrawn from entry. A complete discussion of the land classification of the area and anticipated farming problems is given in the East Mesa Land Classification and Development Report, dated April 1947. This report shows that 18,612 acres of the 33,872 acres in the potential units have been classified as irrigable; 3,782 acres are class 2 lands; and 14,830 acres class 3" (p. 1).

"Project development costs are estimated to average $615 an acre, which includes $390 for a distribution system and $225 for predeveloping the lands" (p. 1).

"On the basis of a budget analysis it has been shown that class 3 lands would not be able to pay for the cost of constructing a distribution system" (p. 2).

"However, the class 2 lands are so interspersed with class 3 and 6 lands that their separate development would be physically impractical. If all 80-acre tracts of predominantly class 2 and 3 lands were developed, it is estimated that less than 20 percent of the total construction and predevelopment cost would be recoverable from the settlers" (p. 2).

"This classification shows a total of 35,900 acres of class 2 and 3 lands, of which 18,612 acres are located within seven potential development areas. Most of the lands tentatively classified as irrigable are of marginal character and were designated as class 3. The class 2 and 3 lands not located within the development areas represent isolated tracts scattered throughout the mesa, which could not be served by a distribution system without the inclusion of a large acreage of class 6, nonirrigable land" (p. 3).

"It appears likely that the irrigation of any substantial acreage of the mesa lands would tend to enhance seriously the drainage difficulties in Imperial Valley unless additional drainage facilities are constructed" (p. 4).

"Most of the mesa is publicly owned land under reclamation withdrawal. Of the 33,872 acres in the potential units, 32,440 acres are publicly owned lands, withdrawn from entry. There are 1,219 acres of privately owned lands located within unit 1; 84 acres of State land; and 129 acres owned by the Southern Pacific Co." (p. 4).

As practically all of these lands are publicly owned and have been withdrawn by the Bureau of Reclamation, it is quite clear that the decision as to the development and irrigation of its own land is for the Federal Government, not California. What the decision should be is manifest; the report constitutes an answer and refutation of arguments for proceeding to develop and irrigate the mesas.

Assuming, however, that California would persist, in the face of these decidedly unfavorable factors, in a program to deliver Colorado River water to the 18,612 irrigable acres scattered among the seven areas potentially susceptible of development, and assuming a similar ratio of irrigable to nonirrigable acres on the West Mesa (which is a most optimistic assumption), she can deliver the required quantity of water and nevertheless remain with ease within her limitation of 4,400,000 acre-feet.

I turn now to a presentation of supplemental legal materials.

Research has not disclosed an example of judicial consideration of the nature and extent of the power of Congress to direct the Attorney General to file a particular type of lawsuit against specified parties.

In the few instances in the last 35 or 40 years in which Congress had directed the Attorney General to file a suit, they have generally involved the title to land. In these instances, Congress has invariably used language similar in wording or effect to that which appears in section 5 of the Northern Pacific Act (46 Stats. 41; act of June 25, 1929), the most recent instance of this sort of statute, wherein the Attorney General was directed to file such proceedings "as might in his judgment" be necessary to quiet title to various tracts of land and to achieve other general objectives. But even in this instance, you will note the Congress did not attempt to control the exercise of discretion by the Attorney General, and the subject matter of the litigation therein contemplated fell clearly wihin the class of "cases and controversies" (that is, justiciable issues) of which the courts have undisputed jurisdiction. The Attorney General in fact filed suit pursuant to the mandate of the statute and Congress shortly thereafter passed a special

statute permitting a direct appeal to the Supreme Court, for the purpose of expediting final solution (49 Stat. 1369; act of May 22, 1936). The circumstances appear in the case of *U. S.* v. *Northern Pacific Railway Co.* (311 U. S. 317, 85 L. Ed. 221), but no point was raised as to the power of Congress to direct the Attorney General to file suit. This has also been true of the other cases which I have examined.

The reason is obvious. No Attorney General, in anything other than a most extraordinary case, is likely to ignore a congressional order to file suit where suit is sustainable, or even when it is not. He could scarcely remain insensible to the power which Congress wields over him, through appropriations and otherwise, even if he were disposed to endure the uproar which would doubtless ensue if he failed to act as directed. These considerations make it quite clear why there is an absence of judicial discussion of the power of Congress to order the Attorney General to institute actions at law.

However, granting that the Attorney General would not resist or test the usurpation by Congress of a power not confided to it, would the Congress thereby be justified in the usurpation?

Let us suppose that the Attorney General were to refuse to obey the congressional behest; could he be compelled to comply? I should like to point out that the Supreme Court has upon numerous occasions considered its power to compel, by mandamus or other process, the performance of alleged duties by the head of an executive department. In these cases, the Court has clearly indicated its views as to the separate and independent powers and prerogatives of the three branches of Government, and in recognition thereof has repeatedly held that it will not compel the performance of duties involving either the exercise of discretion or the political powers inherent in another branch. (See *Reeside* v. *Walker*, 11 Howard 272; *U. S.* v. *Black*, 128 U. S. 40; *U. S.* v. *Boutwell*, 3 McArthur 172; *Kendall* v. *U. S.*, 12 Peters 524; and *U. S.* v. *Guthrie*, 17 Howard 284.)

In concluding this phase of the matter, I quote from the case of *O'Donoghue* v. *U. S.* (289 U. S. 516; 53 S. Ct. 740):

"The Constitution, in distributing the powers of government, created three distinct and separate departments—the legislative, the executive, and the judicial. This separation is not merely a matter of convenience or of governmental machanism—its objective is basic and vital (*Springer* v. *Government of Philippine Islands*, 277 U. S. 189, 201, 48 S. Ct. 480; 72 L. Ed. 845); namely, to preclude a commingling of these essentially different powers of government in the same hands. And this object is not the less apparent and controlling because there is to be found in the Constitution an occasional specific provision conferring upon a given department certain functions, which, by their nature, would otherwise fall within the general scope of the powers of another. Such exceptions serve rather to emphasize the general inviolate character of the principle.

"If it be important thus to separate the several departments of government and restrict them to the exercise of their appointed powers, it follows, as a logical corollary equally important, that each department should be kept completely independent of the others—independent in the sense not that they shall cooperate to the common end of carrying into effect the purposes of the Constitution, but in the sense that the actions of each shall never be controlled by, or subjected, directly or indirectly, to, the coercive influence of either of the other departments. James Wilson, one of the framers of the Constitution and a Justice of this Court, in one of his law lectures said that the independence of each department required that its proceeding 'should be free from the remotest influence, direct or indirect, of either of the other two powers' (Andrews, The Works of James Wilson (1896), vol. 1, p. 367). And the importance of such independence was similarly recognized by Mr. Justice Story when he said that in reference to each other neither of the departments 'ought to possess, directly or indirectly, an over-ruling influence in the administration of their respective powers' (1 Story on the Constitution (fourth edition), sec. 530)."

The facts of that case are not like those of the present, but the application of the rule is inescapable.

Other cases expounding this same philosophy of American Government include the following: *Hayburn's Case* (2 Dallas 409); *U. S.* v. *Ferreira* (13 Howard 40, at 56); *Gordon* v. *U. S.* (117 U. S. 697); *Muskrat* v. *U. S.* (219 U. S. 346); and *Kilbourne* v. *Thompson* (103 U. S. 168; 26 L. Ed. 377).

I desire to supplement another point which I have urged upon the committee. The decision in the case of *Marbury* v. *Madison* also enunciated the principle that Congress cannot add to or subtract from the original jurisdiction con-

ferred by the Constitution upon the Supreme Court. Although in the early days some doubt was entertained, perhaps no principle of our law is now more familiar than that proposition. (Note *U. S.* v. *Hudson*, 7 Cranch 32, 3 L. Ed. 259; *Ex parte Yerger*, 8 Wallace 85, 19 L. Ed. 332; *California* v. *Southern Pacific Co.*, 157 U. S. 229 at 261, 15 S. Ct. 591; *Muskrat* v. *U. S.*, 219 U. S. 346, 31 S. Ct. 250; *Stevenson* v. *Fain*, 195 U. S. 165, 255 S. Ct. 6; and *Ex parte Wisner*, 203 U. S. 449, 27 S. Ct. 150.)

It is equally as well settled, of course, by reason of the language of the Constitution itself, that the Supreme Court has original jurisdiction in controversies between the several States. But granting that the court possesses jurisdiction of the parties, no action is maintainable unless there is a justifiable controversy. The statements of other witnesses present the more technical features of this aspect of the case.

Other considerations point up another basic fallacy of the assertions that a justiciable controversy exists between the State of California and other States of the Colorado River Basin, particularly Arizona. The proponents do not say that the court may equitably apportion the waters of the Colorado River; nor do they say that the issues involve specific property or rights therein; nor do they say that there is an actual or even imminent threat of irreparable injury to property. They do say that the purpose is to submit various documents to the court, and to seek an interpretation thereof, so that the engineers may at a later date proceed with the actual division and use of the waters. Manifestly, the proponents are seeking an advisory opinion, asking for the interpretation of various written instruments.

In the case of *Coffman* v. *Breeze Corporations*, (323 U. S. 316 (October 1944)), which involved facts dissimilar to those now in question, the Supreme Court unequivocally voiced the following rule:

"The declaratory judgment procedure is available in the Federal courts only in cases involving an actual case or controversy * * *, and may not be made the medium for securing an advisory opinion in a controversy which has not arisen * * *."

In the case of *New York* v. *Illinois and Sanitary District of Chicago* (274 U. S. 488), the State of New York sought to enjoin the defendants from diverting immense quantities of water from Lake Michigan, among other things upon the theory that such diversion would interfere with or prevent the use of the waters of the Niagara and St. Lawrence Rivers by the plaintiff States and her citizens for the development of power. There was no showing that there was any present use of the waters for such purpose which was being or would be disturbed, nor that there was a definite project for so using them which was being or would be affected. The court there said:

"The suit is one for an injunction, a form of relief which must rest on an actual or presently threatened interference with the rights of another. Plainly no basis for such relief is disclosed in what is said about water power development. At best the paragraph does no more than present abstract questions respecting the right of the plaintiff State and her citizens to use the waters for such purposes in the indefinite future. We are not at liberty to consider abstract question (*New Jersey* v. *Sargent* (269 U. S. 328)."

The applicability of this language to the position presently taken by California does not require elaboration.

In the course of the decision in the case of *Ashwander et al.*, v. *Tennessee Valley Authority et al.* (297 U. S. 288), a case having no resemblance to the present issue as to factual aspects, the Court said, at page 324:

"The judicial power does not extend to the determination of abstract questions (*Muskrat* v. *United States*, 219 U. S. 346, 361; *Liberty Warehouse Co.* v. *Grannis*, 273 U. S. 70, 74; *Willing* v. *Chicago Auditorium Assn.*, 277 U. S. 274, 289; *Nashville, C. & St. L. Ry. Co.* v. *Wallace*, 288 U. S. 249, 262, 264). It was for this reason that the Court dismissed the bill of the State of New Jersey which sought to obtain a judicial declaration that in certain features the Federal Water Power Act exceeded the authority of the Congress and encroached upon that of the State (*New Jersey* v. *Sargent*, 269 U. S. 328). For the same reason, the State of New York, in her suit against the State of Illinois, failed in her effort to obtain a decision of abstract questions as to the possible effect of the diversion of water from Lake Michigan upon hypothetical water power developments in the indefinite future (*New York* v. *Illinois*, 274 U. S. 488). At the last term the Court held, in dismissing the bill of the United States against the State of West Virginia, that general allegations that the State challenged the claim of the United States that the rivers in question were navigable, and asserted

a right superior to that of the United States to license their use for power production, raised an issue 'too vague and ill-defined to admit of judicial determination' (*United States* v. *West Virginia*, 295 U. S. 463, 474). Claims based merely upon 'assumed potential invasions' of rights are not enough to warrant judicial intenvention (*Arizona* v. *California*, 283 U. S. 423, 462).

"The act of June 14, 1934, providing for declaratory judgments, does not attempt to change the essential requisites for the exercise of judicial power. By its terms, it applies to 'cases of actual controversy,' a phrase which must be taken to connote a controversy of a justiciable nature, thus excluding an advisory decree upon a hypothetical state of facts. (*See Nashville, C. & St. L. Ry. Co.* v. *Wallace, supra.*)"

It is hoped the foregoing will serve to fill out in more detail various points presented by me in my earlier statement, the major portion of the present being on elaboration of several matters made in response to the chairman's invitation.

Senator MILLIKIN. Are there any further witnesses on behalf of the opposition?

Mr. HOWELL. It was our understanding, Mr. Chairman, that Senator Johnson and Mr. Stone would both be here to make a statement in behalf of the Governor of Colorado, and they are not here yet, but would the committee indulge us for about 5 minutes?

Senator MILLIKIN. I suggest that we take a recess for 5 minutes.

Senator MCFARLAND. Before we take the recess, I do not know how busy Senator Hayden is now, but I think, in view of what the chairman has said, that he would probably like to come and personally say what I have said for him.

STATEMENT OF HON. JOHN R. MURDOCK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

Representative MURDOCK. Would it be permissible for the record to show that Congressman Murdock was present during most of the hearings and subscribed to the stand taken by Senator Hayden and Senator McFarland in this case?

Senator MILLIKIN. It is quite permissible, and let the record show that.

We will take a 5-minute recess.

(Short recess.)

Senator MILLIKIN. The committee will come to order.

Senator MCFARLAND. I talked to Senator Hayden, and he had thought that our part of the presentation would last longer, and intended to appear; and, if it would be agreeable, he would like to make a short statement at some mutually convenient time.

Senator MILLIKIN. We will take the Senator out of order.

Senator Johnson, we are very glad to have you here.

STATEMENT OF HON. EDWIN C. JOHNSON, A UNITED STATES SENATOR FROM THE STATE OF COLORADO

Senator JOHNSON. I am sorry to be late, Senator.

Senator O'MAHONEY. You are not late, Senator; we are just fast.

Senator JOHNSON. That is a little of that senatorial courtesy, which I appreciate a great deal.

What I would like to do, Mr. Chairman, if I may, is to read into the record a letter which was dictated to me over the telephone this morning from Governor Knous.

As most of you know, Governor Knous is one of Colorado's foremost attorneys, and he has just finished a 10-year term on the Colorado Supreme Court, and he has interested himself in irrigation litigation for a great many years. So his testimony on this subject ought to be very much in order.

If I may, I would like to read this letter into the record. This letter is addressed to Hon. Eugene D. Millikin, chairman of the Irrigation and Reclamation Subcommittee, Interior and Insular Affairs Committee of the United States Senate:

MY DEAR SENATOR MILLIKIN: This letter concerns Senate Joint Resolution 145, the McCarran resolution, hearings on which are now being conducted by your committee.

Colorado opposes the passage of this resolution. Witnesses on behalf of the State have appeared to express the reasons for such opposition. I need not repeat these reasons nor discuss them in detail.

Colorado is a signatory to the Colorado River compact. This compact was negotiated and ratified by the respective legislatures of seven States. It is an interstate agreement, apportioning the water of the Colorado River and setting forth certain terms and conditions under which the waters of this great river may be utilized for the welfare and future development of the area. The compact itself provides a means for amicable adjustment of controversies which may arise between two or more of the signatory States over the meaning or performance of any of the terms of the compact, but specifies that nothing in the compact shall be construed to limit or prevent any State from instituting or maintaining any action or proceeding, legal or equitable, for the performance of any right under the compact or the enforcement of any of its provisions. This is in accord with the legal aspects of enforcing any agreement by the parties bound by it.

An interstate compact, of course, assumes a broader phase, since it represents an agreement among sovereign States made with the consent of Congress.

If amicable adjustment of controversies by the parties to such an agreement cannot be consummated, it must be assumed that any State or States, in a proper case, and where a justiciable issue arises, may seek redress in the Supreme Court of the United States; and if it appears that the United States is an indispensable party to a suit in the Supreme Court, it would appear that the only clear and appropriate action of the Congress would be to consider, at the time such a suit is commenced, the granting of consent for the United States to be sued. This assumes, of course, that the United States would not voluntarily intervene in such litigation.

However, as the Governor of one of the Colorado River Basin States, I feel it appropriate to point out that a most novel and objectionable procedure for the initiation of litigation on the Colorado River is proposed by Senate Joint Resolution 145. This resolution proceeds on the basis that at the instance of two of the compacting States, the Congress shall become the instrumentality to force the other five States into litigation over their respective claims to Colorado River water; and furthermore, it has the effect of an attempt to control the discretion of an executive officer of the Government in the performance of his duties involving the question of the determination whether a justiciable issue over the Colorado River water exists.

Further, a fair construction of the resolution seems to mean that, if passed, it would have the effect of an attempt to limit and restrict the jurisdiction of the judiciary. That this cannot be done by legislative action is recognized by everyone.

It is the policy of Colorado to avoid litigation over interstate waters in every way possible. It is necessary to take such steps as may expedite the development in the upper basin of the Colorado River. To this end, compact negotiations are now under way among the States of the upper basin of the Colorado River. It is hoped to consummate this compact at an early date.

The attempts by two of the lower basin States, through the Congress, to force litigation upon all seven States of the Colorado River Basin, may well threaten the consummation of an upper Colorado River Basin compact at this time.

I trust and respectfully urge that your committee will recommend against the passage of Senate Joint Resolution 145.

Respectfully yours,

W. LEE KNOUS,
Governor of the State of Colorado.

I know Governor Knous would appreciate your courtesy in permitting this statement to be read into the record, as I appreciate it.

Senator MILLIKIN. We are very glad to have the Governor's message and to have your own viewpoint in the matter.

Senator JOHNSON. Thank you.

Senator MILLIKIN. Are there any further matters in behalf of the opponents?

Mr. HOWELL. That closes our opposition, Mr. Chairman.

Senator MILLIKIN. I have received a letter from Vail Pittman, Governor of Nevada, as follows, and the letter is dated May 10, 1948:

I wish to submit the following statement for inclusion in the record of the hearing on Senate Joint Resolution 145 now in progress. The statement is confirmatory of my telegram to you dated May 8, 1948, but amplifies it and contains some additional matter.

The telegram referred to has already been placed in the record.

I strongly favor enactment of the bill as a definite and final method of clearing up all disputed points relative to allocation of Colorado River water. I realize that the statement reaches you late, for which I apologize, and say in extenuation that the witnesses I had appointed to represent Nevada at the hearing, Attorney General Alan Bible and State engineer, Alfred Merritt Smith, are unable to leave the State just at this time. Mr. Bible has court proceedings that cannot be delayed, and Mr. Smith has the preparation of contracts for electric power for the operation of Basic Magnesium project at Henderson, Nev., which must be completed before the fifteenth instant.

Nevada is seriously concerned as to the effect of congressional action upon the promotion and development of projects in the other States in the lower basin, which may have undesirable repercussions upon Nevada's allotment of water and power.

In the absence of an effective allocation of water between the States of the lower basin, these States may rely upon their respective State water codes, and their rights as established by priority of beneficial use could result in depriving Nevada of a part of the water to which the State is entitled under the Colorado River compact and section 4 (a) of the Boulder Canyon Project Act. The amount of water Nevada would receive under this agreement (300,000 acre-feet), while very small compared with the proposed allocations to Arizona and California, is vitally important to the welfare of southern Nevada. The danger of loss of a portion of this water to Nevada is accentuated by the necessity of supplying water to the Republic of Mexico as required by the Mexican Water Treaty of 1945.

Nevada has a contract executed by the Secretary of the Interior under the Project Act for 17.6259 percent of all firm hydroelectric power produced at Hoover Dam. The necessity of conserving as much of this energy as possible is of the greatest importance to Nevada. The electric power is imperatively needed for present operation and development of natural resources in mining and irrigation, which are rapidly expanding, and for the operation of Basic Magnesium project which is now being acquired by Nevada from War Assets Administration where industries of great benefit to the State and to the national welfare are in operation; and others are negotiating for space and power.

Arizona seeks enactment of a bill (S. 1175) that contains features adverse to the interests of Nevada, including operation of a power plant at Bridge Canyon Dam above Lake Mead in a manner that would reduce power now available from Hoover Dam and increase its cost. The bill contemplates diversion of considerably more than a million acre-feet of water above Hoover Dam, reducing the amount of water now available for Hoover Dam power plant.

Nevada's past experience conclusively leads me to believe that a three-State compact or agreement cannot be reached and further discussions will prove futile. Our State for many years has spent much time and money in efforts to bring the

three-State compact into being, completely without results. At last Nevada discontinued negotiations and on March 30, 1942, contracted directly with the Bureau of Reclamation for 100,000 acre-feet of water from Lake Mead storage as water was urgently needed for the wartime Basic Magnesium project. Meantime, Arizona petitioned Secretary Ickes for a contract of withdrawal of up to 2,800,000 acre-feet from the main stream, that State's entire allotment less certain deductions and qualifications in the contract. This led Nevada to contract for an additional 200,000 acre-feet, the limit of our right under the authorized three-State contract. The right is only for withdrawal of stored water when it is available.

My kindest regards.

Sincerely yours,

VAIL PITTMAN, *Governor.*

A copy was sent to Mr. Northcutt Ely, Tower Building, Washington, D. C.

The Chair is informed that a statement from Senator Robertson, of Wyoming, will be submitted this afternoon, and it will be taken, if necessary, out of order.

Are the proponents prepared to move with their rebuttal?

Mr. SHAW. Mr. Chairman, we are fortunately, and due to the diligence and compression of the material by all parties, a day or so ahead of schedule, or a day and a half, I believe, as originally laid out. We are under some difficulty in presenting the concluding part of our showing owing to the mysterious absence of the report of the Secretary of the Interior. We would like to present our views as to the report of the Department of Justice in final form before the hearings close, but for very obvious reasons we hardly like to do that until we see what the Department of the Interior says and what, if any, suggestions, proposals, or whatever may be contained in the report.

If it is not an interference with the wishes of the committee, we would suggest that the matter go over until tomorrow morning, when we may see that report, we hope, and we will assure you that we will promptly conclude, and I think conclude in 1 day without difficulty. Our material would probably be better organized if we could do it by the use of the transcript rather than from our notes and memory.

Senator MILLIKIN. Is there any objection to going over until 10 tomorrow morning?

Mr. HOWELL. I do not know that I understood exactly what he meant when he said there would be no difficulty in concluding tomorrow. Do you mean both your rebuttal and ours, also?

Senator MILLIKIN. Each side has a half-day for rebuttal.

Mr. HOWELL. We will raise no objection.

Senator MILLIKIN. Then we will recess until 10 o'clock tomorrow morning.

(Whereupon, at 11:30 a. m., the hearing was recessed until 10 a. m., Thursday, May 13, 1948.)

COLORADO RIVER WATER RIGHTS

THURSDAY, MAY 13, 1948

UNITED STATES SENATE,
SUBCOMMITTEE ON IRRIGATION AND
RECLAMATION OF THE COMMITTEE
ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in room 224 of the Senate Office Building, Senator Eugene D. Millikin (chairman of the subcommittee) presiding.

Present: Senators Millikin, Ecton, Malone, O'Mahoney, Downey, and McFarland.

Senator MILLIKIN. The hearing will come to order, please.

We have Senator Hayden here.

STATEMENT OF HON. CARL HAYDEN, A UNITED STATES SENATOR FROM THE STATE OF ARIZONA

Senator HAYDEN. Mr. Chairman, there is an effort being made to adjourn this Congress in about 5 weeks, which requires the passage of all of the appropriation bills, so our committee has been very busy, and I have been unable to attend as much as I would like to do.

I have read the statement submitted by my colleague, Senator McFarland, and I endorse it completely. He is the legal member of our firm, and he speaks for it. The only thing I might contribute very briefly is a little bit of history of the adoption of the Boulder Canyon Project Act which might interest this committee. It was designed to make sure that the State of Arizona obtained no water out of the Colorado River until we had adopted the Colorado River compact. Senator Ashurst and I objected to that, that we thought it should provide for the irrigation of land in Arizona as well as California.

We also objected and were joined by Nevada in that the act provided for no revenue to the two States in lieu of taxes, because if the power plant had been built by private power, by a private power company, we would have obtained taxes.

The bill came up in the Senate toward the end of a long session of Congress, and it was made the unfinished business, but as the situation is now, the appropriation bills had the right-of-way, so Senator Ashurst and I had no difficulty at all in keeping the unfinished business and preventing a vote on it even though there was a cloture petition which failed to obtain two-thirds majority. It was then made the unfinished business in the December session exclusively, and we just debated it day by day.

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In an effort to work out some method whereby the bill might pass, Senator Pittman, of Nevada, made this suggestion to Senator Ashurst and I, that inasmuch as the State of California had obligated itself not to take out of the apportioned water more than 4,400,000 acre-feet, that left the remainder of the 7½ million acre-feet to be apportioned in the lower basin. He said, "Of course, Congress cannot divide water among States, but Congress can approve a compact among the States and indicate what the compact means." "Therefore," he said, "all of the water that Nevada wants is some 300,000 acre-feet," and we could put a provision in the bill looking to an interstate agreement in the lower basin and give the advance approval that would allocate to Nevada 300,000 acre-feet and Arizona 2,800,000 acre-feet.

That appeared entirely feasible to us, but there was one other feature. The reason why Arizona did not ratify the Colorado River compact in the first place was due to the efforts of Mr. George H. Maxwell, who you perhaps remember. Mr. Maxwell went down in Arizona and raised sand that the compact meant the ruin of the State. The majority of the people of Arizona live in the Gila Basin, and he asserted over and over again that under this compact, if there was a shortage of water, it would be necessary to turn water out of the Roosevelt Dam and other reservoirs and divide it with Mexico, and we had a lot of trouble about that.

In an effort to obtain what the compact meant, I addressed a long series of questions to Mr. Hoover, and I obtained his answers, and recommended to our legislature that they approve the compact, which they have failed to do by a very narrow margin of both houses, but they did not approve it due to the influence of Mr. Maxwell.

So, when we came to work out what should be done about the lower basin, I insisted that we should make the Gila Basin thing perfectly clear, and so you will remember that there is in the act that provision that the State of Arizona shall have the exclusive beneficial use of all of the waters of the Gila River within its boundaries, and that no part of it should be allocated to Mexico.

As I say, we continued to filibuster until we worked out that kind of an arrangement. It was entirely satisfactory to Senator Johnson and Senator Shortridge, of California, because their State was obligated to obtain so much water. So far as the Gila Basin was concerned, they agreed with us that it entered the Colorado River below any possible point of diversion into California, and, therefore, they had no interest in it, and on that basis we concluded that we would allow a vote on the bill, and it passed the Senate.

Senator MILLIKIN. Thank you very much, Senator.

Senator Malone is here.

STATEMENT OF HON. GEORGE W. MALONE, UNITED STATES SENATOR FROM THE STATE OF NEVADA

Senator MALONE. Mr. Chairman, I will make my statement brief since I am chairman of the Subcommittee on Flood Control, Rivers and Harbors, Dams, and Electric Power of the Public Works Committee and must return to that meeting.

Mr. Chairman, I intend to show, in support of Senate Joint Resolution 145 in which I joined, that no State of the seven States in the

Colorado River Basin, including my own State of Nevada, has a definite allocation of water under the existing conditions.

The Colorado River compact divides the water of the Colorado River system between the upper and lower basins. This compact was approved by six of the States of the basin in accordance with the provisions of the Boulder Dam Project Act before the construction of a dam could be started. I will present the evidence upon which I concluded that an agreement between the lower basin States on the division of water allocated to that basin is impossible. Therefore, the only logical remaining method would be through a court of competent jurisdiction.

The statement made by Senator Hayden, of Arizona, is a very fair outline of all of the history of the project that he has reviewed. I have not read the brief by Senator McFarland, but I assume it outlines all of those things which were done by the commissions and the Members of the Congress of the United States during the hectic days of 1927 to 1928 when the Boulder Dam project was finally passed and marked the first major development on the Colorado River system.

Many of the things, however, that we would probably each recall are subject to interpretation. Each State, at the time I first attended the Commission meetings early in 1927, had its own water and power setup, including their own engineers; and it soon became apparent that there was no way of getting anything done except to go along with the compact and amend the then Swing-Johnson bill to treat the interested States fairly in the division of the water and power benefits from the project. I, therefore, as secretary of the Colorado River Commission for Nevada, directed all of my efforts, with the power of the State of Nevada behind me, to that end.

Mr. Chairman, it will be found as you delve into this matter that, not only is it impossible to make new agreements, but the old agreements already made including the interpretation of the original Colorado River Compact will be questioned—and, no doubt, submitted to the Court many times in the future for interpretation.

At that time, I was State engineer of Nevada, engineer member of the Public Service Commission, and secretary of the Colorado River Commission. We found immediately that the original bill did not provide any benefits from the project for the States of Arizona and Nevada where the project was located, that it was simply a power development and water storage on the Colorado River for the sole benefit of California.

Mr. Chairman, it has been evident to me since the first water meeting I attended in Los Angeles, Calif., early in 1927, before I became a member of the Nevada-Colorado River Commission, that the lower basin States would never agree upon a division of the waters of the Colorado River.

The reason was perfectly obvious—there was more land than water—and that the limit of any State's development is the limit of that State's water supply.

I do not want to see any State injured through any action of the Federal Government—and certainly not by any action of mine. Therefore, since an agreement is very unlikely, an adjudication by a court of competent authority seemed the only way.

I want to mention in particular some men that were in this fight from the beginning. One was in your own State, Mr. Chairman—Mr.

Delph Carpenter. Mr. Carpenter wrote the Colorado River compact I was informed on the best of evidence at Santa Fe, N. Mex., in 1922, with Herbert Hoover as chairman of the Seven Basin States Organization. It was the first real organized attempt to develop the Colorado River through a division of the water through a compact signed by a representative of each State on November 24, 1922.

I have often chided Delph Carpenter about the compact, that no one could understand it, therefore he was probably going to get it adopted. I personally felt that as long as no State was discriminated against in the matter of water division and the benefits from the power development, which was the purpose of the nine amendments that I offered at that time, that we would get the first step in the development of the river. Then the rest would be growing pains; and I think, Mr. Chairman, that that is exactly where we are now. We anticipated these growing pains, and the next step must be taken just as carefully as the first step, which was the development at Boulder Dam, now known as Hoover Dam. Each step must be just as carefully worked out so that no State will be injured without its day in court.

In the beginning, the men on the committee included Senators McNary, of Oregon; Thomas, of Idaho; Johnson and Shortridge, of California; and Kendrick, of Wyoming; as well as Pittman and Oddie, from my own State of Nevada; Dill, of Washington; and Henry Ashurst, of Arizona, were on the then Irrigation and Reclamation Committee of the Senate (now the Committee on Interior and Insular Affairs). These men wanted to start the development of the Colorado River. Over in the House was Leatherwood, of Utah; Arentz, of Nevada; Morrow, of New Mexico; Lewis Douglas, of Arizona; and White, of Idaho. They are all men who have gone on other jobs or have since died, but they did do this initial job, and, Mr. Chairman, it was a good job. Senator Hayden is the only Member of the United States Senate who was a member of this body and this committee on January 20, 1928, when I first appeared before it on behalf of the Boulder Dam development.

There is one thing that I would like to clear up for the benefit of the committee, and I am sure that everyone knows it, if they would review the Colorado River compact. There are five States in the lower basin—not three—and, by the way, this Senate document to which I refer was prepared by me in 1927. It was then printed as a Senate document in 1928. It is called Senate Document No. 186, Seventieth Congress, second session. It is still used as a reference work by many of the commissions. I did not prepare it alone. The State engineers of the other six States in the basin assisted me in the work through acting as consultants, as well as the Bureau of Reclamation engineers.

Senator MILLIKIN. What is this document now that you are talking about, Senator?

Senator MALONE. Colorado River Development, Senate Document No. 186, Seventieth Congress, second session. On page 31 of that document you will find the definition of the upper and lower divisions and of the upper and lower basins. Much has been said about upper and lower basins and I think an explanation would be helpful. The Colorado River Basin is a seven-State affair, and the term "upper division" means the States of Colorado, New Mexico, Utah, and

Wyoming. The "lower division" means the States of Arizona, California, and Nevada. Lees Ferry is the dividing point between the divisions. [Reading:]

The term "upper basin"—

And this is where a misunderstanding exists—

means those parts of the States of Arizona, Colorado, and New Mexico and Utah and Wyoming—

You see, Utah and New Mexico come into the upper basin—

within and from which waters naturally drain into the Colorado River system above Lees Ferry.

The first is an arbitrary division and the next is a drainage division. The lower basin, then, instead of only meaning just the States of Arizona, California, and Nevada, 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 Lees Ferry. So, there are five States interested in the division of the waters of the lower basin, instead of only three States, which further complicates this situation and, as a matter of fact, the advance consent given by the United States Senate in the Boulder Dam project for a water division treaty could not be binding upon all of the States of the lower basin even if it had been agreed upon and ratified by the States of Arizona, California, and Nevada, since Utah and New Mexico were excluded.

International water obligations: We all are familiar with the compact; it is provided that out of that upper basin States, the 7½ million acre-feet and the lower basin States 7½ million acre-feet, and the additional 1,000,000 acre-feet come the international water obligations. They were determined by treaty as coming out of the waters of both basins equally, after certain surplus water allocated to the lower basin may be exhausted.

To pass the Swing-Johnson bill at that time it was necessary to have a six-State ratification paragraph put in it, because, as Carl Hayden has just said, Arizona did not until much later ratify the seven-State compact. There has never been, I want specifically to point out, a lower-basin agreement in accordance with the approval (advance) of the water division, in the Boulder Dam Project Act, found on page 9 of this Senate document. There was an advance approval by the United States Senate for the States of Arizona, California, and Nevada to enter into an agreement dividing the 7½ million acre-feet annually apportioned to the upper basin—paragraph (a) of article III of the Colorado River compact plus certain surplus water, but the States never agreed so the provision remained ineffective. [Reading:]

THE ADVANCE APPROVAL

* * * there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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 but if, as provided in paragraph (c) of article III of the

Colorado River compact, it shall become necessary to supply water to the United States of Mexico from waters over and above the quantities which are surplus as defined by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico by the lower basin, and (5) that the State of California shall and will further mutually agree with the States of Arizona and Nevada that none of said three States shall withhold water and none shall require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses, and (6) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact, and (7) said agreement to take effect upon the ratification of the Colorado River compact by Arizona, California, and Nevada.

I will call the chairman's attention to the fact that New Mexico and Utah are left out of this provision, and there never was such a compact entered into even by the States of Arizona, California, and Nevada, so naturally the provision in the act is null and void, since no action was ever taken by such States.

I will not read the remainder of the agreement but simply cite it for reference. I do not think it is necessary to put anything further in the record on that subject, since it has never been ratified, and is not effective.

I want to call attention further that the two basins are in the same situation, that is to say, while the water is divided between the upper and lower basins by the compact, and also the upper and lower divisions, that there has never been any division or allocation of the water between the lower basin States which include five States, and as between the upper basin States, which include four States, and until such a division is made by the consent of the States concerned, then it is my conclusion that no State, including my own State of Nevada, could say that it really had any specific amount of water.

On page 36 of this document, under an explanation by Delph E. Carpenter of Colorado, appears a review of the Colorado River compact. Delph Carpenter was well and favorably known among the old-timers, and perhaps not by the more recent participants because he has been practically paralyzed for the last 15 years. However, he was one of the most brilliant men that I ever had the opportunity of knowing. In his explanation or review of the Colorado River compact, he says that provision was made that all future controversy between two or more States of each group are specifically reserved for separate consideration and adjustment by separate commissions or by direct legislation, whenever such questions may arise, if they ever do. Also, appropriations of water are covered.

The West is very careful about anything that affects appropriations of water. Present perfected appropriations of water are not disturbed, but such rights take their water from the apportionment to the basin in which they are located. In other words, if California or Arizona and Nevada claimed that they had used water and it was theirs by appropriation, it would come out of the lower basin water and the upper basin States would not be affected.

On page 38, there is provision for future apportionment of water. In the "Disposition of the waters of the Colorado River under the Colorado River compact," by Delph E. Carpenter, as found on page 38 of the same document, we have this provision; it is a very learned

explanation of the entire document, but sufficient for this testimony I cite a paragraph on the first page:

> The Colorado River compact allocates 16,000,000 acre-feet to uses in the United States and sufficient for the international burden, whatever it may be, and then sets apart the unallocated surplus for future apportionment by the States after 40 years.

The 16,000,000 acre-feet adds up to 7½ million allocated to the upper basin, the four upper basin States, and 7½ million to the lower basin States, the five States that I mentioned, and not the three, and then 1,000,000 acre-feet in addition to the lower basin if it is available. If there is additional water, it would be called unallocated surplus and would not be under the compact apportioned until after 40 years.

> In other words, the compact specifically allocates 16,000,000 acre-feet plus the international burden, as designated burdens upon the whole supply of the river and then dedicates the unallocated surplus to future apportionment between all seven of the States. Of the 16,000,000 aggregate 7,500,000 plus 1,000,000 acre-feet per annum (beneficial consumptive use) is permanently allocated to the lower basin. These permanent allocations include all water necessary to supply all present appropriations, wherever the same may be and whether from the main stream or from the Green, the Gila, or any other tributary.

Now, Mr. Chairman, that is not my language. It is the language of the man who wrote the compact and whom I consider one of the most brilliant attorneys in the United States, certainly on water matters. That is his explanation of the compact, which he himself wrote and which the representatives of the seven States of the basin signed at that time, and which was later to become a highly controversial matter. Finally, the Boulder Dam Project Act was passed based on the approval of the six States of the basin, as already outlined.

Total water available in the entire basin for apportionment, out of which would come this unallocated surplus and the water for any international treaty, is estimated in the beginning on page 38 on the "Disposition of the waters of the Colorado under the Colorado River compact," by Delph E. Carpenter, the water is supplied, reading from his explanation:

> The river is supplied by its tributaries from the Green to the Gila. Without tributaries there would be no river.
>
> The water supply of the river consists of all water which of nature and undisturbed by works of man would pass Yuma, the point below the last tributary. It is impossible to tell the exact amount of this total supply in any year, owing to interference by diversions, but it has been estimated at from 20,000,000 to 24,000,000 acre-feet average.
>
> This aggregate natural water supply may be divided into (1) that part entering the river above Lees Ferry and contributed by those streams which drain the upper basin; and (2) that part entering the stream between Lees Ferry and Yuma and contributed by streams which drain the lower basin.

You see, he again emphasizes that basins mean drainage, and drainage above Lees Ferry is the upper basin and the lower basin means that area draining to the river below Lees Ferry. Divisions mean an arbitrary division of the four States above Lees Ferry and the three States below Lees Ferry.

Any subsidiary compact of the lower basin would be, according to Mr. Carpenter—

the water available to the lower basin, water there originating and Lees Ferry delivery, is to be used in the lower basin to care for the lower basin allocation, 8,500,000 acre-feet, and the entire international burden, unless there is a deficiency for international supply, in which case the waters allocated to each basin are to be called upon to the extent of one-half of the deficiency.

Mr. Carpenter says:

The States of the lower basin should enter into a subsidiary compact making (1) local allocation of the aggregate 8,500,000 acre-feet (out of the whole river supply) allocated to the lower basin by the compact; (2) provision for supplying the entire international burden, if, when, and for the amount by treaty determined; and (3) disposition of the unallocated surplus pending and subject to future allocation between the seven States. They should also make provision for temporary use of allocated water escaping from the upper basin, without prejudice to the rights of the upper basin.

That is the five lower basin States.

Mr. Chairman, in order to save the time of the committee, I also prepared—and it seems I have had a habit of preparing reports for reference over the past 20 years—what is called an Industrial Encyclopedia of the 11 Western States. That was edited and published in 1944; the data included in it, however, is up to 1943. I would like, in order to make available the included reference work on the Colorado River, to make a part of the record beginning in 1922, "November 24, Colorado River compact, executed at Santa Fe, N. Mex., Herbert C. Hoover, then Secretary of Commerce, acted as chairman of the seven Colorado River Basin States Conference." It enumerates from that date the Colorado River development events up until 1944.

Senator MILLIKIN. Will you make clear to the reporter exactly what you want put in there, and it wil be put in.

Senator MALONE. Yes, I will.

(The matter referred to is as follows:)

1922: November 24, Colorado River compact executed at Santa Fa, N. Mex.; Herbert C. Hoover, then Secretary of Commerce, acted as chairman of the seven Colorado River Basin States Conference.
1923: C. H. Birdseye and USGS party survey canyons.
1924: Weymouth report rendered in eight manuscript volumes.
1924: Second Boulder Dam bill (Swing-Johnson) introduced in Congress.
1924: Cosby report on Colorado River issued.
1925: The State of Nevada, by legislative act, March 18, 1925. approved the Colorado River six-State compact.
1925–26: December 21, third Swing-Johnson bill introduced in Congress, H. R. 6251. Identical bill S. 1868 was introduced by Senator Johnson in the Senate about this date. H. R. 6251 was replaced February 27, 1926. These two bills are referred to as the third Swing-Johnson bill.
1927: Special advisors made report to the Secretary of the Interior.
1927: Conference of lower division States—Arizona, California, and Nevada—at Los Angeles attended by the Colorado River commissions of the three States. (New Nevada Colorado River Commission.)
1927: Conference of Governors on Colorado River.
1928: Fourth Boulder Dam bill—"Boulder Canyon Project Act"—(Swing-Johnson bill) introduced in both Houses of Congress.
1928: January 20, George W. Malone, report and testimony before the Irrigation and Reclamation Committee of the United States Senate—title of the report, "Boulder Canyon Lower Colorado River Power and Water Set-up," Nevada Colorado River Commission. The report and the testimony recommended that nine amendments be made to the then pending Swing-Johnson bill.
1928: Senate Document No. 186, Colorado River development, December 11, Seventieth Congress, second session, by George W. Malone, State engineer of Nevada.
1928: The fourth Swing-Johnson bill was passed by the Senate December 14, by the House December 18, including eight of the nine amendments proposed by the Nevada Colorado River Commission, and approved and signed by President Coolidge December 21.

1929: The State of Utah signed the Colorado River compact.
1929: President Hoover issued proclamation declaring six-State ratification of Colorado River compact in effect and declaring Boulder Canyon Project Act effective this date, June 25, 1929.
1929: July 5, 1929, Nevada submitted bid for all of the power to be produced from Boulder Dam together with a use curve showing ultimate use for 483,000 horsepower for mining, agriculture, and electrochemical products to support the States' request for a "withdrawal provision" for power to use in the State. The withdrawal provision was later inserted in the power contracts and the bid was withdrawn.
1929–30: Biennial report—State engineer of Nevada—covering developments to date including legislation and amendments to the original Swing-Johnson bill.
1930: Contract signed by Secretary Wilbur with Metropolitan Water District of Southern California for delivery of water April 24. Contract signed by Secretary Wilbur with Metropolitan Water District of Southern California for electrical energy April 26, amended May 31, providing withdrawal of power by Arizona and Nevada to extent of 36 percent, in accordance with the amendments to the Swing-Johnson bill proposed by the Colorado River Commission of Nevada.
1930: Contract signed by Secretary Wilbur with city of Los Angeles and Southern California Edison Co. for electrical energy April 26, amended May 28, and Department of Water and Power of City of Los Angeles, made party to contract in addition to city of Los Angeles, providing for the withdrawal of power for use within the States of Arizona and Nevada in accordance with amendments to the Swing-Johnson bill finally known as the Boulder Canyon Project Act.
1930: Second deficiency appropriation bill appropriating $10,660,000 to start Boulder Dam work passed by House and Senate July 3.
1930: July 7, 1930, the Secretary of the Interior, Ray Lyman Wilbur, issued an official order to Dr. Elwood Mead, Commissioner of Reclamation to "start work on Boulder Dam today."
1930: Secretary Wilbur drives first spike starting railroad and construction of Boulder Dam at Las Vegas, Nev., September 17, and issues order that dam be called "Hoover Dam."
1931: $15,000,000 appropriated by Congress for construction of dam.
1931: Bureau of Reclamation opens bids for construction of Boulder Dam and powerhouse March 4 and awards contract to Six Companies, Inc., which starts work March 11.
1932: $23,000,000 appropriated for continuing construction of dam.
1932: The engineers divert the river, November 14.
1933: $46,000,000 appropriated for construction of dam.
1933: Secretary of the Interior, Harold L. Ickes, announced that the name of the dam would again be "Boulder Dam." Start concrete pouring in dam. Diversion tunnels, coffer dams, excavation for the dam completed.
1934: Penstock tunnels completed; installation of 30-foot diameter outlet pipes started.
1935: January—Conference of the seven States of the basin, Wyoming, Colorado, New Mexico, Utah, Nevada, Arizona, and California. The conference was held at Phoenix, Ariz., on a further division of water from the Colorado River. Arizona has never signed the seven-State compact and now wants to secure a contract for water.
1935: Complete pouring concrete in dam February and start storing water.
1935: February—Report of the Colorado River Commission of Nevada; "Including a study of proposed uses of power and water from Boulder Dam," 1927 to 1935.
1935: Boulder Dam starts to impound water in Lake Mead February 1.
1935: Last concrete placed in dam May 29.
1935: President Franklin D. Roosevelt dedicates the dam September 30.
1936: First generator goes into full operation October 22.
1936: Second generator goes into operation November 14.
1936: Third generator goes into operation December 28.
1937: Two more generators go into operation March 18 and August 16.
1938: Storage reaches 24,000,000 acre-feet, and Lake Mead stretches 115 miles upstream.
1938: Two more generators go into operation June 26 and August 31; total 7.
1939: Storage reaches 25,000,000 acre-feet, more than 8,000 billion gallons.
1939: Two more generators, June 19 and September 12; total 9. Installed capacity reaches 700,000 kilowatts, making Boulder's hydroelectric power plant the largest in the world.

1940: Boulder Canyon Adjustment Act, providing for the acceptance of $300,000 annually to each of the States of Arizona and Nevada in lieu of the 37½ percent provided for in the Boulder Canyon Project Act, and eliminating the periodical readjustment of the sale price of power.
1940: Three more generators ordered.
1940: All-American Canal placed in operation.
1940: Metropolitan Water District's Colorado River aqueduct successfully tested.
1941: One additional generator began operating in October.
1942: Two more generators began operating in August and December.
1942: Basic Magnesium, largest magnesium plant in the world, began taking power from Boulder Dam and water from Lake Mead.
1943: Rated capacity of power plant of 952,300 kilowatts operated at overload in June to produce more than 1,000,000 kilowatts.
1943: Basic Magnesium takes more than 100,000,000 kilowatt-hours in June.
1943: Industrial service report—11 Western States, August, by the Industrial West Foundation, George W. Malone, managing director.
1944: Additional generator scheduled for operation in October.

Senator MALONE. To make clear my next point and to show the highly controversial nature of the Boulder Dam legislation as introduced under the Swing-Johnson bill as early as 1923, and finally passed and called the Boulder Dam Project Act late in 1928, as explained by Senator Hayden, I would like to make a part of the record excerpts from the 1929–30 biennial report of the State engineer of Nevada. This simply shows the recommendations that were made for amendments to the pending Swing-Johnson bill and those accepted at the time, and has a direct bearing on the next point I am about to make, ending on page 87 and beginning on page 86.

Senator MILLIKIN. Again, you will make that clear to the reporter?

Senator MALONE. Yes.

(The matter referred to is as follows:)

The Boulder Dam Project Act as finally passed, including the power contracts, provides revenue for Arizona and Nevada in lieu of taxes and power to use for the development of the States. According to the Secretary of the Interior the revenue derived will amount to over $700,000 to each State annually after the completion of the project, and each State can withdraw, if, as, and when wanted, up to 117,000 firm horsepower of the electrical energy for use in the State, paying cost at the switchboard when so withdrawn. It is thought that the use of this power will increase the taxable wealth of the State several millions of dollars.

When the State (George W. Malone, State engineer and Colorado River commissioner) administration took over the work of the Colorado River Commission early in 1927 the then pending Swing-Johnson bill, proposing to construct the Boulder Dam on the Colorado River, did not provide any revenue for the States of Arizona and Nevada, nor power from the project to develop those States, but did provide that the All-American Canal in Imperial Valley, costing $38,500,000 should be paid for by revenue from the power from the project in addition to the dam and power plant. Provision was later made for the lands benefited to underwrite the cost of the project. (One of the amendments to the Swing-Johnson bill—later the Boulder Dam Project Act—offered by George W. Malone.)

By unanimous action of the Commission, early in 1927 it was agreed to make a thorough study of the Colorado River set-up, employing such assistance as found advisable, to determine the exact position the State should take relative to the pending legislation for the development of that river, so that our position would be found to be fair to all concerned and supported by the facts.

Accordingly, a conference was called for the three lower-basin States, Arizona, California, and Nevada, in San Francisco, November 19 to December 16, 1927, at which time the power angle of the undertaking was thoroughly reviewed and a report subsequently issued for Nevada (by the State engineer of Nevada, chairman of the conference) definitely determining the effect of such development and making certain definite (nine) recommendations for the protection of our State and to aid the legislation by gaining the support, insofar as possible, of the upper-basin States. The State engineer acted as chairman of that conference.

The conference, in addition to the members of the Colorado River Commission of the three lower States, included such outstanding power experts as H. W.

Crozier, consulting electrical engineer, employed by our Commission; E. S. Scattergood, chief engineer of the Los Angeles Bureau of Power and Light, and L. S. Ready, former engineer for the California Railroad Commission, employed by Los Angeles; Chas. Cragin, chief engineer of the Salt River project, Arizona, and B. F. Jacobsen, consulting engineer of Los Angeles, employed by Arizona.

From the results of this conference a report was made, January 1, 1928, by the Nevada-Colorado River Commission, known as the Boulder Canyon Lower Colorado River Power and Water Set-Up, and from the conclusions drawn from this report nine definite recommendations were made, all calculated to distribute the benefits from the project among the interested States in an equitable manner.

On January 20, 1928, the State engineer of Nevada, George W. Malone, appeared before the United States Senate Committee on Reclamation and Irrigation and presented a statement made up from this report, including the nine recommendations, viz:

1. That Nevada and Arizona should benefit from the proposed development, at least to the extent that she would benefit if developed by private capital, second only to Government payments and any reasonable reserve.

2. That the power be not sold as low as the repayments to the Government will permit, but should be sold at a competitive figure comparable with the cost of power available elsewhere for these markets.

3. That arrangements be made for the sale of the power so that fair offers may be had, and that legitimate bidders be not handicapped.

4. That suitable readjustment periods be arranged for the power charges per kilowatt-hour and also for the proper charges for other service rendered.

5. That proper charges be made for other service rendered flood control, silt control, irrigation water storage, and domestic water storage.

6. That the States shall have the right to withdraw, upon proper notice, certain blocks of power to be used within their own States.

7. That a board be arranged for, from the three lower States, to assist the Secretary of the Interior, or any agency supervising the sale of the power and other service rendered, in an advisory capacity to fix the proper charges per kilowatt-hour for power and proper charges for other service rendered.

8. That an attempt be made to equalize in some manner among the three States the benefits of reclamation financing.

9. That after the Government advancement is entirely repaid the benefits from this development accrue to the States.

The State engineer was then cross-examined at length by members of the Senate committee, which testimony appears in full in the hearings before the Committee on Irrigation and Reclamation, United States Senate, Seventieth Congress, first session, on S. 728 and S. 1274 (January 20, 1928).

Senate Document No. 186 (70th Cong., 1st sess.), Colorado River Development, containing 200 pages and 67 maps and illustrations was prepared by the Nevada State engineer to make available to our Senators and Congressmen complete information for use in the congressional fight. This report was subsequently printed by the Government as a Senate document and was widely distributed as the official document on the Colorado River development.

When the Swing-Johnson bill was finally reported out of the Senate committee, and including the amendments on the floor of the Senate, eight of the nine recommendations were included in the legislation as finally passed and called the Boulder Dam Project Act, and together with the power contracts made by the Secretary of the Interior in conformance with the act, as amended, provide:

1. That 37½ percent of all the money the project makes above the payments due the Government each year after construction is finished is to be paid to Arizona and Nevada. The Secretary of the Interior has announced that those payments will amount to over $700,000 per year to each of the States. (Would at this time, 1948, have amounted to more than $1,500,000 annually to each State if the 1940 adjustment act had not been passed.)

2. That the power be sold at a competitive price.

3. That the Federal Water Power Act be made a part of the act insofar as determining between conflicting bidders is concerned, so that any agency may bid for the power. (Priority to States and municipalities.)

4. That there shall be a readjustment of the charges for power after the first 15 years from the date of signing the contracts and every 10 years thereafter, either up or down, as the competitive price may indicate.

5. That a charge be made for domestic water in Los Angeles and other southern California cities. (No charge was included in the original act.)

6. That the States shall have the right to withdraw, upon certain notice, 18 percent or 117,000 firm horsepower each for use in the States (now approxi-

mately 140,000 kilowatts). This power can be withdrawn and turned back when not needed and withdrawn again as often as necessary by giving such notice and paying the cost at the switchboard when used.

7. That an advisory board to assist the Secretary in the construction, management, and operation of the project, consisting of one duly authorized commissioner from each of the seven States, may act in an advisory capacity with the Secretary of the Interior. (George W. Malone was appointed by the Secretary for the State of Nevada.)

8. That the All-American Canal, costing $38,500,000, shall be underwritten by the lands benefited and not be paid for by the power from the dam (this increases the revenue of the States and investigations shall be made by the Government in Arizona, Nevada, and the upper basin States to determine feasible irrigation projects for development.)

Recommendation No. 9, providing for turning the project over to the States when the cost to the Government has been repaid was not included in the act. It was said that while that policy had been adopted in the case of irrigation districts, it would be 50 years before the Government would be repaid, and during that time a general policy toward this type of project would be adopted.

In connection with the Nevada amendments, we quote in part from a dispatch from Washington over Universal Service, which appeared in the Los Angeles Examiner of September 19, 1930, viz:

"The outstanding features of these amendments were the provision for revenue for Arizona and Nevada from the project in lieu of taxes after its completion, and the privilege of withdrawing power at cost at the switchboard for use in those States when needed. The original Swing-Johnson bill did not provide either revenue or power for the States of Arizona and Nevada, wherein the project is located, and this fact formed the basis for objection to the project.

"At a hearing of the United States Senate Committee on Reclamation and Irrigation held in Washington, January 20, 1928, George W. Malone, Secretary of the Nevada-Colorado River Commission, made nine recommendations for changes in the bill as offered, all those recommendations being calculated to distribute the benefits of the project among the interested States.

"Eight of these recommendations were included in the Boulder Dam Project Act as finally passed and, as a result, Arizona and Nevada each will receive, according to the Secretary of the Interior, a revenue of over $700,000 annually after the project is completed. In addition, through these amendments, Arizona, and Nevada will be allowed to withdraw such amounts of power as they may need within their States up to 117,000 firm horsepower, paying cost at the switchboard for its use."

Senator MALONE. Before I make my next point, and the last one, there was what was called the Boulder Canyon Adjustment Act of 1940, with which I think the chairman is familiar, since it was agreed to by the seven States. To save the time of the committee, I would like to have the explanation of that amendment, which it really was, an amendment to the Boulder Dam Project Act, called the Boulder Canyon Adjustment Act of 1940, incorporated in the record, beginning with the heading "Precedent" on page 88, and ending on page 90, as marked.

Senator MILLIKIN. Do you want the tables in there?

Senator MALONE. No, Mr. Chairman, they simply outline the payment over the years. They would not be a part of it.

(The material referred to is as follows:)

Precedent

The precedent for the "revenue in lieu of taxes" from a Federal power development within a State was founded in the long-adopted principle in the revenue from the sale of public lands, and from the oil and gas leases located on the public lands, providing for 37½ percent of such revenue to be paid direct to the State in which such lands are located, on the theory that where such lands are held by the Federal Government the State cannot levy taxes but is entitled to a proportion of any income in lieu thereof. The Boulder Canyon Project Act, in section 4, paragraph (b) of the original act, provided for 37½ percent to be paid to the States of Arizona and Nevada wherein the project is located.

In order to insure adequate provision for the States it was further provided in section 5, paragraph (a), of the act that "Contracts made pursuant to subdivision (a) of this section shall be made with a view of obtaining reasonable returns and shall contain provisions whereby at the end of 15 years from the date of their execution and every 10 years thereafter, there shall be readjustment of the contract, upon the demand of either party thereto, either upward or downward as to price, as the Secretary of the Interior may find to be justified by competitive conditions at distributing points or competitive centers * * *.

The above provisions of the original act, approved December 21, 1928, provided the foundation for the Boulder Canyon Adjustment Act of 1940, which was negotiated by the seven Colorado River Basin States and approved by the States of Arizona and Nevada, paying $300,000 annually to each of the States of Arizona and Nevada in lieu of the 37½ percent provided for in the original act.

Table No. 10 prepared annually by the Bureau of Reclamation in determining the rates to be charged for power from the Boulder Canyon project for the ensuing year applies to the fiscal year 1943–44 and shows at a glance the expected number of kilowatt-hours of firm and secondary energy for sale from 1943 to 1987, inclusive, and the actual sales for the years 1937–42 (table No. 10, p. 88 of sec. VIII–A, power section of the Industrial Encyclopedia, published in 1944).

It shows the price per kilowatt-hour (1.190 mills for firm and 0.357 for secondary power) necessary for both firm and secondary energy to provide the annual operation and maintenance, amortization payments to the Government, and the $300,000 to each of the States of Arizona and Nevada agreed upon through the Boulder Canyon Adjustment Act.

At the original price per kilowatt-hour agreed upon in contracts for the power under the original Boulder Canyon Project Act passed in 1928, 1.63 mills for firm power and 0.50 for secondary, the return for the fiscal year 1943–44 would have been increased by approximately $2,000,000, 37½ percent of which—or approximately $800,000—would have been added to the $600,000 annual payments to the States of Arizona and Nevada, agreed to under the Boulder Canyon Adjustment Act, making a total to the two States of $1,400,000 or $700,000 each.

The 1.63 mills per kilowatt-hour for firm power established in the original contracts was based on the availability of oil at that time to the "distributing points or competitive centers" at $0.75 to $0.80 per barrel. The price of such oils is now quoted (1944) at $1.10 per barrel, which would indicate an upward adjustment of the price per kilowatt-hour in 1945 at the end of the 10-year period under the original Boulder Canyon Project Act. However, since the Adjustment Act has been accepted no such additional revenue can now be secured. (The price of oil is now approximately $2 per barrel.)

TABLE 11.—*Comparative revenue to the States of Arizona and Nevada under the original, and under the adjusted Boulder Canyon Project Act*

Price per barrel of oil	$0.80	$1.10	$1.35
Assumption kilowatt-hours per barrel	500	500	500
Annual revenue to Arizona and Nevada under 1928 Boulder Canyon Project Act and power contracts	$1,400,000	$2,345,000	$3,133,000
Annual revenue to Arizona and Nevada under 1940 Adjustment Act [1]	$600,000	$600,000	$600,000

[1] $600,000 annual payments in lieu of taxes accepted by the States of Arizona and Nevada in place of the more than $3,000,000 annual revenue provided under the original Boulder Canyon Project Act.

Source: Bureau of Reclamation.

ADJUSTMENT ACT

The principal items of the Boulder Canyon Project Act pertaining to the generation and sale of electric power have been, to a large extent, revised under the Boulder Canyon Project Adjustment Act of 1940.

One of the principal revisions of the Boulder Dam Project Act under the "Boulder Canyon Project Adjustment Act of 1940" referred to above was the acceptance by the States of Arizona and Nevada of a definite annual payment of $300,000 each, in place of the 18¾ percent as provided under the Boulder Canyon Project Act passed in December 1928, which, according to the Bureau of Reclamation, would have paid to the two States over the 50-year period $62,468,000, or an average of $624,680 to each State annually. This lesser amount was accepted presumably on the theory that the oil and gas used to generate the power "at

distributing points or competitive centers" would cost less in 1945, the date of the first "readjustment of the contract," than when the contract was first made.

The Boulder Canyon Readjustment Act authorized and directed the Secretary of the Interior to promulgate "charges on the basis of computation thereof for energy generated at Boulder Dam" during the period from June 1937 to May 31, 1987. This, in addition to other net revenues, was to be adequate for the following purposes:

1. To meet the cost of operation and maintenance and replacement.
2. To provide $500,000 annually for additional development of the Colorado River.
3. To provide $300,000 annually each for Arizona and Nevada.
4. To repay the Treasury with interest at 3 percent loans for the construction of the project, exclusive of the $25,000,000 allocation to flood-control payment, which is to be deferred until the end of the 50-year period, subject to such action as Congress might then determine.

The cost of generating equipment is to be repaid with interest at 3 percent within 50 years from the installation date. On May 29, 1941, the rate for firm power was reduced from 1.63 to 1.163 mills, and the rate for secondary power was reduced from 0.5 to 0.34 mills.

These rates are subject to adjustment from time to time as conditions warrant.

Another item of importance in the Adjustment Act is provision whereby the Government may arrange for an exchange of power to the metropolitan water district from the Parker and Davis Dams in place of the Boulder Dam power allotted it. This provision makes possible an over-all efficient operation of the plant in Black Canyon and the near-by downstream plants. The city of Los Angeles and the Southern California Edison Co. are established as United States operating agents for the Boulder power plant.

Electric energy allocation

The basic firm energy has been allocated as follows: 17.6259 percent each to Arizona and Nevada; 35.2517 percent to the Metropolitan Water District of Southern California for pumping water through its Colorado River aqueduct; 17.5554 percent to the city of Los Angeles; a total of 4.0095 percent to Burbank, Glendale, and Pasadena; 7.0503 percent to the Southern California Edison Co.; and 0.8813 percent to the California Electric Power Co. Energy allocated to, but not used, by Arizona and Nevada, and subject to withdrawal by them upon giving proper notice, has for the present been assigned to other users as follows: 55 percent to the city of Los Angeles; 40 percent to the Southern California Edison Co.; and 5 percent to the California Electric Power Co. The California Pacific Utilities Co. of California has contracted for a maximum of 20,000,000 kilowatt-hours per year and the Citizens Utility Co. of Kingman, Ariz., has contracted for a maximum of 50,000,000 kilowatt-hours per year of the present unused portion of the metropolitan water district's power allotment. These contracts run until 1954, at which time the metropolitan water district may need its full allotment.

HISTORICAL

Boulder Dam, officially named Hoover Dam by the then Secretary of the Interior Ray Lyman Wilbur, and changed back to Boulder Dam again by Secretary of the Interior Harold L. Ickes when he took office in 1933 (and changed again to Hoover Dam by Congress last year), was the first of the federally financed, large, multiple-purpose projects to be authorized by Congress and constructed by the Government in the 11 Western States, and the only one in the entire United States on which the cost was completely underwritten before construction was begun.

The Boulder Canyon Project Act was passed by the United States Senate on December 14, 1928, by the House on December 18, and signed by President Calvin Coolidge on December 21, and made effective through proclamation by Herbert Hoover in June 1929. It, together with the contracts for the use of the power provided for in the act, definitely set the precedent for a State in which a project is located to receive a cash benefit in lieu of taxes, and for withdrawal of power to be used within the State when and if needed, even though such power might be used elsewhere in the meantime.

(The above review traces the history of the Colorado River and its development in some detail, together with its effect upon that growth of the Southwest and the 11 Western States, from the date of the discovery of the region by Francisco de Ullao in 1539 to the use of Boulder Dam by the Basis Magnesium Co.

of more than 100,000,000 kilowatt-hours from the completed Boulder Dam in June of 1943.)

Senator MALONE. One of these amendments—and I will not try to explain all of them because they are a matter of history and ready reference—but they all were directed toward the division of the power and the revenue features of Boulder Dam, now known as Hoover Dam, between Arizona, California, and Nevada. The dam is located between Arizona and Nevada, and the contracts were largely made for the sale of power in California. There was no development at all near the dam then available in either Arizona or Nevada.

In lieu of a direct sale of power to the States of Arizona and Nevada, the two States were given a withdrawal privilege to secure 36 percent of such power if, as, and when needed.

Mr. Chairman, we were laboring and sweating blood over the construction of Boulder (Hoover) Dam, just like they are doing now on the water division. It was important to each of the States to start the river development just as it is now very important to each of the States that a division of the water be made. If a division by compact is impossible, then the only recourse is to a judicial body. That is the reason that I joined in the resolution, Senate Joint Resolution 145.

In the original Swing-Johnson bill was included the All-American Canal. For 5 years, every time Boulder Dam project was mentioned the All-American Canal was a part of it. I came into the picture new and fresh in early 1927, and was chairman of the Lower Basin States Power Conference for several months. We met 40 days in San Francisco at one time and debated the entire problem in a very friendly conference, but no actual agreement came out of it. You will understand that there were just too many claims.

That All-American Canal always bothered me. I prepared amendments to the bill which were offered by Senators Pittman, Oddie, and others, both in committee, and on the floor of the Senate. In the debate in the committee—Senator Johnson was in his prime at that time, and everyone admits that, whether they agreed with Senator Johnson or not, he was a fighter. He said to me in cross-examination, "We would be glad to give Nevada and Arizona money in lieu of taxes if there were such an amount of money available, but there is no such amount."

I said, "Senator"—which is all a matter of evidence at that time, I think January 20, 1948—"what about the All-American Canal? It has no more to do with the Boulder Dam project than any other reclamation project. Why pay for it out of Boulder Dam power? In our State when we want a reclamation project, we borrow the money from the Government, build the project, and repay the Government over a period of years." That is exactly what the committee did. They took the All-American Canal out of the picture, which left the $37,500,000; then I went to explain that there would be no ditches to clean in Imperial Valley once the river cleared up and washed the silt out of the river so that the half million dollars a year expended in cleaning the ditches would be unnecessary, and that will be available money.

Then, $1,000,000 per year was being expended in rebuilding levees along the lower Colorado, because with 150,000 second-feet flow the

valley (Imperial) was endangered, but with the Boulder Dam storage project holding the flow to 40,000 second-feet the 1.5 million or at least a large part of such expenditure would be saved. So, as a result, they gave us—Arizona and Nevada—37½ percent of all the money the project made above the payments due the Government each year when amortization payments should start. The Secretary of the Interior announced that those payments amount to $700,000 per year to each State.

In the Adjustment Act, Arizona and Nevada accepted $300,000 a year in lieu of the $700,000 per year to each State and then went on to make other adjustments to which all seven States agreed. The revenue payments being based upon the cost of oil for steam power—the payments to each State would have been more than 1½ million per year at this time if the original act had not been amended. I recommended that such an attempt be made to equalize in some manner among the three States the benefits of reclamation and financing. What they actually did was to require the All-American Canal, costing $38,000,000, to be underwritten by the lands benefited in Imperial Valley. I note that this Readjustment Act also increased the revenue of the upper basin States, and provided that an investigation shall be made by the Government in Arizona and Nevada and the upper basin States to determine feasible agricultural projects for development. No projects have ever been paid for out of power or are being paid for out of power due to that amendment which I suggested to the then Senate Reclamation and Irrigation Committee on January 20, 1927.

In conclusion, Mr. Chairman, I simply want to say that I am very desirous of seeing fair play, not only for California and Arizona, but for my own State of Nevada. The 300,000 acre-feet of water that we are supposed to have allocated to our State was always simply taken for granted since it was not very much water, and therefore, no one ever paid it much attention, but we do not at this time have any water allocated to the State of Nevada through agreement by the lower basin States, and neither does California or Arizona under the compact; and since there has been no agreement between the lower basin States, either under the provisions of the Boulder Dam Project Act or otherwise, which I want to emphasize again includes two States that have not been mentioned, New Mexico and Utah, then it is wide open, except for the appropriations that are mentioned by Delph Carpenter, original appropriations already put to use, which would come out of the basin where the State is located.

I want to say again that all of these men that were in the fight—and I remember them all kindly: Delph is paralyzed and only his wife can understand him when he tries to talk; Mr. Scattergood, one of the finest engineers that I ever saw; and Bill Matthews, an attorney for Los Angeles, who is kindly remembered, and many others that I am unable at the moment to name—all contributed their share as they went through. They were fighting for their State, but ready to concede something here and there to make the compact work and to start the river development.

Senator MILLIKIN. I want to get this very clear. Does not Nevada claim the right to 300,000 acre-feet of water?

Senator MALONE. We do claim it, but it has never been a part of any agreement. There have been conferences over a long period of time. I must have attended 30 or 40 such conferences during the

8½ years I was State engineer of Nevada and Colorado River commissioner. I should say one such conference was held for several weeks in your city of Denver, but no agreement was ever reached.

Senator MILLIKIN. Let me pursue the matter a little further. Does not Nevada at this time claim the right to 300,000 acre-feet?

Senator MALONE. A claim is all it is. There is no right, and nothing could ever be attached as a right, because there has been no agreement between the States.

Senator MILLIKIN. As of this time, Nevada has no fixed right of any kind to water out of Colorado River?

Senator MALONE. No; and no other State has. Therefore, this matter is very complicated, and it is a matter then of interpretation of the compact, and even Delph Carpenter's learned discussion would have no bearing except to enlighten some of us in our conferences and in our discussions with each other as to what the author of the compact had in mind, which might or might not affect the Court's interpretation.

Senator MILLIKIN. May I ask this, Senator: You raised a very interesting angle in this business. Do your views coincide with those of the senior Senator from Nevada?

Senator MALONE. Unfortunately, I think he is in the hospital, and I have not discussed this with him, but we did agree that the only way there could be an equitable division of the waters—as a matter of fact, if a project were to be constructed now in any State, that would take a large amount of water—the only way such a division probably could be secured within a reasonable time would be by a court adjudication. I cannot speak for him now as to his current opinion. I understand that he submitted a written statement.

Senator MILLIKIN. Do your views coincide with those of the Governor of Nevada?

Senator MALONE. That I could not say because I have not conferred with him on this particular matter. I understand Mr. Smith, who took my place as State engineer of Nevada, and worked for me a number of years before that time, will be here Saturday.

Senator MILLIKIN. I should like to ask the California representatives whether they have the same theory of Nevada's rights as those expressed by the Senator from Nevada.

Mr. SHAW. I might add to what Senator Malone has said, Mr. Chairman, that Nevada does have two contracts with the Secretary of the Interior, naming the quantities of 300,000 acre-feet in the aggregate, qualified by the clause "subject to availability for use in Nevada." That does to some extent throw the matter again wide open. Nevada, I believe, considers that the quantity named is within reasonable limits and is properly to be expected to belong to Nevada.

This, I think, might be said on the subject, and I think Senator Malone would probably go along with the idea, that so long as there is not compact and no adjudication, everyone in the lower basin is subject to being sniped at, and subject to having political determinations either in the executive departments or in Congress affect the working out of actual projects either to Nevada's benefit or detriment. The same is true as to Arizona and as to California.

Senator MILLIKIN. I think that we are still missing the point that I am driving at. I think Senator Malone has made it very clear. The Chair would like to know whether California is in agreement with the statement of Senator Malone to the effect that Nevada, at the present

time, has no right to 300,000 acre-feet or any other number of feet of water from the Colorado River.

Mr. SHAW. It has contracts. We are then bound to determine whether those contracts confer a right. There has been debate on that subject as to whether they confer water rights or whether they are something of a different category.

Senator MILLIKIN. Has California resolved its views as to whether it does or does not have a right? I am speaking of Nevada's right, if it has one.

Mr. SHAW. I am unable to answer that question positively.

Senator MALONE. I might clear that matter up further. I did not mean that the State of Nevada has not advanced a claim, and I do not mean that California has not advanced a claim, and that Arizona may have advanced a claim, but I do mean that none of us have any particular amount of water that we can say unequivocally belongs permanently to Nevada or any other State until a compact is signed by the lower-basin States, or the water has been adjudicated by a competent authority.

Senator MILLIKIN. I think the Senator has made that clear. The reason I am proving this, I have been under the opinion that it was conceded by all parties that Nevada had a right to 300,000 acre-feet of water, and, of course, if that is not correct, we certainly should throw all of the clarification we can on it.

Senator MALONE. In every conference I have sat in, Mr. Chairman—you see, out of the 7½ million and the additional million to the lower-basin States, the 300,000, a small amount, was generally taken for granted, but there has been nothing agreed upon officially or signed; so, if someone did question it, some new man representative of Arizona or California or Utah or New Mexico, in the lower basin, it would throw a cloud on any claim we have, and if it were never adjudicated and no compact ever signed giving us 300,000 acre-feet, then financing any projects under it would be serious.

Senator MILLIKIN. I may have misinterpreted the Senator's testimony, but the impression is that the Senator himself has thrown a doubt on it, and if that is not correct, that ought to be made very clear.

Senator MALONE. That is correct. I myself believe implicitly that even your own State of Colorado has no specific amount of water that it can call its own in the upper basin until you would either agree by compact between the four upper-basin States or until it has been adjudicated by a competent authority.

Senator MILLIKIN. I would like to ask the representatives of the upper States whether there is any claim that Nevada does not have 300,000 acre-feet of water by way of fixed firm right?

Mr. BREITENSTEIN. We concede that the Nevada contract gives her the right to use 300,000 acre-feet of the Colorado River water. When you talk about a right, Senator, we get into complications. A water right is a right of use, and it is not comparable to the ownership of tangible property.

Senator MILLIKIN. I suggest that under the compact that is not at all correct. The purpose of the compact, one of the purposes of the compact, was to avoid the necessity for us to mature a right by use.

Mr. BREITENSTEIN. Your compact divides beneficial consumptive use of water. Now, Nevada has the right, as we see it, to use beneficially or consume beneficially 300,000 acre-feet of water per year.

Senator MILLIKIN. Is that contested by any of the States in the upper basin?

Mr. BREITENSTEIN. Not that I know of.

Senator MILLIKIN. Is that contested?

Mr. BREITENSTEIN. I have never heard of that contested by any person speaking for an upper basin State.

Senator MILLIKIN. How about the States in the upper division?

Senator MALONE. Would Mr. Breitenstein identify himself for the record?

Mr. BREITENSTEIN. My name is Jean S. Breitenstein. I am a lawyer, and I am attorney for the Colorado Water Conservation Board, which is the water agency of the State of Colorado charged with the protection and conservation of water resources of the State.

Senator MALONE. I would like to ask Mr. Breitenstein a question. Does the upper basin have anything to do whatever with the division of the lower basin water?

Mr. BREITENSTEIN. No, sir.

Senator MALONE. What difference does it make whether you advance a claim to the water allocated under the compact to the lower basin, or that you do not? The upper basin States have no interest in the lower basin water.

Senator MILLIKIN. Well, the Chair's purpose was to find out whether Nevada's right, if she has one, has been generally accepted or whether it has been a matter of opinion and possibly conflict.

Senator MALONE. I want to say again that the upper basin States have only one obligation, and that is to turn down 7,500,000 acre-feet of water annually, or 75,000,000 acre-feet in any 10-year period. The lower basin States have nothing whatever to do with the waters remaining in the upper basin and the upper basin States have nothing to do with the 7,500,000 turned down to the lower basin.

Senator MILLIKIN. I was not proposing to raise that question. I was simply trying to find out what the state of opinion is around here as to all of the States on the river, as to whether Nevada has a fixed right to a certain amount of water.

Now, as I understand it, the upper basin States do not challenge that right. If I am not correct in that, I would like to have someone correct me. As I understand it, California has not yet matured her conclusions as to whether that is or is not correct. Is that right?

Mr. SHAW. There are legal questions involved there as to the nature of these contracts from the Secretary of the Interior that I would rather not attempt to express a view on without pretty careful consideration, Senator.

May I add two thoughts, if you please. In a sense, each of the States on an interstate river has a right to equitable apportionment; that is, a right to a share of the whole use of the river. Now, that is something which must be taken into account in answering your question. I would like to make a little comparison. The State of Nevada has a secretarial contract under section 5 of the Boulder Canyon Project Act. It has two contracts aggregating 300,000 acre-feet. The States of Utah and New Mexico have no such contracts. Their position is, therefore, less advanced and less secure and less definite than that of the State of Nevada.

Senator MALONE. Could I ask a question of the witness? Are you referring to the paragraph that I read, where the Congress of the

United States merely consents to a division of the waters, that that gave us a claim?

Mr. SHAW. I was not referring to that paragraph.

Senator MALONE. Will you tell me the one to which you refer?

Mr. SHAW. I was referring to the law of equitable apportionment, and that is something—if I may just complete the thought—undetermined and unadjudicated and still in full consideration of the Senator's question must be taken into account.

Senator MILLIKIN. Will you hold up just a moment? Does Arizona challenge the right of Nevada to 300,000 acre-feet?

Mr. CARSON. No; we do not. We have put in the Arizona contract this clause:

Arizona recognizes the right of the United States and the State of Nevada to contract for the delivery from storage in Lake Mead for annual beneficial consumptive use within Nevada, for agricultural and domestic uses, of 300,000 acre-feet of the water apportioned to the lower basin by the Colorado River compact, and in addition thereto, to make contract for like use of one twenty-fifth of any excess or surplus water available in the Lower Basin and unapportioned by the Colorado River Compact, which waters are subject to further equitable apportionment after October 1, 1963, as provided in Article III (f) and III (g) of the Colorado River Compact.

Now, since Utah and New Mexico have been mentioned here, I would like to read the next paragraph in this contract.

Senator MILLIKIN. This is a contract between Arizona and the Secretary of the Interior?

Mr. CARSON. Yes.

Senator MILLIKIN. What is the date of that contract?

Mr. CARSON. The 9th of February 1944. It was ratified by the Arizona legislature. [Reading:]

Arizona recognizes the rights of New Mexico and Utah to equitable share of the water apportioned by the Colorado River Compact in the Lower Basin and also water unapportioned by such compact; and nothing contained in this contract shall prejudice such rights.

Mr. SHAW. Would you be kind enough to read the next section?

Mr. CARSON. That was (g).

Now, I would like to offer this entire contract for the record.

Senator MILLIKIN. It will be put in the record.

Mr. CARSON. It appears on page 240 of the Bridge Canyon project hearings, on Senate bill 1175.

Mr. ELY. We have already entered that as an exhibit to our testimony.

Senator MILLIKIN. Since it has been offered, would that be sufficient?

Mr. CARSON. I would like to have it entered.

Senator MILLIKIN. Put it in at this point, even at the risk of encumbering the record. I do not like to have to make all sorts of cross-references all of the time to find the material.

Mr. CARSON. All right.

(The matter referred to is as follows:)

UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION—BOULDER CANYON PROJECT, ARIZONA-CALIFORNIA-NEVADA

CONTRACT FOR DELIVERY OF WATER

THIS CONTRACT made this 9th day of February 1944, pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplemental thereto, all of which acts are commonly known and referred to

as the Reclamation Law, and particularly pursuant to the Act of Congress approved December 21, 1928 (45 Stat. 1057), designated the Boulder Canyon Project Act, and acts amendatory thereof or supplementary thereto, between THE UNITED STATES OF AMERICA, hereinafter referred to as "United States," acting for this purpose by Harold L. Ickes, Secretary of the Interior, hereinafter referred to as the "Secretary," and the STATE OF ARIZONA, hereinafter referred to as "Arizona," acting for this purpose by the Colorado River Commission of Arizona, pursuant to Chapter 46 of the 1939 Session Laws of Arizona,

WITNESSETH THAT—

EXPLANATORY RECITALS

2. WHEREAS for the purpose of controlling floods, improving navigation, regulating the flow of the Colorado River, providing for storage and for the delivery of stored waters for the reclamation of public lands and other beneficial uses exclusively within the United States, the Secretary, acting under and in pursuance of the provisions of the Colorado River Compact and Boulder Canyon Project Act, and acts amendatory thereof or supplementary thereto, has constructed and is now operating and maintaining in the main stream of the Colorado River at Black Canyon that certain structure known as and designated Boulder Dam and incidental works, creating thereby a reservoir designated Lake Mead, of a capacity of about thirty-two million (32,000,000) acre-feet; and

3. WHEREAS said Boulder Canyon Project Act provides that the Secretary under such general rules and regulations, as he may prescribe, may contract for the storage of water in the reservoir created by Boulder Dam, and for the delivery of such water at such points on the river as may be agreed upon, for irrigation and domestic uses, and provides further that no person shall have or be entitled to have the use for any purpose of the water stored, as aforesaid, except by contract made as stated in said Act; and

4. WHEREAS it is the desire of the parties to this contract to contract for the storage of water and the delivery thereof for irrigation of lands and domestic uses within Arizona; and

5. WHEREAS nothing in this contract shall be construed as affecting the obligations of the United States to Indian tribes;

6. NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows, to wit:

DELIVERY OF WATER

7. (a) Subject to the availability thereof for use in Arizona under the provisions of the Colorado River Compact and the Boulder Canyon Project Act, the United States shall deliver and Arizona, or agencies or water users therein, will accept under this contract each calendar year for storage in Lake Mead, at a point or points of diversion on the Colorado River approved by the Secretary, so much water as may be necessary for the beneficial consumptive use for irrigation and domestic uses in Arizona of a maximum of 2,800,000 acre-feet.

(b) The United States also shall deliver from storage in Lake Mead, for use in Arizona, at a point or points of diversion on the Colorado River approved by the Secretary, for the uses set forth in subdivision (a) of this article, one-half of any excess or surplus waters unapportioned by the Colorado River compact to the extent such water is available for use in Arizona under said compact and said act less such excess or surplus water unapportioned by said compact as may be used in Nevada, New Mexico, and Utah in accordance with the rights of said States as stated in subdivisions (f) and (g) of this article.

(c) This contract is subject to the condition that Boulder Dam and Lake Mead shall be used: First, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses and satisfaction of perfected rights in pursuance of article VIII of the Colorado River compact; and third, for power. This contract is made upon the express condition and with the express covenant that the United States and Arizona, and agencies and water users therein, shall observe and be subject to and controlled by said Colorado River compact and the Boulder Canyon Project Act in the construction, management, and operation of Boulder Dam, Lake Mead, canals and other works, and the storage, diversion, delivery, and use of water for the generation of power, irrigation, and other uses.

(d) The obligation to deliver water at or below Boulder Dam shall be diminished to the extent that consumptive uses now or hereafter existing in Arizona above Lake Mead diminish the flow into Lake Mead, and such obligation shall be subject to such reduction on account of evaporation, reservoir, and river losses,

as may be required to render this contract in conformity with said compact and said act.

(e) This contract is for permanent service, subject to the conditions stated in subdivision (c) of this article, but as to the one-half of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c) of article III of the Colorado River compact, such water is subject to further equitable apportionment at any time after October 1, 1963, as provided in article III (f) and article III (g) of the Colorado River compact.

(f) Arizona recognizes the right of the United States and the State of Nevada to contract for the delivery from storage in Lake Mead for annual beneficial consumptive use within Nevada for agricultural and domestic uses of 300,000 acre-feet of the water apportioned to the lower basin by the Colorado River compact, and in addition thereto to make contract for like use of 1/25 (one-twenty-fifth) of any excess or surplus waters available in the lower basin and unapportioned by the Colorado River compact, which waters are subject to further equitable apportionment after October 1, 1963, as provided in article III (f) and article III (g) of the Colorado River compact.

(g) Arizona recognizes the rights of New Mexico and Utah to equitable share of the water apportioned by the Colorado River Compact to the Lower Basin and also water unapportioned by such compact, and nothing contained in this contract shall prejudice such rights.

(h) Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an act of its Legislature (Chapter 16, Statutes of California of 1929) upon which limitation the State of Arizona expressly relies.

(i) Nothing in this contract shall preclude the parties hereto from contracting for storage and delivery above Lake Mead of water herein contracted for, when and if authorized by law.

(j) As far as reasonable diligence will permit, the water provided for in this contract shall be delivered as ordered and as reasonably required for domestic and irrigation uses within Arizona. The United States reserves the right to discontinue or temporarily reduce the amount of water to be delivered, for the purpose of investigation and inspection, maintenance, repairs, replacements, or installation of equipment or machinery at Boulder Dam, or other dams heretofore or hereafter to be constructed, but so far as feasible will give reasonable notice in advance of such temporary discontinuance or reduction.

(g) The United States, its officers, agents, and employees shall not be liable for damages when for any reason whatsoever suspensions or reductions in the delivery of water occur.

(i) Deliveries of water hereunder shall be made for use within Arizona to such individuals, irrigation districts, corporations, or political subdivisions therein of Arizona as may contract therefor with the Secretary, and as may qualify under the Reclamation Law or other Federal statutes or to lands of the United States within Arizona. All consumptive uses of water by users in Arizona, of water diverted from Lake Mead or from the main stream of the Colorado River below Boulder Dam, whether made under this contract or not, shall be deemed, when made, a discharge pro tanto of the obligation of this contract. Present perfected rights to the beneficial use of waters of the Colorado River system are unimpaired by this contract.

(m) Rights-of-way across public lands necessary or convenient for canals to facilitate the full utilization in Arizona of the water herein agreed to be delivered will be granted by the Secretary subject to applicable Federal statutes.

POINTS OF DIVERSION: MEASUREMENTS OF WATER

8. The water to be delivered under this contract shall be measured at the points of diversion, or elsewhere as the Secretary may designate (with suitable adjustment for losses between said points of diversion and measurement), by measuring and controlling devices or automatic gauges approved by the Secretary, which devices, however, shall be furnished, installed, and maintained by Arizona, or the users of water therein in manner satisfactory to the Secretary; said measuring and controlling devices or automatic gauges shall be subject to the inspection of the United States, whose authorized representatives may at all times have access to them, and any deficiencies found shall be promptly

corrected by the users thereof. The United States shall be under obligation to deliver water only at diversion points where measuring and controlling devices or automatic gauges are maintained, in accordance with this contract, but in the event diversions are made at points where such devices are not maintained, the Secretary shall estimate the quantity of such diversions and his determination thereof shall be final.

CHARGES FOR STORAGE AND DELIVERY OF WATER

9. No charge shall be made for the storage or delivery of water at diversion points as herein provided necessary to supply present perfected rights in Arizona. A charge of 50¢ per acre-foot shall be made for all water actually diverted directly from Lake Mead during the Boulder Dam cost-repayment period, which said charge shall be paid by the users of such water, subject to reduction by the Secretary in the amount of the charge if it is concluded by him at any time during said cost-repayment period that such charge is too high. After expiration of the cost-repayment period, charges shall be on such basis as may hereafter be prescribed by Congress. Charges for the storage or delivery of water diverted at a point or points below Boulder Dam, for users, other than those specified above, shall be as agreed upon between the Secretary and such users at the time of execution of contracts therefor, and shall be paid by such users; provided such charges shall, in no event, exceed 25¢ per acre-foot.

RESERVATIONS

10. Neither Article 7, nor any other provision of this contract, shall impair the right of Arizona and other States and the users of water therein to maintain, prosecute, or defend any action respecting, and is without prejudice to, any of the respective contentions of said States and water users as to (1) the intent, effect, meaning, and interpretation of said compact and said act; (2) what part, if any, of the water used or contracted for by any of them falls within Article III (a) of the Colorado River Compact; (3) what part, if any, is within Article III (b) thereof; (4) what part, if any, is excess or surplus waters unapportioned by said Compact; and (5) what limitations on use, rights of use, and relative priorities exist as to the waters of the Colorado River system; provided, however, that by these reservations there is no intent to disturb the apportionment made by Article III (a) of the Colorado River Compact between the Upper Basin and the Lower Basin.

DISPUTES AND DISAGREEMENTS

11. Whenever a controversy arises out of this contract, and if the parties hereto then agree to submit the matter to arbitration, Arizona shall name one arbitrator and the Secretary shall name one arbitrator, and the two arbitrators thus chosen shall meet within ten days after their selection and shall elect one other arbitrator within fifteen days after their first meeting, but in the event of their failure to name the third arbitrator within thirty days after their first meeting, such arbitrator not so selected shall be named by the Senior Judge of the United States Circuit Court of Appeals for the Tenth Circuit. The decision of any two of the three arbitrators thus chosen shall be a valid and binding award.

RULES AND REGULATIONS

12. The Secretary may prescribe and enforce rules and regulations governing the delivery and diversion of waters hereunder, but such rules and regulations shall be promulgated, modified, revised, or extended from time to time only after notice to the State of Arizona and opportunity is given to it to be heard. Arizona agrees for itself, its agencies, and water users that in the operation and maintenance of the works for diversion and use of the water to be delivered hereunder, all such rules and regulations will be fully adhered to.

AGREEMENT SUBJECT TO COLORADO RIVER COMPACT

13. This contract is made upon the express condition and with the express covenant that all rights of Arizona, its agencies and water users, to waters of the Colorado River and its tributaries, and the use of the same, shall be subject to and controlled by the Colorado River Compact signed at Santa Fe, New Mexico, November 24, 1922, pursuant to the Act of Congress approved August 19, 1921 (42 Stat. 171), as approved by the Boulder Canyon Project Act.

EFFECTIVE DATE OF CONTRACT

14. This contract shall be of no effect unless it is unconditionally ratified by an Act of the Legislature of Arizona, within three years from the date hereof, and further, unless within three years from the date hereof the Colorado River Compact is unconditionally ratified by Arizona. When both ratifications are effective, this contract shall be effective.

INTEREST IN CONTRACT NOT TRANSFERABLE

15. No interest in or under this contract, except as provided by Article 7 (1), shall be transferable by either party without the written consent of the other.

APPROPRIATION CLAUSE

16. The performance of this contract by the United States is contingent upon Congress making the necessary appropriations for expenditures for the completion and the operation and maintenance of any dams, power plants or other works necessary to the carrying out of this contract, or upon the necessary allotments being made therefor by any authorized Federal agency. No liability shall accrue against the United States, its officers, agents, or employees by reason of the failure of Congress to make any such appropriations or of any Federal agency to make such allotments.

MEMBER OF CONGRESS CLAUSE

17. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

DEFINITIONS

18. Wherever terms used herein are defined in article II of the Colorado River Compact or in Section 12 of the Boulder Canyon Project Act, such definitions shall apply in construing this contract.

19. IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed the day and year first above written.

THE UNITED STATES OF AMERICA,
By (Signed) HAROLD L. ICKES,
Secretary of the Interior.
STATE OF ARIZONA, acting by and through its COLORADO RIVER COMMISSION,
By (Signed) HENRY S. WRIGHT, *Chairman,*
By (Signed) NELLIE T. BUSH, *Secretary.*

Approved this 7th day of February 1944.

(Signed) SIDNEY P. OSBORN,
Governor of the State of Arizona.

Mr. CARSON. Then, in Arizona's view Nevada has a firm right to 300,000 acre-feet, plus one twenty-fifth of the surplus which comes from our half of the surplus, and the division is made in the lower basin by virtue of the California Limitation Act in article IV of the Boulder Canyon Project Act, which the Senator from Nevada did not read, but which limits California to 4,400,000 acre-feet.

Now, then, that leaves for Nevada and Arizona the balance of the 7½ million acre-feet of III (a) water apportioned to the lower basin plus that small part of Utah and New Mexico, which are in the lower basin, and there is no dispute between Arizona and Utah or New Mexico over that water, nor with Nevada.

Mr. SHAW. Could I have paragraph (h) of that contract read?

Senator MALONE. I would like to have section (h) read.

Mr. SHAW. With the Chairman's permission, I would like to read into the record the subsection of this contract immediately following the two which counsel for Arizona read.

Senator MALONE. Is this a contract or is it something adopted by the State legislature?

Mr. SHAW. It is a secretarial contract, approved by the State legislature of Arizona. [Reading:]

Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an Act of its legislature, upon which limitations the State of Arizona expressly relies.

Now, I wish to make these two comments. Obviously, the formulas adopted in this contract for recognition of the rights of Nevada, Utah, New Mexico, and California are wide open to the questions, the legal questions, which have been presented. They are not self-defining numerical quantities in all respects. They are subject to the provisions of article 10 of the same contract, which provides—

Neither Article 7 (which contains these three subdivisions which have been read), nor any other provision of this contract shall impair the right of Arizona and other states and the users of water therein to maintain, prosecute or defend any action respecting, and is without prejudice to, any of the respective contentions of said States and water users as to (1) the intent, effect, meaning, and interpretation of said compact and said act; (2) what part, if any, of the water used or contracted for by any of them falls within Article III (a) of the Colorado River Compact; (3) what part, if any, is within Article III (b) thereof; (4) what part, if any, is excess or surplus waters unapportioned by said Compact; and (5) what limitations on use, rights of use, and relative priorities exist as to the waters of the Colorado River system; provided, however, that by these reservations there is no intent to disturb the apportionment made by Article III (a) of the Colorado River Compact between the Upper Basin and the Lower Basin.

We, on the part of California, and I do not want to have any mistake about this, do not challenge the right of the State of Nevada or the privilege of the State of Nevada, or whatever you may call it, to use 300,000 acre-feet of water. Nevada, however, without any adjudication, is standing out here deriving what comfort it can from this contract, but without any definition by any court or any compact of its exact rights.

Senator MILLIKIN. I believe, Senator Malone, I should bring to your attention the letter of Governor Pittman of May 10, 1948, to this subcommittee. In the course of the letter the following appears:

Nevada is seriously concerned as to the effect of congressional action upon the promotion and development of projects in the other States in the lower basin, which may have undesirable repercussions upon Nevada's allotment of water and power.

In the absence of an effective allocation of water between the States of the lower basin, these States may rely upon their respective State water codes, and their rights as established by priority of beneficial use could result in depriving Nevada of a part of the water to which the State is entitled under the Colorado River compact and section 4 (a) of the Boulder Canyon Project Act. The amount of water Nevada would receive under this agreement (300,000 acre-feet), while very small compared with the proposed allocations to Arizona and California, is vitally important to the welfare of southern Nevada. The danger of loss of a portion of this water to Nevada is accentuated by the necessity of supplying water to the Republic of Mexico, as required by the Mexican water treaty of 1945.

Nevada has a contract executed by the Secretary of the Interior under the Project Act for 17.6259 percent of all firm hydroelectric power produced at Hoover Dam. The necessity of conserving as much of this energy as possible is of the greatest importance to Nevada. The electric power is imperatively needed for

present operation and development of natural resources in mining and irrigation, which are rapidly expanding, and for the operation of Basic Magnesium project which is now being acquired by Nevada from War Assets Administration where industries of great benefit to the State and to the national welfare are in operation; and others are negotiating for space and power.

I shall make the whole letter available to you, Senator, but here is another part that I want to refer to:

Nevada's past experience conclusively leads me to believe that a three-State compact or agreement cannot be reached and further discussions will prove futile. Our State for many years has spent much time and money in efforts to bring the three-State compact into being, completely without results. At last Nevada discontinued negotiations and on March 30, 1942, contracted directly with the Bureau of Reclamation for 100,000 acre-feet of water from Lake Mead storage, as water was urgently needed for the wartime Basic Magnesium project. Meantime, Arizona petitioned Secretary Ickes for a contract of withdrawal of up to 2,800,000 acre-feet from the main stream, that State's entire allotment less certain deductions and qualifications in the contract. This led Nevada to contract for an additional 200,000 acre-feet, the limit of our right under the authorized three-State contract. The right is only for withdrawal of stored water when it is available.

Now, for whatever bearing that may have I thought that you should have that directly before you.

Senator MALONE. Mr. Chairman, I appreciate that. No doubt the Governor sent me a copy, but in the press of other business it did not reach me. It has not been called to my attention. He says the same thing in his letter that I have just said for the record. What I want to say again is that I appreciate very much the protection afforded by the contract that the Legislature of Arizona has ratified, but as you can see, California still leaves the gate wide open, and the only way it could bind the State of Arizona would be through a compact with Nevada, ratified by the legislatures of both States, and even then the remaining three States of the lower basin would in no way be bound. I think California questions the 4,400,000 acre-feet limitation indicated by the Boulder Dam Project Act, and there are various ways, you understand, that you can compute water. One might be through gross diversions, and others through beneficial consumptive use, and you will find that in Delph Carpenter's explanation of the compact it is always beneficial consumptive use. Arizona, for example, computes their use of the Gila River waters in a certain manner—other computations use a different formula—neither I nor the State of Nevada can say what method should be used, but a court of competent jurisdiction can resolve the question.

Consumptive use means that in Colorado, for example, or the upper basin, you could and probably will divert the water, a considerable part of it, several times, and you have in Colorado one of the highest duties of water of any State in the West, primarily because you have such a large return flow. I am talking about beneficial consumptive use. I think it is only a little over an acre-foot or between an acre-foot and 2 acre-feet per acre. Whereas if it were diverted and never returned to the stream system, it might be several times that; but your return flow is such that your beneficial consumptive use is very low.

I want to say a further word about this. Highly complicating this entire picture is the 1,500,000 acre-feet allocated to Old Mexico. That has been ratified by the Senate of the United States and it is duly signed, and there is nothing that anyone can do about it. I examined personally the lands in Old Mexico in 1927 and 1928. I have a peculiar

habit of looking at things that I have to do something about. They never at any time, in my judgment, irrigated over 30,000 to 40,000 acres at one time, but they had about 200,000 acres under cultivation due to irrigating a part of it for 2 or 3 years; and then shifting to other parts of the land.

But now instead of the three-quarters of a million acre-feet, which is at least 100,000 acre-feet more than anyone thought they would ever be allocated and certainly that much more than they had ever utilized at any one time prior to the construction of the dam, they get 1.5 million acre-feet. The 1.5 million acre-feet must come from some place. It immediately dissipates any idea that there is going to be any large unallocated surplus, or maybe even very little of that 1 million acre-feet, that is allocated to the lower basin, in addition to the 7.5 million to the lower basin to be delivered at Lees Ferry by the upper basin. Through all of the negotiations—and you understand that I am not passing on these questions—we tried to meet the necessary problems in the interest of harmony and to get development started on the Colorado River, feeling that the rest of it would be growing pains—just like we are going through now. I do not want to hurt any State in the basin, either the upper or lower basin.

Therefore, I want it clearly understood that in my opinion there is not now any allocation to any specific State in the basin. I know the Secretary of the Interior has made these contracts, and they have made them with California, and they are about to make them or have made them with Arizona, and they have made two with us, but the Secretary of the Interior in the last 15 years has had a habit of taking on a good deal of authority; and I think the chairman is fully familiar with all of the ramifications of that habit—and that all of the Department's actions do not have the weight of law.

The Secretary of the Interior, Mr. Ickes, was entirely unfamiliar with water law in the West, and this is no disparagement of him, and the present Secretary, Mr. Krug, is entirely unfamiliar with our methods of water use in the West, and therefore, it comes back to the old saying, "No one can talk quite so convincingly on a subject as someone entirely unhampered by the facts."

I cannot settle this problem between Arizona, California, Nevada, New Mexico, and Utah. Only those States can settle it through a compact—or the rights can be adjudicated by a competent authority.

I want to make this point, that Delph Carpenter when he says what the compact means, and he leaves for the moment aside what the States ratified, he is just like George Malone or our chairman or anyone else—he is just 1 out of 140,000,000 making up the United States. What he says, and he wrote the compact, and he evidently meant it to mean that it included the Gila River, and it included every stream and every foot of watershed in it and to be based on beneficial consumptive use, but nevertheless, that is only Delph Carpenter. I have the highest regard for him—we used to call him the "Silver Fox of the Rockies"—however, the questions of fact must still be left to the Court if there is a disagreement.

What we did at that time seemed right to us. But there are so many interpretations of even the compact itself, as you have seen here this morning, that it is my earnest opinion that the way to save time and to utilize the waters of that basin, in view of the fact that I agree wholeheartedly with the Governor, who has, along with Tom Smith, our

State engineer, sat in these conferences almost continuously since I left the Commission, that there would probably never be an agreement between the lower basin States in the division of water.

I concur in that position, and I think my friends from Arizona and California would also concur, therefore, it is very important that the Government of the United States not assist anyone—Nevada, Arizona, California, New Mexico, or Utah—in establishing priorities that might be inimical to the rights of any other State until such determination is made either by compact or adjudication.

I have been advised, that if a compact is not possible, the quickest way to determine the rights would be through an adjudication by the Supreme Court, and should not hold us up, perhaps, more than a year; which, in view of the fact that the Boulder Canyon project was held up 7 years, even after Mr. Hoover called the States together in Santa Fe, N. Mex. Since it has taken the States of the West many years on all major projects, to arrive at the proper solution, the time element would not be out of line when the importance of the subject is considered.

What I am saying is that rather than deprive California and Arizona and Nevada or any other State of their proper rights, one year more or less is relatively unimportant, and if they are unable to do it for themselves, there should be a competent body to do the job. Now, it did make some difference in my thought on the subject when the Bureau of Reclamation came in and said that they were going to pump the water from Parker to central Arizona instead of taking it out of the Bridge Canyon, because if it were taken out of Bridge Canyon—I think the Governor of Nevada, Mr. Vail Pittman, has very well covered it—that would divert a large amount of water without any adjudication, compact, or termination of rights to above Boulder and Davis Dams where power is developed and then used for irrigation, and, of course, acts as flood control. They are truly multiple-purpose dams, but it would change materially the matter of repayments by reducing the power development upon which the project was originally financed.

I want to make this one point again. Not in any part of the lower river basin with which I am familiar has power developed on the main stream been used to finance an irrigation district. The Bridge Canyon project, if it is built, will produce a lot of power. The water will go through the Bridge Canyon, then on through Hoover and Davis Dams. The power will be available to the basin States, wherever it can be economically transmitted. I understand at Parker it will take about a third of this power to pump the water back into central Arizona. Approximately one-third of the power is used for that purpose, and then the revenue from the power—the power is fixed at a price that will repay the Government for the central Arizona project. It is an exact parallel, as I see it, to the All-American Canal that the Congress rejected, through denial of the use of Boulder Dam revenue with which to repay the Government for the cost of the All-American Canal.

I am not suggesting what should be done. I am merely outlining what has been done, and I think in order to meet the future developments on the river it is necessary for the committee to know what has been done and what precedents have been established and the real points at issue.

I heartily agree with the Senator, the chairman, in his conclusion that if you are going to write a book on this subject, you had better

do it during the first 2 weeks before you become burdened with details, or else you had better wait several years, because once you begin to find out the real problems. you will be very reluctant to make a definite decision between the States on water rights. As a matter of fact, on none of these things, either in the Industrial Encyclopedia of the 11 Western States, or in Senate Document 186, have I drawn conclusions. I have merely put down the evidence, so that anyone can refer to the documents as interpreted by the men on the job at the time, and the actions of the Congress of the United States, and make up their own mind.

I want to adopt that attitude all of the way through. As we go along certain precedents are set and become common procedure—fair to the States involved—so that Congress has finally established a definite method of procedure.

The reason that I joined with other Senators in the joint resolution then was because the necessary adjudication in the absence of a compact, could be made only by the Supreme Court, in my opinion, since I felt that the States would never make it, just as my Governor has said in his letter. He had not communicated with me before writing the letter, but we agree on principle.

Mr. Chairman, unless there are further questions, I think that that concludes my statement.

Senator McFARLAND. There is just one matter that I would like to call Senator Malone's attention to, and I am sure that he is familiar with it, and that is (b) under article IV of the compact, which reads:

> Subject to the provisions of this compact, water of the Colorado River system may be impounded and used for generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes.

Then I would like to ask him if he is not familiar with the fact that the Colorado-Big Thompson in Colorado is financed largely from power generated?

Senator MALONE. I am referring to the power developed on the main lower-basin stream where two or more States are interested; also following a compact or an adjudication the amount that any one State might divert would be determined.

Senator McFARLAND. I do not care to go into it any further.

Senator MILLIKIN. I think that is extraneous to the immediate matter.

Senator MALONE. I am entirely familiar with the provision which the Senator just read.

Mr. Chairman, it is perfectly clear that not a single one of the seven States in the entire Colorado River watershed has a firm right to the use of any specific amount of water until such time as the water allocated to the upper and lower basins, respectively, under the Colorado River compact has been divided between the States in the respective basins either through interstate agreements or compacts or by a court of competent jurisdiction.

It is equally clear to me that the lower-basin States, Arizona, California, Nevada, New Mexico, and Utah, will not, within any reasonable time, agree upon such a division. I, therefore, Mr. Chairman, joined in the introduction of Senate Joint Resolution 145 to hasten the further development of the Colorado River.

Senator MILLIKIN. Thank you very much, Senator.

We have a statement of Senator E. V. Robertson of Wyoming in opposition to Senate Joint Resolution 145, which will be tendered in full in the record at this point.

STATEMENT OF HON. E. V. ROBERTSON, A UNITED STATES SENATOR FROM THE STATE OF WYOMING

Senator MILLIKIN (reading):

Senate Joint Resolution 145, now being considered by the Subcommittee on Irrigation and Reclamation, together with companion measures which have been introduced in the House of Representatives, if enacted into law, will constitute the most devastating action in retarding the growth and development of the States of the Colorado River Basin that could possibly be conceived by any agency of Government.

Not only does this resolution propose to direct the Attorney General of the United States to commence an action in the Supreme Court of the United States and define its form, but the resolution also names five States to be made parties to the action, and by inference indicates the two remaining States of the Colorado River Basin, Wyoming and Colorado, will be included therein.

First, it is desired to emphasize that the Federal Government is not engaged in any controversy with any of the States of the Colorado River Basin over any apportionment of Colorado River water, nor has the Federal Government any controversy, real or imaginary, between the proponents of this resolution, namely, California and Nevada, and any of the other States concerned. As for the language of the Colorado River compact and the approving act of the Congress being ambiguous, there was no question raised at the time the compact was ratified by the States and approved by the Congress. The compact and the Boulder Canyon Act contain the exact apportionments of water to the lower basin States, and are further supplemented by a special enactment of the California Legislature, which defines that State's share of said apportionments. Thus, it cannot be conceived that any controversy exists between the United States and the States, signatory to the compact, nor is there any cause for any action to be initiated by the United States against any of the States concerned.

The history of both private and public irrigation and reclamation litigation presents series after series of interminable delays, months and years consumed in the preparation of data and their submission in evidence, with the incident enormous expense which most of the litigants, both public and private could ill-afford. There is no reason to believe that the court action proposed by Senate Joint Resolution 145 will be consummated any more rapidly or be any less expensive than any of the major interstate water suits which were plodding slowly through the courts for many years. If a controversy existed in which the Federal Government had an interest, or the interest of the Federal Government was being jeopardized by any litigant, and the Attorney General of the United States declined or failed to protect such interest, it then might be proper for the Congress to further define the duties of the Attorney General by appropriate enactment. The records of the Department of Justice certainly fail to disclose any reluctance on the part of the Attorney General to join in any action which might jeopardize any interest of the United States.

In the meantime, what will be happening to the efforts of the States, toward further development of their reclamation and irrigation projects which have been planned to use the waters of streams of the basin, if the proponents of this legislation are successful in their efforts and the entire matter of apportionment of the Colorado River waters is opened up? Once an action is commenced, its limits cannot be contained, and there is no reason to believe that there will be any limitation of issues, should this action be authorized by the Congress. It will then be impossible to secure approval of the Interior Department or Congress for any new projects in the affected areas in any of the States as long as any litigation is pending. Current projects, also in the affected areas, will likewise suffer as Congress will be loath to authorize additional appropriations for their completion under such uncertain conditions.

Presently, the upper basin States—Wyoming, Colorado, Utah, and New Mexico—are engaged in negotiating a compact to apportion among themselves the 7,500,000 acre-feet of water apportioned to the upper basin by the Colorado River compact. This work has progressed to the point where it is expected

that the compact will be completed this fall and will be ready for submission to the legislatures of the States for ratification during their 1949 sessions, and to the Congress for its approval early next year, and in time for the Congress to act during its next session.

It has been an arduous and time-consuming process to reach the point in our deliberations and planning where we are today, and now is not the time for any further delays to be initiated to satisfy imaginary grievances of proponents of the resolution. There are ample means at hand for them to initiate any individual action desired without involving the other States with which no controversy exists.

Should this resolution be enacted into law, and even should the five States opposing the resolution be successful in maintaining their position, that there is no controversy or cause for action involving them, the time required to accomplish that objective will be many months and possibly 2 or 3 years will be consumed before a decision is rendered. Furthermore, the compact now being worked out by the upper basin States may be delayed from several months to 2 years if approval is not consummated by their legislatures at their regular 1949 sessions. Certainly, the legislatures of the States as well as the Congress will not be inclined to ratify or approve any compact if the basis of apportionments of water is involved in a court action.

The development of the water resources of the West is vital to the prosperity and growth of the States concerned. This development means new homes for their people, new wealth for all, and more prosperity for the entire Nation. To say that the effect which will result if Senate Joint Resolution 145 is enacted into law will be devastating, is stating the situation mildly. There is no way to estimate the damage which will accrue to thousands of our citizens who have planned their homes on the land, if the Congress authorizes this unwarranted delay in the orderly progress which is now being made.

I am unalterably opposed to the enactment of Senate Joint Resolution 145, not only in its present form, but in any form. Not only is the proposed procedure legally questionable, there is no controversy, and, therefore, there certainly is no cause for action by the United States.

Senator MILLIKIN. We now have a report from the Secretary of the Interior addressed to Senator Butler. It is dated May 13, 1948, and is as follows:

MY DEAR SENATOR BUTLER: The views of this Department have been requested on Senate Joint Resolution 145, a joint resolution to authorize commencement of an action by the United States to determine interstate water rights in the Colorado River.

After reciting that "the development of projects for the use of water in the Lower Colorado River Basin is being hampered by reason of long-standing controversies among the States in said basin as to the meaning and effect of the Colorado River compact, the Boulder Canyon Project Act, the Boulder Canyon Adjustment Act, the California Limitation Act (Stats. Cal. 1929, ch. 16), various contracts executed by the Secretary of the Interior with States, public agencies, and others in the lower basin of the Colorado River, and other documents, and as to various engineering, economic, and other facts," Senate Joint Resolution 145 provides that the Attorney General shall commence "a suit or action in the nature of interpleader" against the States of the Lower Colorado River Basin "and such other parties as may be necessary or proper" and "require the parties to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the Lower Colorado River Basin."

Since the basic facts bearing on the Lower Colorado River Basin's water supply are already well known to your committee and are readily available in House Document 419, Eightieth Congress—this Department's report on the status of its Colorado River investigations—I shall not burden this letter with a repetition of them. Neither shall I attempt anything more than the very summary statement, which appears later in this letter, of some of the questions that are agitating the lower-basin States. It was in part to these unresolved questions that the Commissioner of Reclamation referred when he concluded (see his letter to me dated July 17, 1947, printed in House Document 419, p. 5): "That a comprehensive plan of development for the Colorado River Basin cannot be formulated at this time"; and "That further development of the water sources of the Colorado River Basin, particularly large-scale development, is seriously handicapped, if not barred, by a lack of a determination of the rights of the individual States to utilize the waters of the Colorado River system."

It is indeed desirable that these controversies be settled. This Department has urged more than once that this be done. Its latest expression on this subject is contained in the letter of the Commissioner of Reclamation to which I referred in the preceding paragraph. The Commissioner there concluded: "That the * * * States of the Lower Colorado River Basin should be encouraged to proceed expeditiously to determine their respective rights to the waters of the Colorado River consistent with the Colorado River compact." I approve that conclusion at the time it was written, and I am convinced that it is altogether sound.

These statements were made in the hope that the States would be able to compose their differences without resort to litigation. It may well be that interstate negotiations have not yet been carried as far as they could profitably be carried. Certainly I wish to urge that your committee give serious consideration to the possibilities which this method—or that of interstate arbitration—offer for the solution of the lower basin's problems before it decides upon a course of action with respect to Senate Joint Resolution 145.

The committee may also wish to consider the authority of the Congress to determine for itself where and how the waters of the Lower Colorado shall be used and whether this authority, whatever it may be, has been exhausted by the Congress' approval of the Colorado River compact subject to the condition, which has been complied with, of California's enacting a self-limitation act or by the exercise of the authority given the Secretary of the Interior by section 5 of the Boulder Canyon Project Act to enter into contracts for the storage of water in and its delivery from Lake Mead.

Additional factors that should, in my judgment, be given serious consideration before action is taken on this joint resolution are the probability that the litigation that would follow its enactment will involve not only the lower basin States (although they are the States primarily interested in it) but the upper basin States as well; the near certainty that, unless all parties to the litigation are willing to enter into a stipulation covering basic water supply data, the litigation will be quite protracted; and the possibility that the pendency of this litigation will be seized upon by those who are unfriendly to further development of the Nation's water resources generally, or to such development in the Colorado River Basin specifically, to delay authorization of badly needed works in that basin.

Previous instances of interstate water litigation have not been marked by speedy adjudications. I am fearful that many years, perhaps decades, will elapse before the suit which Senate Joint Resolution 145 contemplates could be concluded. Such a delay would work a real hardship on communities in the Southwest and, perhaps, throughout the basin unless means were provided to carry forward the development of noncontroversial projects in the meantime.

I could not say, therefore, in any event that there would be no objection to the enactment of Senate Joint Resolution 145 unless I could also be assured that progress in the development of the Colorado River Basin and in the use of its waters would not be halted by such litigation. Such assurances would, I believe, be best evidenced by the enactment of a bill, prior to or concurrently with the enactment of Senate Joint Resolution 145, authorizing the construction by the Secretary of the Interior, through the Bureau of Reclamation or the Office of Indian Affairs, of those projects, wherever they may be located in the Colorado River Basin, * * *

Senator DOWNEY. I wonder whether they were seeking the right themselves to authorize these projects or I was wondering whether they were referring to the authorizations by Congress.

Senator MILLIKIN. I will go back and start the paragraph:

I could not say, therefore, in any event that there would be no objection to the enactment of Senate Joint Resolution 145 unless I could also be assured that progress in the development of the Colorado River Basin and in the use of its waters would not be halted by such litigation. Such assurances would, I believe, be best evidenced by the enactment of a bill, prior to or concurrently with the enactment of Senate Joint Resolution 145, authorizing the construction by the Secretary of the Interior, through the Bureau of Reclamation or the Office of Indian Affairs, of those projects, wherever they may be located in the Colorado River Basin—

1. Which have engineering feasibility, economic justification, and financial feasibility (allowance being made under the last factor for the nonreimbursability of that portion of the cost of these projects which is properly chargeable to navigation, flood control, silt control, recreation, salinity control, and the preservation and propagation of fish and wildlife); * * *

Senator DOWNEY. I just want to point out that there the letter is wholly ambiguous to me, whether he means Congress will make the determination that these projects have that factor or whether he means that that will be done by the Bureau of Reclamation of the Department of the Interior. Do you see the purport of what I have in mind?

Senator MILLIKIN. I would not attempt to interpret the letter, Senator. [Continuing:]

2. For which there will be an adequate water supply regardless of the outcome of the litigation;

3. Which (*a*) are consistent with full economical development of the water resources of the Colorado River system and of the particular basin, whether upper or lower, in which the proposed works are located, (*b*) will permit the States of the two basins to fulfill their obligations under and achieve the benefits of the Colorado River compact, and (*c*) will allow the United States to carry out its obligations with respect to the delivery of water under the Mexican water treaty; and

4. Which fit in with a plan, which should be embodied in the legislation, for the pooling of revenues from new hydroelectric plants developed in the Colorado River Basin to aid irrigation developments in that basin.

Beyond the problems that I have just mentioned there are various questions that need to be considered carefully in connection with the language of Senate Joint Resolution 145 itself, should it be the opinion of your committee that litigation is the only appropriate remedy remaining available for the settlement of the controversies that now exist among the States of the lower Colorado River Basin. If the present preamble to this joint resolution, for instance, is intended to set out the substance of the United States' cause of action in the proposed suit, or if it is likely so to be construed, it seems quite certain that the contemplated suit would be dismissed by the Supreme Court, for it can hardly be said that an action predicated upon a fear that developments which have not yet been authorized would be frustrated, if they were authorized, by a holding that the necessary water was not available for them constitutes a "case" or a "controversy" within the meaning of article III of the Constitution. It is entirely probable that the Court would hold that such a suit called for an advisory opinion rather than for a judicial determination.

To say this, however, is not to say that there is no adequate basis for an action through which all or most of the controversies that now exist among the States of the lower Colorado River Basin could be determined, if it is the belief of the Congress that resort should be had to litigation for that purpose.

It is a fair assumption, I believe, that in the event such a suit as Senate Joint Resolution 145 contemplates were to be brought in the Supreme Court, the principal parties to that suit among the States would be California and Arizona. A review of statements made by the spokesmen for these two States at hearings before the House Committee on Irrigation and Reclamation on H. R. 5434, Seventy-ninth Congress, before the Senate Committee on Public Lands on S. 1175, Eightieth Congress, and before the House Committee on Public Lands on S. 483, Eightieth Congress, and of the comments by the two States on this Department's report on a plan for the development of the Colorado River indicates that the core of the legal aspect of this controversy between Arizona and California lies in certain provisions of section 4 (a) of the Boulder Canyon Project Act. This section, in permitting the Colorado River compact to become effective upon its ratification by six States of the basin, including California, did so only upon the condition that California agree "irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of this act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California * * * shall not exceed 4,400,000 acre-feet of the waters

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apportioned to the lower basin States by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact." Legislation evidencing such an agreement was enacted by California in the statute cited in the preamble to Senate Joint Resolution 145.

Confining my attention to this section of the Boulder Canyon Project Act—it being impossible to predict all of the issues that may be raised by the various parties to the proposed suit—four major problems would appear to be in dispute between California and Arizona. I may summarize them in question form thus:

(1) Are the 1,000,000 acre-feet of water for which provision is made in article III (b) of the Colorado River compact "surplus" or "apportioned" within the meaning of section 4 (a) of the Boulder Canyon Project Act? That is, is or is not California entitled to share in the use of III (b) water?

(2) Is the flow of the Gila River, for purposes of determining the water supply of the Colorado River Basin, to be measured at the mouth of the stream or elsewhere? And, as another aspect of the same problem: Is beneficial consumptive use by Arizona of the waters of the Gila to be measured, in terms of diversions from the Gila River less returns to that river, or in terms of the depletion of the virgin flow of that river at its mouth?

(3) Is the water required for delivery to Mexico under the treaty with that Nation to be deducted from "surplus" water prior to determination of the amount available for use in California under section 4 (a) of the Boulder Canyon Project Act, or is California entitled to use a full one-half of the "surplus" diminished only by so much of the Mexican requirements as cannot be supplied from the other half?

(4) Is the burden of evaporation losses at such reservoirs as Lake Mead to be borne by California and Arizona in proportion to the waters stored there for each of them, or is the burden of these losses to be fixed in some other fashion?

The bare statement of these questions, the knowledge that there is disagreement between Arizona and California about the answers to be given them, and the fact that, if the contentions of either State are accepted in full and if full development of the upper basin within the limits fixed by the Colorado River compact is assumed, there is not available for use in the other State sufficient water for all the projects, Federal and local, which are already in existence or authorized would seem to indicate that there exists a justiciable controversy between the States. Should the Congress, however, entertain doubt about the existence of such a controversy, it could dispel that doubt by authorizing the construction of the central Arizona project, a report which has been prepared by this Department and has been sent, pursuant to the provisions of section 1 of the Flood Control Act of 1944, to the States of the Colorado River Basin and to the Secretary of the Army for consideration and comment.

It is probably true that, in view of the existing physical water supply in the lower basin—a supply which is as ample as it is chiefly because the upper-basin States are using far less than the 7,500,000 acre-feet apportioned to them by the compact—the situation is not such that the Court would be warranted in granting an injunction against either California or Arizona if it were found to be using more water than it is entitled to use. The controversy, nevertheless, appears to be of the sort that would justify the Court's determining the rights of the parties and definitely adjudicating their respective interests in the waters available to the lower basin. It matches in every particular the requirements for a "case" or a "controversy" in the constitutional sense of these words as those requirements were spelled out by the Supreme Court in *Aetna Life Insurance Company* v. *Haworth* (300 U. S. 227, 240 (1937)). "A 'controversy' in this sense," the Court said, "must be one that is appropriate for judicial determination. * * * The controversy must be definite and concrete, touching the legal relations of parties having adverse legal interests. * * * It must be a real and substantial controversy admitting of specific relief through a decree of a conclusive character, as distinguished from an opinion advising what the law would be upon a hypothetical state of facts. * * * Where there is such a concrete case admitting of an immediate and definitive determination of the legal rights of the parties in an adversary proceeding upon the facts alleged, the judicial function may be appropriately exercised, although the adjudication of the rights of the litigants may not require the award of process or the payment of damages. * * * And as it is not essential to the exercise of the judicial power that an injunction be sought, allegations that irreparable injury is threatened are not required."

Senator DOWNEY. Is that still a quotation there?

Senator MILLIKIN. It is still a quotation. There are some asterisks in there. [Continues reading:]

I have spoken thus far as if this controversy were of concern only to the States. Let me state briefly the interest of the United States. The United States has invested heavily in developments for the benefit of both sides of the river. These works include the Hoover, Davis, Parker, and Imperial Dams, the All-American Canal, the San Diego aqueduct, and the Yuma, Gila, and Salt River reclamation projects. They also include the Colorado River and San Carlos Indian irrigation projects, and the Headgate Rock, Coolidge, and Ashurst-Hayden Dams serving those projects. All of these developments are tangible evidence of the Federal and Indian interests in a development of the area that is not yet complete. But they are more than this. They are also the means by which thousands of families live and by which the Nation benefits from a region which is rich with water and poor without it. In these people and in a continuation and expansion of the benefits which the area can yield, even more than in its financial investment, the United States has an interest to protect.

Among these people, the United States has an especial interest in the protection of the Indians. That their stake in the Colorado River Basin is a very large one is made plain in the pages of House Document 419, devoted to the present and prospective development of Indian lands. That their rights to the use of the waters of the Colorado River system for the irrigation of these lands will be an important element in any settlement of the lower basin's problems, whether that settlement is accomplished by litigation or otherwise, is made plain by many legal precedents. Notable among these is the decision of the Supreme Court in *Winters* v. *United States* (207 U. S. 564 (1908)) that a reservation for Indian use of lands within the area of an Indian cession carries with it a reservation of such waters, within the ceded area, as may be needed to make the reserved lands valuable for agricultural pursuits or otherwise adequate for beneficial use, and that such a reservation of waters has priority from the date, at least, when the lands involved were reserved for Indian use. The obligation of the United States to maintain the prior water rights of the Indians of the Colorado River Basin, and to enforce the immunity of these rights against displacement by action inconsistent with their status as interests protected by Federal law, is one that has been recognized by all seven States of the basin in the provisions of the Colorado River compact itself.

The vital concern of the United States in the waters of the Colorado River also stems from its traditional guardianship over navigable streams, the particular responsibility which it has taken on itself with respect to the Colorado by having entered into a treaty with Mexico, and its authority (asserted in sec. 5 of the Boulder Canyon Project Act) to control the use and disposition of the waters impounded behind Hoover Dam—all of which clearly make it an indispensable party to any general litigation involving water rights in the Colorado. But, quite apart from these broad policy considerations, the specific Federal developments, existing and potential, on both sides of the river are, as I have pointed out, so extensive and so important that, if those on either side are threatened by claims asserted on the other, the United States has a clear interest in seeing those assertions defeated.

It likewise has an interest in knowing what its obligations are under the various water storage and delivery agreements that the Secretary of the Interior has entered into with Arizona, Nevada, and several California agencies under the authority given him by section 5 of the Boulder Canyon Project Act. The validity, meaning, and effect of those agreements depend upon their conformity to the relevant provisions of the Boulder Canyon Project Act and the documents related to it, and, therefore, depend, in part at least, upon the answers to such questions as those previously outlined in this letter.

I have not attempted to examine the merits of the contentions made by the spokesmen for Arizona and California on these questions. Assuming, however, that there is some merit to both sides on all four of the major questions, it is obvious that there are many answers, in terms of the number of acre-feet of water which California may use under section 4 (a) of the Boulder Canyon Project Act, that might conceivably be given. Using the long-run average flows shown in this Department's report on the Colorado River Basin as a basis for computations, the answers might range from as much as 6,250,000 acre-feet per year to approximately 4,000,000 acre-feet. Likewise, there is a great range in the amount of

water from the Colorado River system which might be found available for use in Arizona. The maximum might be somewhat over 3,500,000 acre-feet, the minimum nearly as little as 2,250,000 acre-feet.

The water which California projects, Federal or other, now in existence or under construction will require when they are in full operation is a great deal more than the amount which that State is entitled to use if all of Arizona's contentions are taken to be true. Similarly, the water which Arizona projects now in existence, under construction, or authorized will require when they are fully developed is much more than the supply available to that State if all of California's contentions are taken to be true.

It may be, of course, that the Supreme Court would not agree with all of the contentions of either of the States. For the present, however, the purpose of this discussion is to emphasize the fact that the United States has an interest of its own in the proposed litigation, that if Senate Joint Resolution 145 becomes law the United States may have to take a position before the Court independent of that taken by either of the States, that it is highly desirable that this likelihood be anticipated and recognized in the proposed legislation, which is before your committee, and that the constitutional bases for the Federal developments in the lower basin ought, therefore, to be clearly asserted in this legislation if it is to be enacted.

While I am thus convinced that the United States would have a large stake in the outcome of this proposed litigation, I am not prepared to say that the onus of instituting the suit should be cast, as the present language of Senate Joint Resolution 145 proposes, on the Attorney General. It would, I believe, be better for the United States merely to allow itself to be joined as a party defendant in the litigations.

If the Congress determines that a joint resolution along the lines of Senate Joint Resolution 145 ought to be enacted, then, in addition to the incorporation therein (or in other legislation enacted prior thereto) of provisions authorizing those developments in the basin that can be appropriately undertaken pending conclusion of the litigation, the joint resolution should, in my opinion, be amended by substituting for its present text language substantially as follows:

"Whereas there are controversies of long standing, particularly among the States of the lower Colorado River Basin, over the meaning and effect of certain provisions of the Colorado River compact, the Boulder Canyon Project Act, the Boulder Canyon Project Adjustment Act, the California Limitation Act (Stats. California 1929, ch. 16) and other documents related thereto; and

"Whereas those controversies affect the various projects in that basin for impounding, regulating, and using the waters of the Colorado River and its tributaries, a commercially valuable interstate stream system, the construction of which the Congress has heretofore authorized, or may hereafter authorize, in the exercise of its constitutional powers to provide for the general welfare of the United States, to regulate commerce by promoting the comprehensive development of the Nation's water resources, to implement and carry out the obligations of the United States to Indian tribes and to foreign nations, to make needful rules and regulations respecting the territory or other property of the United States, to protect the rights of the Indians to priority in the use of the waters reserved or otherwise available for them, and to provide for the national defense; and

"Whereas the Secretary of the Interior, on behalf of the United States, has entered into various agreements with States, public agencies, and other parties in the lower Colorado River Basin relating to the storage and delivery of Colorado River water, and the validity, meaning, and effect of these agreements depend upon their conformity to the provisions of the statutes and other documents hereinbefore referred to; and

"Whereas the Supreme Court of the United States in Arizona versus California (298 U. S. 558) held in effect that there can be no final adjudication of rights to the use of the waters of the Colorado River system without the presence, as a party, of the United States: Now, therefore, be it.

"*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That consent is hereby given to the joinder of the United States of America as a party in any action or actions commenced within two years from the effective date of this Act in the Supreme Court of the United States by any State of the lower basin of the Colorado River, as that basin is defined in the Colorado River compact, for the adjudication of claims of right asserted by such State, by any other State, or by the United States, with respect to the waters of the Colorado River system available for use in that basin."

The Bureau of the Budget has advised me that the enactment of Senate Joint Resolution 145 would not be in accord with the program of the President unless amended in such a way as:

(*a*) To waive the immunity of the United States to suit and permit the States to bring such actions as they may desire if the Congress feels that it is necessary to take such action in order to compose differences among the States with reference to the waters of the Colorado River; * * *

Senator DOWNEY. Is he still referring to the report of the Budget there?

Senator MILLIKIN. Yes. This (*a*), (*b*), and (*c*) is under his reference to the Bureau of the Budget:

(*b*) To place a reasonable limit on the time for the bringing of such actions; and

(*c*) To insure that in any such action the United States would have the right to defend and also to assert any affirmative claim which it may have or wish to assert in connection with the subject matter of any action filed pursuant to the legislation.

Sincerely yours,

J. A. KRUG,
Secretary of the Interior.

Senator MILLIKIN. As I said before, we are having this multigraphed, and I will try to get an estimate as to when the multigraph copies will be completed.

Senator DOWNEY. You pay me a too high compliment by saying a "little time." I would suggest that the chairman might, in a few simple words, summarize the letter.

Senator MILLIKIN. You pay me an overwhelming compliment, Senator.

Senator DOWNEY. You, more than anybody else, have helped to make the law of the river by establishing firmly one undeniable right, and that is for the sovereignty of Mexico.

Senator MILLIKIN. May we now consider that as a firm and undenied right?

Senator DOWNEY. I have never resisted that.

Mr. Chairman, would it be appropriate for me to request the chairman to ask the Bureau of Reclamation to submit to this committee for its information the report of the Bureau of the Budget?

Senator MILLIKIN. I do not see any objection. Ido not know what the departmental protocol is on that. I will ask for it.

Senator MCFARLAND. I think what they do, Mr. Chairman, they submit their report and ask approval of it. I think that that is the procedure.

Senator MILLIKIN. I have some doubt as to whether we have a right to ask for that but, if we can get it readily, we might as well have it.

Senator DOWNEY. If you request the Bureau of the Budget for it, it will be immediately forthcoming, I am sure. I do not see why anybody should object to it. We all would naturally assume that the Bureau of Reclamation would make its report in conformity with the report of the Bureau of the Budget.

Senator MILLIKIN. You see we asked for this report on July 9, 1947, the report which I have just read. It certainly was supposed to be here before the beginning of this hearing. This is now the fourth day of this hearing and, after all of this labor, the report has been forthcoming. I shall leave it to you gentlemen to interpret it.

Senator DOWNEY. I think that that is the duty of the chairman, really.

Senator MILLIKIN. I assume that I am going to be instructed as to its true meaning.

Senator DOWNEY. I will pay tribute to the great ability of the Senator, who is the chairman.

Senator MILLIKIN. Assuming the multigraphed copies are ready by 2 o'clock.

Mr. SHAW. Might I suggest an alternative which might expedite the procedure, that we have certain comments by way of rebuttal of Arizona's showing which we could proceed with earlier than 3:30 if the chairman so desired, and we would then have the evening to reserve to consider this report and possibly be able to make comments on it tomorrow.

Senator MILLIKIN. I think that that is a much better suggestion.

We will meet at 2:30.

(Whereupon, at 11:55 a. m., the subcommittee recessed until 2:30 p. m.)

AFTERNOON SESSION

(The committee resumed at 2 p. m., after the expiration of the recess.)

Senator MILLIKIN. The meeting will come to order.

I have a staff memorandum, as follows:

Mr. Roger Jones, of the Bureau of the Budget advised over the telephone at noon today, re your request for the Bureau of the Budget report to Interior on Senate Joint Resolution 145, as follows:

The first material forwarded the Bureau of the Budget was in the nature of an approved statement from the Secretary of the Interior. The draft had been prepared, he said, by representatives of the Indian Office and Bureau of Reclamation.

Because of interest expressed by the House committee, the Bureau of the Budget asked Secretary Krug what he had in front of him at the time the report was drafted. The Budget Bureau went over the material and found that it was not in accord with the President's program. Mr. Jones stated they wrote Secretary Krug on an informal basis and told him what they thought was wrong with that draft.

A complete rewrite of the report was made and submitted, as Mr. Jones says, to both the House and Senate committees today. This draft has not yet been seen by the Bureau of the Budget.

Director Webb, of the Bureau of the Budget, talked with Senator Downey and told him that this rather informal type of letter had nothing to do with the report received this morning, but was based solely on the first draft submitted by Interior to the Bureau of the Budget.

Mr. Jones suggested that if you would still like to know the contents of the Bureau of the Budget "informal note" to the Interior Department that you call Direcor Webb on the telephone.

Mr. Slaughter has advised Mr. Jones that a copy of today's Interior Department report will be submitted to the Budget Bureau and Mr. Jones said he would go over it promptly and advise you as to his comments.

Mr. Jones further said that the report of the Department of Justice was sent to the committee in identically the form it had been submitted to Budget and it has been cleared through the White House as indicated on the report.

Mr. SHAW. Mr. Chairman, there seems to be a state of confusion as to what is meant by the statement in the Secretary's report:

The Bureau of the Budget has advised me that the enactment of Senate Joint Resolution 145 would not be in accord with the program of the President unless amended—

and so on. The statement which you have just read indicates that they have not submitted any letter of advice.

Senator MILLIKIN. Yes; that is my interpretation of it.

Mr. SHAW. So are we left to understand that the report from the Secretary which was read this morning has not been cleared by the Bureau of the Budget?

Senator MILLIKIN. I would not attempt to say what we are led to understand. We have the report, and we have the informal advice. I shall see if I can get some of the obvious inconsistencies straightened out, but I made no guaranties.

Mr. SHAW. Mr. Chairman, if you are ready to proceed, we would like to designate for the record and ask that there be printed in the record of these hearings certain portions of the hearing on S. 1175, Eightieth Congress, first session, held before this subcommittee as follows:

The statement appearing under heading of "Availability of water supply for project" on pages 358 to 363, inclusive, made by Raymond Matthew, chief engineer of the Colorado River Board of California.

The statement, also made by Mr. Matthew, appearing under the head of "Available water supply and requirements," on pages 374 to 389, inclusive.

The statement, also by Mr. Matthew, appearing under the heading of "Supplemental statement No. 3 * * *" on page 412.

And last, the statement of C. C. Elder, hydraulic engineer, Metropolitan Water District of Southern California, appearing at pages 417 to 429, inclusive.

Senator MILLIKIN. Do you wish those to appear at this point in the record?

Mr. SHAW. At any point, Mr. Chairman. This is in response to the chairman's invitation to designate such portions of the record on the hearings on S. 1175 as might be relevant to the portions which were designated by Arizona.

Senator MILLIKIN. We will put them in at this point in the record.

(The material referred to is as follows:)

AVAILABILITY OF WATER SUPPLY FOR PROJECT

The Bureau's preliminary report on the proposed project contains the following statement with respect to available water supply:

"(b) Colorado River: The average annual virgin flow of the Colorado River at Lee Ferry, the point of demarcation between the upper and lower Colorado River Basins, is estimated to be 16,270,000 acre-feet. The amount of this flow which may be diverted for use in the State of Arizona must fall within the provisions of various compacts, agreements, and contracts and a treaty between the United States and Mexico. Many of these documents are subject to conflicting interpretations. It is not the intent of this report to interpret the legal aspects of allocating the water of the Colorado River. Responsible officials of the State of Arizona have made interpretations of existing contracts and compacts for Colorado River water.

"On the basis of these interpretations, it is estimated that the Colorado River may be depleted 1,077,000 acre-feet a year for the central Arizona project. It is assumed that diversions from the Colorado River for the central Arizona project may be made to the full extent of the 1,077,000 acre-feet, plus any water which would return to the Colorado River as a result of this development. * * *"

Senator DOWNEY. May I intervene with one question? I thought the Bureau here, based upon certain assumptions, did find there was enough water for 1,200,000 acre-feet for the central Arizona project. You used the figure 1,077,000 acre-feet.

Mr. MATTHEW. I am quoting from the Bureau's report. The difference between the two figures is this, Senator: The 1,077,000 acre-feet is determined, based on Arizona's interpretation of compact and related documents, as to the net amount of water she would have available for the central Arizona project

and all of her other projects which she is contemplating. The 1,200,000 is computed from this 1,077,000, with allowance for assumed return flow.

Senator McFARLAND. In other words, is it estimated we depleted the river 1,200,000 acre-feet?

Mr. MATTHEW. That is right. That follows right along here, Senator.

Senator DOWNEY. Thank you.

Senator MILLIKIN. Go ahead, please.

Mr. MATTHEW. I was quoting:

"* * * It would ultimately be necessary to release water from the area to maintain proper salt balance. Since the net effect of such a release would be to return about 10 percent of the diverted water to the Colorado River, it is estimated that 1,200,000 acre-feet could be diverted annually."

With respect to the foregoing statement, no mention is made of the fact that responsible officers of the State of California have arrived at a contrary conclusion. The water-supply figures cannot be considered as either definite or certain but merely as a reflection of Arizona's interpretations of the Colorado River compact and related statutes and documents.

The Colorado River Board and the State of California are in complete disagreement with Arizona's legal interpretations of the Colorado River compact and related statutes and documents in regard to the amount of water that Arizona is entitled to.

Arizona contends that, in addition to 2,800,000 acre-feet annually of the waters of the Colorado River system allocated by article III (a) of the Colorado River compact, she is entitled to the entire 1,000,000 acre-feet of water which the lower basin may use under article III (b) of the compact. In addition, Arizona contends that she is chargeable under the compact for the use of Gila River water only to the extent that such use would deplete the flow of the Gila River at its mouth.

Senator DOWNEY. May I ask how much is actually involved in that first item—how much water?

Mr. MATTHEW. Well, it is in two parts: One is the III (a) water of the compact and one is III (b) water.

Senator DOWNEY. I understand about the depletion theory. There is a million acre-feet involved in that. How much is involved in the other one?

Mr. MATTHEW. It has to do with what Arizona is chargeable for on the Gila River—whether on the depletion basis at the mouth or on a consumptive-use basis. The amount of water amounts to another million acre-feet.

Senator DOWNEY. There is 2,000,000 acre-feet involved in Arizona contentions?

Mr. MATTHEW. Yes.

Senator McFARLAND. I don't want to interrupt, and perhaps the witnesses will cover these matters; however, I think that when witnesses present certain data, they should also state the source of that data, instead of merely stating unsupported figures. That isn't any evidence; that is just a conclusion. I think we ought to have the source of the information. Maybe the witness will do so before he gets through. No one should decide the case and resolve anything on statements like that.

Senator MILLIKIN. The witness has made two statements in this paragraph.

Senator McFARLAND. I wasn't referring to his statement. I was talking about the oral statement just made.

Mr. MATTHEW. I can support that statement, Senator, briefly. On a consumptive-use basis, according to California's opinion, Arizona would be chargeable on the Gila River to a consumptive use of 2,300,000 acre-feet. Arizona contends she would be chargeable only for depletion of the Gila River at its mouth.

Senator MILLIKIN. From virgin flow, with the virgin flow as your reference point?

Mr. MATTHEW. Yes, sir. That depletion would be computed from the virgin flow that the Bureau estimates at the mouth of the Gila, or 1,300,000 acre-feet.

Senator McFARLAND. I understand what your contention is. But my contention is, Mr. Chairman, as I pointed out yesterday, that at Granite Reef Dam we divert all the water of the Salt River; then, by return flow, there is more water entering the river; and lower down the river at Arlington all of the water is diverted again for the Buckeye district. The same process takes place at Gila Bend at the Gillespie Dam, and there is a return flow for use and reuse. I don't want to interrupt the witness, but I just say that I don't think that kind of evidence is any good unless it is substantiated by the source.

Senator MILLIKIN. Let me ask you, Senator McFarland: Is this a correct statement of the contention of Arizona? Arizona contends that, in addition to the

2,800,000 acre-feet annually of the Colorado River allocated by article III (a) of the Colorado River compact, she is entitled to the entire 1,000,000 acre-feet of water which the lower basin may use under article III (b) of the compact?

Senator McFARLAND. That is correct. As was pointed out by Mr. Howard here yesterday, if III (b) water is apportioned water, California wouldn't be entitled to any part of it.

Senator MILLIKIN. What I am getting at—is that Arizona's contention?

Senator McFARLAND. That is correct.

Senator MILLIKIN. Is it Arizona's contention that she is chargeable, under the compact, for use of Gila water only to the extent that such would deplete the flow of the Gila River at its mouth?

Senator McFARLAND. That is correct.

Mr. MATTHEW. I think I might make one remark. I don't want to be argumentative, but the statement as to the consumptive use of water in central Arizona is just simply this: It has nothing to do with the use or reuse. The inflow into the Phoenix area is in excess of 2,300,000 acre-feet a year according to the Bureau's figures and all of that water is used. I don't think that would be disputed. That is just simple fact.

Senator McFARLAND. I said we would rather go on facts rather than just a statement from California. We would like to know where the information comes from.

Mr. MATTHEW. That comes out of the Bureau's report, Senator.

Senator MILLIKIN. Go ahead, please, Mr. Matthew.

Mr. MATTHEW. In California's opinion, both of these contentions are unsound and cannot be legally supported. The United States Supreme Court has already declared against Arizona's first contention. As to the second contention, it is California's opinion that the compact is clear that Arizona is properly chargeable thereunder with the actual consumptive use of water of the Gila River and its tributaries at actual places of use. If either of these contentions of Arizona proves to be wrong, the result will be an inadequate water supply for the project.

In the synopsis of the Bureau's preliminary report previously referred to it is stated that "the amount of water available for diversion from the Colorado River to the central Arizona project cannot be precisely determined at this time." The report should also state the reason why, namely, that such determination can only be made after the basic determination has been made of the allocation of waters of the Colorado River system among the lower basin States under the Colorado River compact and related statutes and documents, and in turn, the State of Arizona has determined how its share of Colorado River system waters is to be divided among the existing or authorized projects and proposed projects in that State.

Senator MILLIKIN. Mr. Matthew, I would like a further enlightenment on the last part of your preceding paragraph. You said:

"* * * and in turn, the State of Arizona has determined how its share of Colorado River system waters is to be divided among the existing or authorized projects and proposed projects in that State."

Assuming merely for the purpose of assumption that Arizona or the interested parties in Arizona committed themselves to the use of water, water would be diverted from the Colorado for the purpose of this project, is it your contention Arizona would have to go further and achieve determination of all her other water rights in the State?

Mr. MATTHEW. The point is, Senator, that there is a certain total amount of water that Arizona is entitled to yet to be determined, from the Colorado River system. Now, then, within that total entitlement Arizona has to make the decision, as to how she is going to divide water among the projects.

Senator MILLIKIN. Assuming there is impingement on the internal distribution of water by Arizona of the Colorado River over rights of other Arizona parties to the Colorado River, it is no concern to any other outside party how Arizona handles her internal water.

Mr. MATTHEW. That is her business.

Senator MILLIKIN. As far as this project is concerned, merely by way of assumption, by way of enlightenment, if this project were authorized and if it proceeded, and if the amount of water necessary to maintain it were thoroughly committed to the project, so that would be the interest of this committee in how Arizona handled the rest of its internal water problems?

Mr. MATTHEW. Well, the only point is, Senator, that there is just a certain total amount of water that Arizona would be entitled to use.

Senator MILLIKIN. The case that I put to you assumes that at least, in the judgment of Congress, they would be entitled to use water for support of this

project, assuming that were determined, would the Congress have any further interest or this committee have any further interest in how Arizona resolved the rest of its internal problems?

Mr. MATTHEW. I think fundamentally that this committee would be concerned with determining satisfactorily if there was a water supply in fact for this project.

Senator MILLIKIN. Of course.

Mr. MATTHEW. And that depends upon two things—how much water Arizona is entitled to from the Colorado River system; and secondly, what are the requirements of their existing and authorized projects or any other projects they propose; in other words, to see whether the balance left over is enough for this project.

Senator DOWNEY. Mr. Chairman, if I may intervene. It seemed to be the issue upon the Gila project bill that this committee recently approved and was passed by the Senate. Suppose the Supreme Court should decide that Arizona is entitled to 750,000 acre-feet above the needs of its present projects, then the question would be, if no binding decision has been made by Arizona, would it be the case that the Gila project would be entitled to 600,000 out of the 750,000, or if Congress had also approved the central Arizona project, would this project take the whole?

Senator MILLIKIN. I don't think there is any question. I don't think anyone suggested it isn't the duty of this committee, and, if we go further, ultimately of the Congress, to determine whether there is enough water to build these projects.

Senator DOWNEY. Say above and beyond the Mohawk.

Senator MILLIKIN. I think the way I have stated it answers the question completely. Our job would be to determine whether there is enough water for this project and that further includes a consideration of waters which have been allotted to other projects.

Senator DOWNEY. Mr. Chairman, you have stated it very clearly, but in the Mohawk bill, Congress is in a new departure, because that project does not as yet, and may not for a long time, have any contract with the Secretary of the Interior, which is the method prescribed in the existing statute.

Senator MCFARLAND. Oh, yes; we have a contract. I might put it in the evidence now, if the Senator hasn't seen it.

Senator DOWNEY. If there is a contract with the Secretary of the Interior on the Mohawk, I had not been aware of it.

Senator MILLIKIN. The Chair is not determining anything now. The Chair is seeking enlightenment now. The Chair is simply saying that obviously this committee and, if it should go further, Congress, must determine whether there is enough lawful water to sustain that project.

Senator MCFARLAND. We are not attempting to settle that.

Senator MILLIKIN. Go ahead, please.

Mr. MATTHEW. Return flow: The foregoing quotation from the Bureau's preliminary report contains a statement that there would be a return of "about 10 percent of the diverted water to the Colorado River." The amount of such return flow was estimated at 20 percent in a previous preliminary report. If any water passes Gillespie Dam, one of two results will follow——

Senator MILLIKIN. Just a minute. Let me get Gillespie Dam located.

Mr. MATTHEW. That is the lower end of the main Salt River Valley development, Senator.

Senator MILLIKIN. That is the exit to the last stretch of the Gila.

Mr. MATTHEW. Yes, the end of the main development.

Senator MILLIKIN. Go ahead, please.

Mr. MATTHEW. (1) Either it will be lost in the wide, sandy bed of the Gila River between Gillespie Dam and Yuma, or (2) if it can be diverted from the river or subterranean flow, it will be taken and consumed on Arizona lands. In view of the realities of the situation, there is no assurance that there would be any return flow to the Colorado River; there is much evidence that there would be none. Accordingly, no allowance should be made for return flow in any such calculation.

AVAILABLE WATER SUPPLY AND REQUIREMENTS

The development and utilization of Colorado River system waters in the lower basin has already progressed to such an extent that the water requirements of existing and authorized projects, together with recognized commitments in the lower basin exceed the water supply that will be available to the lower basin under full development, after the Mexican water treaty obligation is satisfied.

Table I shows estimates of available water supply in the lower basin during

critical periods such as 1931–40, inclusive, or 1930–46, inclusive, and estimates of the consumptive use requirements of existing—operating—and authorized projects, including recognized commitments for projects in the lower basin. The analysis presented involves no legal interpretations of the compact, Boulder Canyon Project Act, and relevant statutes, decisions, and instruments but points up the necessity of there being a final determination of the rights of the States of the lower basin before any new projects, such as the proposed central Arizona project, are authorized.

Mr. Chairman and gentlemen, then follows table I and the text will go along explaining table I, item by item, as numbered in the table.

(The table is as follows:)

TABLE I.—*Estimated available water supply and requirements of existing projects in lower basin (based on critical periods such as 1931 to 1940, inclusive, or 1930 to 1946, inclusive)*

		Average annual flow in acre-feet
Available water supply for lower basin:		
1. Colorado River at Lee Ferry		7,500,000
2. Net from tributaries—Lee Ferry to mouth of Gila River		300,000
3. Gila River and tributaries (available for consumption)		2,300,000
4. Total available supply		10,100,000
5. Required to deliver Mexican treaty guarantee		1,700,000
6. Available water supply for projects in lower basin		8,400,000

		Annual consumptive use in acre-feet
Requirements of existing (operating) and authorized projects:		
7. Main stream reservoir projects (net evaporation losses)		[1] 780,000
NEVADA, UTAH, AND NEW MEXICO		
8. Projects in lower basin		440,000
ARIZONA		
9. Projects using water of Gila River and tributaries	2,270,000	
10. Projects on other tributaries		130,000
11. Colorado River Indian Reservation (Parker project)	300,000	
12. Yuma project in Arizona	250,000	
13. Gila project (proposed)	600,000	
14. Total, Arizona projects		3,550,000
CALIFORNIA (AS LIMITED BY EXISTING CONTRACTS)		
15. Palo Verde irrigation district	300,000	
16. Yuma project in California	50,000	
17. All-American Canal project	3,800,000	
18. Metropolitan water district and San Diego County Water Authority	1,212,000	
19. Total California projects		5,362,000
20. Total requirements of existing projects in lower basin		10,132,000
Say		10,130,000
21. Indicated average annual deficit without withdrawal from hold-over storage during critical period		1,730,000
22. Assumed additional water supply available from hold-over storage		1,500,000
23. Indicated average annual deficit with withdrawal from hold-over storage		230,000
24. Required total withdrawal from hold-over storage:		
(*a*) 10-year period, 1931–40		15,000,000
(*b*) 17-year period, 1930–46		25,500,000

[1] Does not include losses from proposed Bridge Canyon and Marble Canyon Reservoir projects, estimated to total 90,000 acre-feet annually.

Senator MILLIKIN. Let me take a quick look at the table. I am not quite clear on the contents of table I in relation to your statement on the preceding page:

"The analysis presented involves no legal interpretations of the compact, Boulder Canyon Project Act and relevant statutes, decisions, and instruments, but points up the necessity of there being a final determination of the rights of the States of the lower basin before any new projects, such as the proposed central Arizona project, are authorized."

Are not there some projects listed in table I with indicated claims for water that do depend for their validity upon the compact, Boulder Canyon Project Act and relevant statutes, decisions, and instruments?

Mr. MATTHEW. Senator, not the way this table is made up. The answer is "No." I suppose you may be referring to the amounts set up for the California projects. Those represent water requirements—in fact, minimum water requirements for those California water projects, regardless of the fact those amounts are also incorporated in contracts with the Secretary of Interior. They do represent, as far as this table is concerned, water requirements. In fact, the water requirements of those California projects might be estimated as more than that. In the Bureau's comprehensive report on the Colorado River, the requirements of those California projects were estimated by the Bureau in excess of 5,362,000 acre-feet, and we have no quarrel with that at all. As a matter of fact, a good deal more water could be used than is covered by the amounts here. But these are and do represent and constitute the minimum water requirements of each of those projects, individually and collectively.

Senator MILLIKIN. But you are not asserting that the validity of those requirements is not in question?

Mr. MATTHEW. I am not indicating one way or another here whether they are valid or not. They are water requirements, independent of any question of validity.

Senator MCFARLAND. Mr. Chairman, I see no object in arguing with the witness about the figures or about the law. The way the tables are set up, there are items very much in dispute, and we contend, according to our theory, that California isn't justified in executing them. And particularly is that true in regard to the item of Gila River of 2,270,000 acre-feet. I think, Mr. Chairman, that is also true in regard to the 5,362,000 total set up for California. That is beyond the amount for which they have a contract. As I say, there is no object in arguing these points now. It just takes a lot of time.

Senator DOWNEY. Mr. Chairman, may I inquire of the witness? It really makes no difference in these tables what amounts you set up for the Gila. You set up the same amounts both on the debit and credit side of the ledger; don't you?

Mr. MATTHEW. That is correct.

Senator DOWNEY. It doesn't make any difference if you enter the maximum or minimum figure, you get the same results?

Mr. MATTHEW. That is right.

Senator DOWNEY. You have here, item No. 3, "Gila River and tributaries (available for consumption), 2,300,000" and then on item No. 9 you have, "Projects using water of Gila River and tributaries, 2,270,000." The two balance?

Mr. MATTHEW. That is correct.

Senator DOWNEY. If you put that in million acre-feet on both sides as a credit and debit, you would get the same final conclusions?

Mr. MATTHEW. That is right.

Senator DOWNEY. May I ask this: Mr. Matthew, do I understand that as far as California items are concerned here, those are all covered by contracts from the Secretary of the Interior?

Mr. MATTHEW. That is correct. I want to make it clear, Mr. Chairman and gentlemen, that this table is an engineering table. It is not a legal table at all. These are estimated water requirements of these projects, and they are based upon the amount of water required to serve the areas in each of the projects.

Senator MILLIKIN. Would it not be more accurate on your page 20 to state that the analysis presented is independent of legal interpretation?

Mr. MATTHEW. That, perhaps, might be a more apt way of stating it.

Senator MILLIKIN. I am testing the accuracy of that sentence. I would like to know whether you adhere to that sentence or would you like to modify it?

Mr. MATTHEW. I have no reason to modify it, Senator. It is meant to be clear. This is an engineering table—data on water supply and water requirements. As

I say, the requirements of California projects might be estimated in more than that, particularly item 18—1,212,000 for the metropolitan water district and the areas of southern California. Those requirements could be estimated at considerably more than that.

Senator McFARLAND. Mr. Chairman, I wouldn't want to argue this. We would certainly not agree with these figures of 2,300,000 acre-feet and the other matter. They are engineering data set up for the purpose of basing legal interpretations. I just want to "flag" that figure now and say no more about it at this time.

Mr. MATTHEW. That wouldn't affect the computation of the indicated deficit.

Senator McFARLAND. From your viewpoint.

Mr. MATTHEW. Just mathematically.

Senator McFARLAND. How much water are you using annually from the Colorado River water?

Mr. MATTHEW. California.

Senator McFARLAND. California.

Mr. MATTHEW. California is using now something like 3,000,000 acre-feet.

Senator McFARLAND. Yes. That is all.

Mr. MATTHEW. But that isn't all the water requirements of the total irrigated area of 1,000,000 acres. About half is being irrigated now. These requirements are made up for the projects as they are constituted.

Senator McFARLAND. As you want it constituted?

Senator MILLIKIN. I believe the Chair has a sufficient understanding of what is involved in the various items, so if you will proceed.

Mr. MATTHEW. I don't know just how best to proceed with this, Mr. Chairman, but we will have to refer to the table in explanation of these items. The explanation follows:

Item 1 shows the average annual flow in acre-feet of the Colorado River at Lee Ferry in the average amount of 7,500,000 acre-feet annually, which constitutes the minimum residual flow under the terms of the Colorado River compact.

Item 2 is the estimated net inflow—inflow less channel losses in main river under full decelopment—into the Colorado River from tributaries between Lee Ferry and the mouth of the Gila River. This figure is based chiefly on estimates of the Bureau of Reclamation.

Item 3 is the estimated water supply available for consumptive use on the Gila River and its tributaries; or, in other words, the safe annual yield. It is based chiefly on Bureau estimates of the natural inflow into the Phoenix area as shown in table CXLVI of the Colorado River report, set forth as averaging 2,279,000 acre-feet. This entire average supply is regulated by surface and underground storage and fully utilized.

Item 4 shows the total available supply in the lower basin for such critical periods in the amount of 10,100,000 acre-feet, which is the sum of items 1, 2, and 3.

Senator O'MAHONEY. Is there any dispute about that figure?

Mr. MATTHEW. I think there is a dispute as to whether the Gila River shall be considered as the water supply at its mouth or the water supply available for consumptive use and actually put to consumptive-use purposes. That is what Senator McFarland referred to.

Senator McFARLAND. I might say we contend that any State, including the State of Arizona, should only be charged with the amount of water that we actually deplete the Colorado River. The virgin flow of the Gila at its mouth is 1,270,000 acre-feet. We deplete it less than that. We contend that we are only chargeable with that amount of water which the other States could be affected by our use.

Senator O'MAHONEY. This figure 2,300,000 is in excess of that?

Senator McFARLAND. Yes.

Senator O'MAHONEY. That is agreed?

Mr. MATTHEW. The figure 2,300,000 acre-feet is the flow into the affected areas and it is all used, so it is set up as water supply available for consumptive use on the Gila River and its tributaries. The flow at the mouth of the river is far below the area in which the water is used.

Senator O'MAHONEY. That is a matter of argument. I am just trying to determine what this figure 2,300,000 includes. Do I understand from you that what you mean by that figure is not only the water which is delivered from the Gila into the Colorado but the water which is used in the basin of the Gila?

Mr. MATTHEW. It is the water available in the basin of the Gila for consumptive use.

Senator O'MAHONEY. As well as that which is delivered?

Mr. MATTHEW. Yes; it includes water delivered.

Senator O'MAHONEY. Thank you, sir.

Mr. MATTHEW. Item 5 is the estimated amount of water required to satisfy deliveries of water required by the Mexican water treaty. The treaty guarantees Mexico 1,500,000 acre-feet annually from the Colorado River system. Because of the difficulty of measuring accurately the large quantities involved and of controlling precisely the rate of flow from points of release in the United States to the international boundary, it is estimated that a minimum additional amount of 200,000 acre-feet will be required for regulation purposes, making a total demand on the river of 1,700,000 acre-feet annually for this requirement.

Item 8 shows the available water supply for consumptive use of projects in the lower basin—item 4 minus item 5.

Items 7 to 19 show the estimated consumptive use requirements in acre-feet annually for existing—operating—and authorized projects in the lower basin.

Senator MILLIKIN. With reference to your 200,000 acre-feet required for regulation purposes, is that as of the present time or at the time of the river development?

Mr. MATTHEW. That would be as of the time when the treaty comes into operation on the Colorado River, sir, and deliveries are made under the treaty to satisfy demands up to 1,500,000 acre-feet a year for delivery at the international boundary in accordance with the terms of the treaty.

Senator MILLIKIN. As of that time?

Mr. MATTHEW. Yes.

Senator DOWNEY. Mr. Chairman, did you say "until that time"?

Senator MILLIKIN. I asked whether this statement referred to the present or whether it refers to the time the river is fully developed.

Mr. MATTHEW. Well, I would say simply that it does refer to the time when the river is fully developed, but I don't know when the treaty is going into full effect.

Senator MILLIKIN. I suggest that when the river is fully developed the whole coordinated system of reservoirs will make it unnecessary to set any particular amount for regulation of that requirement.

Mr. MATTHEW. The question as to delivery of water from the sources in the United States, the nearest source of water to satisfy the Mexican treaty will be the Davis Dam, which is far upstream, and anyone having experience with handling large flows such as in the Colorado River would know that you can't regulate precisely, particularly in view of the fact the treaty provides that Mexico can get its delivery of that water in certain daily amounts, according to what they want to take, within certain limits. At any rate, it is our judgment that the draft on the river for the Mexican treaty will be more than 1,500,000 acre-feet.

Senator MILLIKIN. Proceed.

Mr. MATTHEW. Item 7 is the estimated net evaporation loss of main stream reservoir projects, Bureau estimates. It may be noted that this figure does not include the estimated net evaporation losses for the proposed Bridge Canyon and Marble Canyon Reservoirs, which, if and when built, would involve an additional net evaporation loss of 90,000 acre-feet, Bureau estimates.

Senator MILLIKIN. By "net loss" you mean the difference between what would be lost by virgin flow and what is lost by reason of storage?

Mr. MATTHEW. Yes.

Senator MILLIKIN. May I interrupt again? Is it California's contention that those evaporation losses should be distributed to those who have the benefit of storage water?

Mr. MATTHEW. No, sir. California considers that the reservoir evaporation losses are charged against the lower basin; that such reservoir losses have to be taken out of the total available water supply.

Senator MCFARLAND. California wants to be charged with evaporation for storage within the boundaries of California; is that the idea?

Mr. MATTHEW. Well, Senator, I am not making a legal presentation here.

Senator MCFARLAND. Go ahead.

Senator MILLIKIN. Let me probe that a little further. Are you charging the beneficiaries of water from a storage installation with the evaporation loss?

Mr. MATTHEW. Senator, the Boulder Canyon Project Act and the California Limitation Act provide for California limiting itself to certain quantities of water defined as diversion less returns to the river; nothing is said about reservoir evaporation loss. The contracts between the Secretary of the Interior and the various agencies in California call for the storage and the delivery at stated

points on the river of necessary quantities of water. Now, that is the background of California's viewpoints—those documents.

Senator MILLIKIN. Do you contend that the loss by evaporation should be charged against beneficiaries of the water from the reservoir?

Mr. MATTHEW. Generally speaking; yes.

Senator MILLIKIN. All right.

Senator DOWNEY. Mr. Matthew, it is plain it would be charged against the lower basin?

Mr. MATTHEW. Yes.

Senator DOWNEY. That would reduce the available supply for distribution among States of the lower basin?

Mr. MATTHEW. Yes.

Senator DOWNEY. If we had 10,000,000 acre-feet gross, with a million acre-feet charged to the lower basin, that would leave 9,000,000 acre-feet to divide among us all?

Mr. MATTHEW. Yes, sir.

Senator MILLIKIN. Is it California's position that you divide that evaporation loss in some proportional way?

Mr. MATTHEW. California's viewpoint is that, as I say, under the terms of the Boulder Canyon Project Act and the California Limitation Act and the contracts, the quantities of water called for are diversions from the river less return to the river.

Senator DOWNEY. Would it not be California's contention to charge Arizona particularly for the 90,000 acre-feet for evaporation loss in the Bridge Canyon Reservoir if that is built? That would be identical to the other evaporation losses and thereby reduces the amount of water that would be available for lower basin use.

Mr. MATTHEW. It has to be charged to the whole lower basin and as a reduction of the water supply available.

Senator MCFARLAND. As a matter of fact, the real fact is that you want Arizona to bear all the loss and California take none?

Mr. MATTHEW. We wouldn't want Arizona to.

Senator MCFARLAND. Those are facts, Mr. Matthew. You can answer "yes" or "no."

Mr. MATTHEW. No. We are just operating under what we consider the law to be.

Senator MCFARLAND. You didn't want to talk about the law a minute ago, and now you want to talk about the law.

Mr. MATTHEW. You made me.

Senator MCFARLAND. Your statement speaks for itself; that is in the net results you are asking.

Senator MILLIKIN. The committee will estimate the net result. You may proceed, Mr. Matthew.

Mr. MATTHEW. Item 8 covers projects in the lower basin in the States of Nevada, Utah, and New Mexico in the amount of 44,000 acre-feet annually, comprising existing projects and commitments for projects in these States, including contracts under the Boulder Canyon Project Act between the United States and the State of Nevada for 300,000 acre-feet annually. It also covers miscellaneous projects in portions of Utah and New Mexico within the lower basin based on estimates of the Bureau. So far as known, there has never been a question raised as to such allocation to these States.

Item 9 is the estimated consumptive use of projects using the water of the Gila River and its tributaries in Arizona. The amount is estimated as 2,270,000 acre-feet, or 30,000 acre-feet less than the total water supply of the Gila River and its tributaries shown in item 3. This 30,000 acre-feet is the estimated requirement for projects in New Mexico and is included in item 8. Existing projects in Arizona are using the entire supply available from the Gila River and its tributaries; in fact, are now overdrawing the safe yield.

Item 10 is the estimated consumptive use requirements of existing projects on other tributaries of the Colorado River in Arizona, which aggregate 44,000 acres, as shown in the Colorado River report, and based upon a consumptive use of 3 acre-feet per acre per annum.

Item 11 is the estimated consumptive-use requirement for the 100,000 acres of irrigable land in the Parker Indian Reservation. This project was started in the seventies and is presumed to have a right covering the entire irrigated area.

Items 12 and 13 cover, respectively, the estimated consumptive-use requirements of the Yuma project in Arizona and the Gila project as now proposed.

Item 14 shows the total requirements of existing projects in Arizona, amounting to 3,550,000 acre-feet annually.

Items 15, 16, 17, and 18 set forth the estimated consumptive-use requirements of the existing projects in California. The amounts shown in the tabulation, aggregating 5,362,000 acre-feet annually (item 19) are based upon contracts executed from 1930 to 1934 under the Boulder Canyon Project Act.

Item 20 shows total estimated consumptive-use requirements of all existing projects in the lower basin amounting to 10,130,000 acre-feet annually (rounded figure).

Comparing this total (item 20) with the total available water supply for projects in the lower basin (item 6), there is an indicated average annual deficit during such critical periods, without withdrawal from hold-over storage, of 1,730,000 acre-feet.

The water supply that can be made available to the lower basin during such critical periods may be augmented by withdrawals from hold-over storage provided by Lake Mead and other reservoirs under construction or proposed in the lower basin. According to estimates of the Bureau of Reclamation (see data presented by Commissioner Bashore in S. Doc. 39, p. 8, 79th Cong., 1st sess.), plans contemplate sufficient hold-over storage to provide a withdrawal therefrom of an acreage of 1,500,000 acre-feet annually during a critical period such as 1931 to 1940, inclusive.

Item 22 is this assumed amount of additional water supply available from hold-over storage during such critical period.

Item 23 shows an indicated average anual deficit, after an assumed withdrawal from hold-over storage, in the amount of 230,000 acre-feet per annum.

As set forth in item 24, in order to obtain this additional supply, the total withdrawal from hold-over storage for the 10-year period 1931 to 1940, inclusive, would aggregate 15,000,000 acre-feet. However, the estimates of flow at Lee Ferry show that the controlling critical period of record for the lower basin continued through the 17 years 1930 to 1946, inclusive, with only the minimum flow of 7,500,000 acre-feet annually, on the average, available at Lee Ferry. This is assuming full upper-basin development. The required withdrawal from hold-over storage for the 17-year period 1930 to 1946, inclusive, would aggregate 25,500,000 acre-feet.

Senator O'MAHONEY. May I interrupt to suggest that it would be helpful to me if you will review items 9 to 18, inclusive, and indicate which ones of those are actually existing and utilizing water and how much, and which ones of those are not presently operating and not using the water set forth in respective figures.

Mr. MATTHEW. Yes, sir. Item 9, "Projects using water of Gila River and tributaries." Those projects are in existence and using all of that water in central Arizona.

Item 10, "Projects on other tributaries." That is the Bureau's estimate. It is my understanding that those projects all exist and are using most of that water. Those projects are on tributaries such as the Little Colorado River, and so forth.

Item 11, "Colorado River Indian Reservation (Parker project)." That project exists. They are only irrigating part of it now, but it has been under operation for many years.

Senator O'MAHONEY. What is the actual use of water?

Mr. MATTHEW. They are irrigating about six to ten thousand acres there, so their actual use of water on crops—consumptive use—would be in the neighborhood of 30,000 acre-feet.

Item 12, "Yuma project in Arizona," is existing and is an old-time reclamation project, and they are using substantially that total quantity of water.

The "Gila project (proposed)"—that project is authorized and under construction, and they are using some water; a small amount.

Senator MILLIKIN. How much water is the Gila using at the present time?

Senator MCFARLAND. Perhaps Mr. Debler can answer that. How much is being used on the Gila project?

Senator DOWNEY. The lower Gila project—at the existing authorized Gila project at the present time.

Mr. LARSON. The figure I have would be the 1940–44 average.

Mr. DEBLER. The Gila projejct is consuming 20,000 acre-feet a year.

Senator MCFARLAND. Could you give us the amount in the Indian Reservation project?

Mr. DEBLER. About 50,000. That is in the testimony I gave the other day.

Senator O'MAHONEY. That is the Parker project?

Mr. MATTHEW. That is right.

Senator O'MAHONEY. And the Gila, 20,000. Now, Mr. Matthew, the next item.

Mr. MATTHEW. The Palo Verde irrigation district is one of the older projects on the river in California, with rights dating back to the seventies. They are now irrigating about 60,000 acres out of a 100,000 gross, so that they are probably using about 200,000 acre-feet.

Senator O'MAHONEY. You want to put that down as 200,000?

Mr. MATTHEW. I don't want to put that down. I am giving you the information you requested.

Senator O'MAHONEY. In response to my question?

Mr. MATTHEW. Yes.

The Yuma project in California is a part of the United States Bureau of Reclamation project, the part in California. They are now irrigating 6,000 to 8,000 acres. It would take, perhaps, about twenty-five or thirty thousand acre-feet, I would say.

Senator O'MAHONEY. We will put that down at 30,000?

Mr. MATTHEW. I think that will be sufficient.

The All-American Canal project is now using about 2,700,000 acre-feet.

Senator MCFARLAND. That is, items 15, 16, 17, and 18?

Mr. MATTHEW. No, sir. That is item 17. That is for irrigation of about 500,000 acres out of a million acres provided by the All-American Canal project.

The metropolitan water district and San Diego County Water Authority's present diversion from the river is about 80,000 to 100,000 acre-feet.

Senator O'MAHONEY. Give me that figure again.

Mr. MATHEW. Somewhere between 80,000 and 100,000. Mr. Elder, can you give the latest figure?

Mr. ELDER. One hundred thousand acre-feet this year.

Senator O'MAHONEY. Being used in the metropolitan water district and San Diego County Water Authority.

Senator DOWNEY. For the further information of the Senator, I might say that the Federal Government has just assisted in the completion of an aqueduct to bring Colorado River water into San Diego, where it is vitally needed. The contract calls for a total of 112,000 acre-feet. The aqueduct is to be completed this fall.

Senator O'MAHONEY. That suggests another inquiry. Will the Palo Verde irrigation district at any time have more than 300,000 acre-feet?

Mr. MATTHEW. That is an estimate of consumptive-use requirement for the entire area there, Senator.

Senator O'MAHONEY. That is the maximum?

Mr. MATTHEW. Yes.

Senator O'MAHONEY. Is 50,000 the maximum for the Yuma project?

Mr. MATTHEW. Yes.

Senator O'MAHONEY. Is 3,800,000 a maximum for the All-American Canal project?

Mr. MATTHEW. That is our estimate of the ultimate consumptive-use requirement.

Senator O'MAHONEY. In other words, it is your maximum?

Mr. MATTHEW. Yes.

Senator DOWNEY. That is the amount of water fixed in the contract from the Secretary of the Interior?

Mr. MATTHEW. That relates to the contract.

Senator DOWNEY. As prescribed in the Boulder Canyon Project Act? I will withdraw that.

Senator O'MAHONEY. It is the maximum, is it not?

Mr. MATTHEW. That is our estimate as related to the contract, sir. As I said before, the Bureau of Reclamation presented larger estimates, and we have no quarrel with that.

Senator O'MAHONEY. My questions are directed to develop some simple information. Is that a maximum or is it not? Do you ever expect to ask for more water?

Mr. MATTHEW. We don't expect to ask for more water.

Senator O'MAHONEY. Then it is a maximum?

Mr. MATTHEW. Yes.

Senator O'MAHONEY. That is all I was asking. I will ask the same question with respect to item No. 18. That is a maximum?

Mr. MATTHEW. That is right.

Senator O MAHONEY. In other words, you don't think there will be in the future a draft upon the Colorado River's lower basin for more water than that for those particular purposes?

Mr. MATTHEW. That is correct.

Senator O'MAHONEY. Thank you, sir.

Senator MILLIKIN. Do you know how much water initially from San Diego is used through the aqueduct which Senator Downey referred to?

Mr. MATTHEW. She will be using about half of her allotment—about 75 second-feet.

Senator MILLIKIN. How many acre-feet?

Mr. MATTHEW. About 50,000 acre-feet a year.

Senator MILLIKIN. That is the start?

Mr. MATTHEW. Yes.

Senator MILLIKIN. The ultimate?

Mr. MATTHEW. The ultimate is 112,000 acre-feet, under the contract with the Secretary of the Interior. The metropolitan water district is for 1,212,000, including San Diego.

Senator MILLIKIN. So should 50,000 acre-feet be added to this 100,000 acre-feet that the aqueduct is now taking?

Mr. MATTHEW. Oh, no, sir. That was in answer to Senator O'Mahoney—the present diversion through the Colorado River aqueduct to the metropolitan water district. It is growing every year, and it would increase up to that amount of 1,212,000.

Senator MILLIKIN. Does that include the San Diego County Water Authority?

Mr. MATTHEW. Yes.

Senator MILLIKIN. What will it be when the aqueduct comes into being—what will it be then, the total diversion from the Colorado River on account of those two projects?

Mr. MATTHEW. Then I would say that the diversion would immediately be increased to 150,000. San Diego needs all of that water and more, too, right now. She is suffering a very severe shortage.

Senator MILLIKIN. The total of the metropolitan water district and the San Diego County Water Authority, as soon as the aqueduct is in operation, will be how much—can you estimate?

Mr. MATTHEW. I would say 150,000 to 200,000 in the next couple of years, as soon as the San Diego aqueduct is completed.

Senator MILLIKIN. What is the status of that aqueduct?

Senator DOWNEY. It will be completed within the next 3 or 4 months. I might say that as soon as that is completed it will require about the flow of that aqueduct and the balance within the next 30 years.

Senator MILLIKIN. The aqueduct runs from where to where?

Senator DOWNEY. Mr. Matthew, where does it run from where it connects with the supply canal of the metropolitan irrigation district—about 80 miles from San Diego, does it not?

Mr. MATTHEW. About that. It joins up with the main aqueduct of the metropolitan water district, which is called the Colorado River aqueduct, at the westerly end of the San Jacinto tunnel.

Senator DOWNEY. If I might mention, the municipal water-supply priority of the San Diego aqueduct is the lowest priority of any water rights we have in California. That water is considered essential by the military authorities of the Government for use in San Diego—the full 112,000 acre-feet, to maintain the existing civilian and military installations, which require about one-half of the total amount of water.

I would like to also point out to the committee that the transportation units of the metropolitan water district have, in the main, been wholly constructed now, and the cost has been expended under a contract, given by the Bureau of Reclamation, for the full amount of 1,100,000 acre-feet.

Senator O'MAHONEY. Does this affect the answer to my question?

Senator DOWNEY. No.

Senator O'MAHONEY. This 150,000 for San Diego will all be within the 1,212,000 set forth in item 18?

Senator DOWNEY. That is right, Senator. Probably Mr. Matthew is right in describing these allocations as the maximum amount and probably I am wrong, but I thought the figures down here agree with the figures given in the contracts by the Bureau of Reclamation to these different agencies in the State of California. Am I right or wrong?

Mr. MATTHEW. You are correct in that.

Senator DOWNEY. Understand, we are not saying we could not use much more Colorado River water in California.

Mr. MATTHEW. California did not want to limit itself to any use of water but it had to do so in 1928, to secure the passage of the Boulder Canyon Project Act. There are many projects in California upon which greater use of water could be made than is covered by these contracts.

Senator MCFARLAND. There is one question I would like to ask in regard to this All-American Canal project. You say they are using 2,700,000 acre-feet of water now?

Mr. MATTHEW. Yes.

Senator MCFARLAND. How much of that water goes into the Salton Sea?

Mr. MATTHEW. I can't tell you exactly how much. My understanding is together with the outflow from the Mexicali Valley in Baja California, which amounts to a very sizable figure, there is somewhere around 700,000 to a million acre-feet gets into Salton Sea, that is, when there is a lot of surplus water in the river.

Senator MCFARLAND. Now, how much more new land do they hope to put in crops under this project?

Mr. MATTHEW. Under the All-American Canal project?

Senator MCFARLAND. Yes.

Mr. MATTHEW. That would be about 100,000 acres in the Coachella Valley and 300,000 acres in the Imperial Valley.

Senator MCFARLAND. All that California has to do is not put in 300,000 acres of new land and they will have all the water they need, won't they?

Mr. MATTHEW. It so happens that the Imperial Valley lands have one of the first water rights on the river, dating back to the nineties.

Senator MCFARLAND. But not these new lands?

Mr. MATTHEW. These are also incorporated in the original water filings made for that project back in the nineties.

Senator MCFARLAND. Have these lands ever been irrigated?

Mr. MATTHEW. They haven't been irrigated.

Senator MCFARLAND. All your contracts for water are subject to availability, aren't they?

Mr. MATTHEW. Available under the compact.

Senator MCFARLAND. Subject to availability of water for use?

Mr. MATTHEW. Oh, any project is subject to availability of water.

Senator MCFARLAND. I understand. All you have to do to get all the water California needs is just fail to put in that 300,000 acres of new land?

Mr. MATTHEW. Senator, the original appropriations on the river for that area call for 10,000 second-feet and this right has been preserved for that area, by due diligence.

Senator MCFARLAND. I wasn't trying to argue the law. Maybe we have differences as to the rights. We feel Arizona has some rights on the river, too. But I was just asking a factual question.

Senator MILLIKIN. Mr. Matthew, California has a system of priorities to govern its own internal distribution of water from the Colorado?

Mr. MATTHEW. That is right.

Senator MILLIKIN. It might be well to put that in the record at some stage of the proceedings. (Information in supplemental statement No. 2, at conclusion of Mr. Matthew's presentation.)

Mr. MATTHEW. I would be very glad to.

Senator DOWNEY. I should like to attempt to clarify an answer to one of Senator O'Mahoney's questions. As Senator McFarland just stated, it is the claim of Arizona that it is only chargeable under the compact and the Boulder Canyon Project Act with a million acre-feet of water which was the amount that came down the Gila River in virgin flow. But, it is true that Arizona on the Gila River is getting a beneficial consumptive use of 2,270,000 acre-feet, and it is our legal view that Arizona is charged with beneficial consumptive use and not upon the theory of depletion. Consequently, Mr. Matthew in preparing item No. 3 gave as an item of available water supply for the lower basin 2,300,000 acre-feet which is the consumptive use on the Gila, but in setting up the requirements for existing and authorized projects he used the figure 2,270,000. They virtually wash each other out.

Taking Arizona's theory that Arizona should only be charged with a million acre-feet or 1,270,000 acre-feet on the Gila, each of these items the two items in the table of 2,300,000 and 2,270,000—would have to be changed correspondingly, so there will be no difference in the final result of this particular computation.

Senator McFARLAND. I don't want to leave the impression that we were using 2,300,000 acre-feet of water or anywhere near that. We are not using that amount of water or anywhere near that figure. We will have engineering data to show that.

Senator DOWNEY. I thought your witness, Mr. Debler, and Mr. Larson testified that the present beneficial consumptive use is about 2,300,000.

Senator McFARLAND. We divert all the water from the Salt River at Granite Reef, every drop of it, and by return flow there is more water comes back into the river. We divert it again at Buckeye.

Senator O'MAHONEY. That is clear, Senator.

Senator MILLIKIN. The conflict here, as near as I understand, Senator, California contends that you must measure the consumptive use that is made on every tributary of the Colorado and charge the State with that consumptive use. Arizona contends that the question is what is the amount of depletion of the Colorado River as against virgin flow.

Senator O'MAHONEY. That is clear.

Senator MILLIKIN. What is the charge Arizona claims should rightfully be made against her on account of depletion on the Gila River?

Senator McFARLAND. 1,100,000 acre-feet.

Senator MILLIKIN. If you did not have your inflow on the Gila River, if you were not irrigating on the Gila River 1,100,000 acre-feet, more water would reach the Colorado than now reaches it, is that correct?

Senator McFARLAND. That is correct; this water couldn't be used by the other States, but the other States are affected inasmuch as it would go down to supply water for Mexico.

Senator MILLIKIN. Please proceed.

Senator O'MAHONEY. There were two questions I wanted to ask. Mr. Matthew, in responding to my questions with respect to item 17, I understood you to say that 3,800,000 is the maximum estimated use. As at the present you are using only 2,700,000 acre-feet, and this irrigates 500,000 acres out of a million acres capable of irrigation, is that right?

Mr. MATTHEW. Yes. But when I say a million acres I am including all of the irrigated area in California including the Palo Verde project and the Yuma project.

Senator O'MAHONEY. Which was to be supplied out of this water?

Mr. MATTHEW. No, sir. I say out of the million acres there, there is about 900,000 acres under the All-American Canal.

Senator O'MAHONEY. That introduces another uncertainty. Is it proposed to irrigate this extra 500,000 acres by the difference between 2,700,000 acre-feet presently being used and 3,800,000 acre-feet which you have told us is your maximum anticipated use?

Mr. MATTHEW. It will be irrigated.

Senator O'MAHONEY. That difference between 1,100,000 acre-feet?

Mr. MATTHEW. It would be irrigated by the total of those under irrigation which amounts to 4,150,000 acre-feet. That is a rough figure, covering the Palo Verde and Yuma and All-American Canal project.

Senator O'MAHONEY. Well, 3,800,000 is a maximum.

Mr. MATTHEW. That amount is 4,100,000.

Senaor O'MAHONEY. Where does that figure appear?

Mr. MATTHEW. That is the sum of 300,000, 50,000, and 3,800,000.

Senator O'MAHONEY. I see. So that difference between 3,800,000 acre-feet and 2,700,000 acre-feet, namely 1,100,000 acre-feet is to be used on how many acres?

Mr. MATTHEW. I testified they are irrigating about 60,000 in Palo Verde and 10,000 acres in the Yuma project. That is 70,000. There will be an increase of 400,000 acres.

Senator O'MAHONEY. Four hundred thousand acres additional. Thank you.

Senator McFARLAND. Mr. Matthew, just so we won't be misunderstood. Are these contracts that you have with the Secretary of the Interior all subject to the availability of water under the compact?

Mr. MATTHEW. That is right. No, I don't deny that.

Senator MILLIKIN. Mr. Matthew, just to formalize the answers put to inquiries to Senator O'Mahoney, will you furnish us a table giving your own estimates of present use of water of all Colorado River system projects in the lower basin.

Mr. MATTHEW. I will be glad to do that, sir. (Table in supplemental statement No. 3, at conclusion of Mr. Matthew's presentation.)

Senator MILLIKIN. Will you proceed.

Mr. MATTHEW. The figures set forth in table I show that even with the amount of withdrawal from hold-over storage estimated by the Bureau of Reclamation, the requirements of existing and authorized projects in the lower basin exceed the water supply that will be available. As yet, no studies have been made to demonstrate that the long-time average flow of the Colorado River can be fully equated and that hold-over storage can be provided which will furnish the amounts of water required to be withdrawn during a critical period such as 1930-46, inclusive.

The important facts revealed by the analysis are that the consumptive use requirements of existing and authorized projects in the lower basin exceed the water supply that will be available to the lower basin under full development and that no water will be available for any new consumptive use projects in the lower basin. New projects in the lower basin could be provided with water for consumptive use only at the expense of the projects now operating or authorized, or for which commitments have been made.

California has no desire or interest in entering into the question of where or on what projects Arizona may decide to use the water to which she may be entitled from the Colorado River system.

Senator MILLIKIN. Going back to that last sentence of the preceding paragraph, of course, when you refer to something being done at the expense of something else, correctly interpreted, that would mean according to the legal rights of all the interested parties. If California has a legal right to something and Arizona takes it away from her, that is at the expense of California. Or, if Arizona has a legal right to something and that is taken away from California, that would be at the expense of Arizona?

Mr. MATTHEW. Yes; except, as I say, this is an engineering analysis and the point is simply that if these requirements were fully satisfied, then there would be no water available for any other project.

Senator MILLIKIN. Is that another way of saying all the claims on the river were satisfied?

Mr. MATTHEW. The claims on the river, sir, probably exceed these, I think. They would exceed this estimate of water requirements and that would be another matter, I believe. This is merely the estimated water requirements as compared to the water supply.

Senator MILLIKIN. Proceed, please.

Mr. MATTHEW. However, in the light of the analysis presented, it is desired to point out that in the opinion of California, with the completion of the Gila project as proposed by the bill, S. 483, now before Congress, no water will be available to supply any other new irrigation project in Arizona, such as the proposed central Arizona project.

SUPPLEMENTAL STATEMENT NO. 2 SUBMITTED BY RAYMOND MATTHEW, CHIEF ENGINEER, COLORADO RIVER BOARD OF CALIFORNIA, HEARINGS OF S. 1175, CENTRAL ARIZONA PROJECT

PRIORITIES TO USE WATER OF THE COLORADO RIVER IN CALIFORNIA

(Quoted from contract between the United States and the Metropolitan Water District of Southern California dated April 24, 1930, as amended September 28, 1931:)

"The waters of the Colorado River available for use within the State of California under the Colorado River compact and the Boulder Canyon project act shall be apportioned to the respective interests below named and in amounts and with priorities therein named and set forth, as follows:

"SECTION 1. A first priority to Palo Verde Irrigation District for beneficial use exclusively upon lands in said district as it now exists and upon lands between said district and the Colorado River, aggregating (within and without said district) a gross area of 104,500 acres, such waters as may be required by said lands.

"SEC. 2. A second priority to Yuma project of United States Bureau of Reclamation for beneficial use upon not exceeding a gross area of 25,000 acres of land located in said project in California, such waters as may be required by said lands.

"SEC. 3. A third priority (a) to Imperial Irrigation District and other lands under or that will be served from the All-American Canal in Imperial and Coachella Valleys, and (b) to Palo Verde Irrigation District for use exclusively on 16,000 acres in that area known as the 'Lower Palo Verde Mesa,' adjacent

to Palo Verde Irrigation District, for beneficial consumptive use, 3,850,000 acre-feet of water per annum less the beneficial consumptive use under the priorities designated in section 1 and 2 above. The rights designated (a) and (b) in this section are equal in priority. The total beneficial consumptive use under priorities stated in sections 1, 2, and 3 of this article shall not exceed 3,850,000 acre-feet of water per annum.

"SEC. 4. A fourth priority to the Metropolitan Water District of Southern California and/or the City of Los Angeles, for beneficial consumptive use, by themselves and/or others, on the coastal plain of Southern California, 550,000 acre-feet of water per annum.

"SEC. 5. A fifth priority (a) to the Metropolitan Water District of Southern California and/or the City of Los Angeles, for beneficial consumptive use, by themselves and/or others, on the coastal plain of Southern California, 550,000 acre-feet of water per annum, and (b) to the City of San Diego and/or County of San Diego, for beneficial consumptive use, 112,000 acre-feet of water per annum. The rights designated (a) and (b) in this section are equal in priority.

"SEC. 6. A sixth priority (a) to Imperial Irrigation District and other lands under or that will be served from the All-American Canal in Imperial and Coachella Valleys, and (b) to Palo Verde Irrigation District for use exclusively on 16,000 acres in that area known as the 'Lower Palo Verde Mesa,' adjacent to Palo Verde Irrigation District, for beneficial consumptive use, 300,000 acre-feet of water per annum. The rights designated (a) and (b) in this section are equal in priority.

"SEC. 7. A seventh priority of all remaining water available for use within California, for agricultural use in the Colorado River Basin in California, as said basin is designated on map No. 23000 of the Department of the Interior, Bureau of Reclamation.

"SEC. 8. So far as the rights of the allottees named above are concerned, the Metropolitan Water District of Southern California and/or the City of Los Angeles shall have the exclusive right to withdraw and divert into its aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said district and/or said city (not exceeding at any one time 4,750,000 acre-feet in the aggregate) by reason of reduced diversions by said district and/or said city; provided, that accumulations shall be subject to such conditions as to accumulation, retention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final; provided further, that the United States of America reserves the right to make similar arrangements with users in other States without distinction in priority, and to determine the correlative relations between said district and/or said city and such users resulting therefrom.

"SEC. 9. In addition, so far as the rights of the allottees named above are concerned, the City of San Diego and/or County of San Diego shall have the exclusive right to withdraw and divert into an aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said city and/or said county (not exceeding at any one time 250,000 acre-feet in the aggregate) by reason of reduced diversions by said city and/or said county; provided, that accumulations shall be subject to such conditions as to accumulations, retention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final; provided further, that the United States of America reserves the right to make similar arrangements with users in other States without distinction in priority, and to determine the correlative relations between the said city and/or said county and such users resulting therefrom.

"SEC. 10. In no event shall the amounts allotted in this agreement to the Metropolitan Water District of Southern California and/or the city of Los Angeles be increased on account of inclusion of a supply for both said district and said city, and either or both may use said apportionments as may be agreed by and between said district and said city.

"SEC. 11. In no event shall the amounts allotted in this agreement to the city of San Diego and/or to the county of San Diego be increased on account of inclusion of a supply for both said city and said county, and either or both may use said apportionments as may be agreed by and between said city and said county.

"SEC. 12. The priorities hereinbefore set forth shall be in no wise affected by the relative dates of water contracts executed by the Secretary of the Interior with the various parties."

SUPPLEMENTAL STATEMENT NO. 3, SUBMITTED BY RAYMOND MATTHEW, CHIEF ENGINEER, COLORADO RIVER BOARD OF CALIFORNIA, HEARINGS ON S. 1175, CENTRAL ARIZONA PROJECT

Estimated annual beneficial consumptive use of projects in lower basin of Colorado River system at present time

	Acre-feet per annum
Net losses from reservoirs, main stream	750,000
State of Arizona:	
Colorado River Indian Reservation	50,000
Yuma project (in Arizona)	220,000
Gila project	130,000
Williams River Basin	5,000
Little Colorado River Basin	60,000
Virgin River and miscellaneous	5,000
Gila River and tributaries	2,270,000
Total Arizona	2,740,000
State of California:	
Palo Verde project	150,000
Yuma project (in California)	30,000
All-American Canal project	2,900,000
Metropolitan Water District of Southern California	150,000
Total California	3,230,000
State of Nevada:	
Virginia River Basin	25,000
Las Vegas area	15,000
Total Nevada	40,000
State of New Mexico:	
Little Colorado River Basin	14,000
Gila River Basin	16,000
Total New Mexico	30,000
State of Utah: Virgin and Kanab River Basins	50,000
Grand total of lower basin projects, present use	6,840,000

SUPPLEMENTAL STATEMENT NO. 4 OF RAYMOND MATTHEW, CHIEF ENGINEER, COLORADO RIVER BOARD OF CALIFORNIA, IN ANSWER TO INTERROGATORIES ADDRESSED TO HIM BY SENATOR MCFARLAND ON JULY 1, 1947, AT HEARINGS ON S. 1175 BEFORE SUBCOMMITTEE ON IRRIGATION AND RECLAMATION, SENATE PUBLIC LANDS COMMITTEE

The questions asked by Senator McFarland and answers thereto follow, in the order listed in the interrogatories.

A. The statement presented for California by Raymond Matthew on June 30, 1947, page 22, item 17, lists a requirement for the All-American Canal of 3,800,000 acre-feet. With respect to this item, the following information is desired.

Question 1: How much land is actually being irrigated at this time in the Imperial Valley area?

Answer: It is assumed that by "Imperial Valley area" is meant Imperial and Coachella Valleys or, in other words, the area under the All-American Canal project and, that "at this time" means as of the present year. On this basis, it is estimated that the land actually being irrigated at this time totals about 470,000 acres.

Question 2: How much water is being carried into this area; state each source and amount reaching the area. Also show how much of this water is being deliv-

ered to the irrigator, the amount lost in conveyance of water to the land, and the amount wasted.

Answer: It is assumed that the "area" is the same as referred to in answer to question No. 1; that annual amounts are desired; that the reference to "carried into the area" and "amount reaching the area" means diversion from the source of supply; and that "delivered to irrigator" means all deliveries as no segregation is made between water delivered for domestic, industrial, or irrigation purposes in Imperial Valley. All water required by the cities, towns, and farms in Imperial Valley must be supplied from the irrigation canal system as no other source of supply is available. On these bases: Source, (*a*) Colorado River. Amount carried into area totals 2,900,000 acre-feet. Of this total, 100,000 acre-feet to Coachella Valley for supplying needs for canal construction, priming completed canal (over 100 miles), and supplementing underground supply. Of remaining 2,800,000 acre-feet delivered to irrigator 1,900,000 acre-feet (68 percent); loss in canal system (1,800 miles) 700,000 acre-feet (25 percent); and canal regulation and maintenance of delivery efficiency 200,000 acre-feet (7 percent). No water is wasted. Source, (*b*) underground water from mountains surrounding Coachella Valley, safe yield estimated to be 50,000 acre-feet which is also used in the portion of the Coachella Valley, including Palm Springs, which lies outside of the All-American Canal area.

Question 3: Tabulate the areas on which 3,800,000 acre-feet of All-American water is to be used, by organized districts and by areas lying outside of organized districts showing for each district area and each nondistrict area the following information:

(*a*) Acres actually being irrigated.

(*b*) Irrigable acres not now irrigated, with reference to report supporting such finding of irrigability, and for such irrigable acres show percent of lands publicly owned.

(*c*) Reference to project reports including such lands.

(*d*) Amount of water required for each such area in acre-feet per acre delivered to the farm; also amount of All-American Canal water to be used by the area and where such water will be measured.

(*e*) Citation, of authorization by Congress for construction of works to serve each such area.

Answer: The same general assumptions are used in answering this question as in answering question No. 1 and No. 2:

The 3,800,000 acre-feet is to be used only on lands within organized districts; these are Imperial irrigation district in Imperial Valley and Coachella Valley County water district in Coachella Valley.

The following data are submitted in answer to the items in question 3:

All-American Canal project

	Acres	
	Imperial	Coachella
Gross areas:		
Private lands	700,000	133,000
Public lands	290,000	12,000
Indian lands	----------	15,000
Total gross areas	990,000	160,000
Irrigable areas:		
Now irrigated	450,000	20,000
Not now irrigated	320,000	115,000
Total irrigable areas	770,000	135,000

(*a*) Acres actually being irrigated are shown in above tabulation.

(*b*) The irrigable acres are as shown in the above tabulation. The areas now being irrigated are private lands except for a small acreage in Coachella Valley of Indian land. Data are not now available for a segregation of the irrigable areas not now irrigated, between private, public, and Indian lands. Irrigable areas are based on soil surveys shown in the All-American Canal report of 1919, the Fall-Davis report of 1922 on problems of Imperial Valley and vicinity.

studies by the Bureau of Reclamation covering the design and capacity of the All-American Canal and studies made by the two districts.

(c) For further reference as to areas included in All-American Canal project see the All-American Canal contracts between the United States and Imperial irrigation district and Coachella Valley County water district.

(d) No specific amount of water has been assigned to each area. The 3,800,000 acre-feet is the water requirement for the project as a whole. By contract, Imperial has the first right for its requirements and Coachella, the subsidiary right.

Based on an average of about 90 percent of the irrigable area or 800,000 acres being farmed in any one year, the 3,800,000 acre-feet gives a diversion duty of 4.75 acre-feet per acre. Future losses of all kinds under full development are estimated at 30 percent resulting in a delivery at the farm of approximately 3.33 acre-feet per acre.

Under the California Limitation Act, the 3,800,000 acre-feet will be measured by and accounted for as diversions to the project at Imperial Dam less the amount of return flow from the project to the Colorado River in the United States.

(e) Authorization of works. Boulder Canyon Project Act of 1928 and various appropriation acts.

Question B: The same statement on page 21 lists "2. Net from tributaries—Lee Ferry to mouth of Gila River—300,000." Explain how this item is derived?

Answer: This figure of 300,000 acre-feet is intended to represent the amount of water available for use on the tributaries of the Colorado River between Lee Ferry and the mouth of the Gila River less main stream channel losses, under full development, for this section of the river. It should be divided into and shown as two separate amounts; i. e., water available for consumptive use by projects on tributaries in the lower basin, other than the Gila River, and main stream channel losses under full development, Lee Ferry to mouth of Gila River. However, available information is not adequate to do this although it is probable that the net result would not be substantially different from the amount shown of 300,000 acre-feet.

Based on the available information, the figure of 300,000 acre-feet was derived from data shown in the chapter on water supply in the Bureau of Reclamation's Colorado River Report of March 1946 and in Senate Document 39 (79th Cong., 1st sess.):

		Acre-feet
Tributary inflow (less main river channel losses), Lee Ferry to Hoover Dam		800,000
Channel losses, virgin conditions, Hoover Dam to mouth of Gila River	$1,000,000	
Salvaged losses under full development	400,000	
Channel losses under full development	600,000	
Tributary inflow, Hoover Dam to mouth of Gila River	100,000	
Net loss, Hoover Dam to mouth of Gila River		500,000
Net from tributaries, Lee Ferry to mouth of Gila River		300,000

Question C: The same statement on page 21, lists "7. Main stream reservoir projects (net evaporation losses) 780,000." Advise what acreage content was assumed for Lake Mead for the 1931–40 period; also water area and evaporating rate?

Answer: As indicated, this figure represents net losses from reservoirs, existing or authorized, on the main stream of the Colorado River in the lower basin. This amount is shown in table CII of the Bureau of Reclamation's report on the Colorado River as "Reservoir losses" for "Existing or authorized projects"—"779,000 acre-feet."

Question D: The same statement on page 22, lists "15. Palo Verde irrigation district 300,000." State:

(a) Area nonirrigated and irrigable acres within irrigation district.

(b) If additional works are contemplated to irrigate these lands, who will construct such works; if they are to be constructed by the Government, cite congressional acts authorizing such construction.

(c) How quantity of 300,000 acre-feet is developed, and whether such 300,000 acre-feet includes river water consumed within the area under virgin conditions.

Answer (a): This item of 300,000 acre-feet is for the area covered by the old

appropriative rights of Palo Verde irrigation district in the Palo Verde Valley and Mesa. The area is set forth in the water contract of February 7, 1933, between the United States and the district and is in accordance with the California priority schedule.

	Acres
Gross area	143,000
Irrigable area	100,000
Now irrigated	50,000

(*b*) Additional works required will be extensions of existing works of Palo Verde irrigation district and will be constructed by the district, as have been the existing works.

(*c*) The 300,000 acre-feet is the total estimated consumptive use of 100,000 acres at 3 acre-feet per acre per year. It is "developed" on the basis prescribed in the California Limitations Act (sec. 4 (a) of Boulder Canyon Project Act), i. e., diversions less returns to the river.

Question E: The same statement, page 21, lists "3. Gila River and tributaries (available for consumption) 2,300,000." State:

(*a*) Is this figure intended to total undepleted flow to the central valley of Arizona?

(*b*) What part of such water would be lost by evaporation at reservoirs built or to be built for its regulation? Do you consider such evaporation chargeable to the lower basin as a whole similar to main stream reservoir losses, item 7 of your statement?

(*c*) What part of such 2,300,000 acre-feet would pass through the central Arizona valley area because of insufficient storage control? State reservoirs you assume built for such control?

(*d*) What part of such 2,300,000 acre-feet would be consumed by evaporation and transpiration along river channels, and in other areas not irrigable?

(*e*) What part of such 2,300,000 acre-feet do you consider necessary to pass out of the central Arizona valley for maintenance of a salt balance?

Answer: As stated in the item, the 2,300,000 acre-feet is considered to be the safe annual yield of the Gila River and its tributaries available for beneficial consumptive use. As shown under "Requirements" in the tabulation to which the question refers, it is considered that of this total, 30,000 acre-feet is required in New Mexico and 2,270,000 acre-feet in Arizona by existing (operating) and authorized projects. On this basis, answers to the divisions of this question follow:

(*a*) No.

(*b*) The amount of reservoir evaporation losses from existing reservoirs in the Gila River system, average for the period 1931–40, is indicated by estimates of the Bureau of Reclamation in House Document No. 39, Seventy-ninth Congress, first session, part 2 (p. 5), at 80,000 acre-feet per year.

The tabulation (p. 21) to which the question refers does not show and is not intended to show how such reservoir evaporation losses are or may be charged. The tabulation is an engineering analysis, independent of legal interpretations, to show the over-all deficit between available water supply and water requirements of existing (operating) and authorized projects in the lower basin. The indicated deficit is not affected by the question of how reservoir losses are or may be charged.

(*c*) None, with existing surface storage reservoirs in combination with the proper utilization of the available underground storage reservoir.

(*d*) None.

(*e*) None.

STATEMENT OF C. C. ELDER, HYDRAULIC ENGINEER, METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Mr. ELDER. I have a statement that in effect supplements the legal memorandum of Mr. Howard's given a day or two previously, chiefly in an effort to evaluate some of the statements he made on a qualitative basis.

I am a graduate of the University of Utah and have worked as an engineer in every State of the Colorado River Basin, and was with the Bureau of Reclamation as a water-supply engineer for 7 or 8 years. In that capacity I worked on several projects but chiefly in the Denver office assisting Mr. Debler, who has testified here, chiefly on Colorado River supply studies, which were used as the basis ultimately of the Boulder Canyon project and the construction of that project.

I start out with comments on the depletion theory as applied to Gila Basin consumptive use. First, I make a comparison of quantity effect, two columns, the first being depletion at the mouth as listed in the statement of Mr. Larson at this hearing and another statement by Mr. Baker.

The present depletion at the mouth has been testified to as 1,135,000 acre-feet, and that of the future is 20,000 acre-feet, making a total of 1,155,000 acre-feet.

Now, in contrast, the beneficial consumptive use, as interpreted by me, and other Californians possibly, the present about 2,280,000 acre-feet; the future that is expected is about 20,000 acre-feet, making a total of 2,300,000 acre-feet. The difference in charge to Arizona is 1,145,000 acre-feet.

Arizona's claimed net water available from compact III (a) and III (b) articles is 3,670,000 acre-feet as appeared in the same statement of Mr. Larson. Certain charges are accepted. The first for main stream reservoir losses to Arizona—316,000 acre-feet. For present depletion, 1,408,000 acre-feet. Future depletion, 924,000 acre-feet. Accepted charge for total depletion is 2,648,000 acre-feet.

Now, if we apply this one correction for beneficial consumptive use, neglecting all the other factors——

Senator MILLIKIN. Just a moment, please. I am not quite clear on the relation of the present depletion figure on your page 1 with the accepted charge for present depletion on page 2.

Mr. ELDER. There is no connection except this, the first one is picked up to be added into page 2. It is simply preparation for the figure on page 2.

Applying correction for beneficial consumptive use of 1,145,000, gives us a total required for present and future uses of 3,793,000 acre-feet. Surplus over III (a) and III (b), which is the figure at the head of page 2, then becomes 123,000 acre-feet required from this surplus.

Senator MILLIKIN. That is on the theory that Arizona is charged with consumptive use on the Gila?

Mr. ELDER. That one correction is applied. I am trying to separate these factors into their respective amounts.

There is thus no III (a) or III (b) water available for the central Arizona project, correcting only for the one error in interpretation of the depletion theory. This is true even on the controversial basis of allowing Arizona its asserted right to the full 1,000,000 acre-feet of compact III (b) water.

The Arizona statements have claimed possibly available for consumption in that State only 55,000 acre-feet, or a one-fourth share of all Colorado River water, considered as surplus over and above compact III (a) and III (b) allocations. These records thus indicate an apparent deficit of 68,000 acre-feet annually for present and planned future projects in Arizona, exclusive of the proposed central Arizona project. Therefore making the one correction for the misinterpretation of the depletion theory shows that there would then be no water of any category for the proposed new project, on the basis of the Arizona records.

But the correction for the use of the depletion theory has the further effect of increasing the unallocated surplus in the Colorado River Basin. The Arizona contract indicates that the State may possibly claim and obtain (if urper basin rights to part of the surplus are disregarded) one-half of such surplus, less one twenty-fifth part quitclaimed to Nevada. Using the data of the Arizona statements and of the United States Bureau of Reclamation, but correcting for the depletion theory, the possible share of Arizona in such surplus is computed as 484,000 acre-feet.

The net correction for the depletion theory error is then 1,145,000 acre-feet minus 484,000 acre-feet or 661,000 acre-feet annually. Allowing for the indicated requirements of other Arizona projects, both present and future, for 123 000 acre-feet of surplus water, over and above the III (a) and III (b) allocations, leaves an apparent balance of such surplus of only 361,000 acre-feet for the proposed central Arizona project, if all other errors of interpretation are temporarily ignored. This quantity is but 30 percent of the proposed diversion for the project.

Compact III (b) claim for Arizona projects: The basis for the assertion of this claim by Arizona as well as its refutation and the historical 25-year controversy about the disposition of this 1,000,000 acre-feet allocation, have been thoroughly covered in previous statements at this hearing. The evident error involved, if the Arizona claim is not upheld in the courts, is at least 500,000 acre-feet annually. This error may be increased to 540,000 acre-feet if Nevada should assert its contract right to one twenty-fifth of the III (b) water, if the same is finally determined to be unapportioned by the compact.

Even the balance of 460,000 acre-feet might be pushed into the unallocated surplus, over and above III (a) and III (b) allocations, if lower-basin water use priorities, in the absence of a lower-basin compact, should finally be ranked in the order of actual appropriation dates. For present purposes, however, the correction for the III (b) misinterpretation is taken at the minimum of 500,000 acre-feet annually.

Allocation of reservoir losses: Colorado River main-stream reservoir losses in the lower basin, under conditions of ultimate development, are estimated at 870,000 acre-feet annually, in the statement (p. 20) of V. E. Larson at the present hearings, and in other USBR and Arizona statements and report. The same statements allot to or charge Arizona with 316,000 acre-feet of this total loss, in proportion to lower-basin main stream diversion rights, according to the special interpretations of Arizona officials. But as discussed by other witnesses, the California Limitation Act and the several California contracts for Lake Mead storage rights are specific and definite in making the California diversions net, at or near the points of diversion. These are of course all far downstream from Lake Mead, as this is located in Nevada and Arizona.

The equitable justification for these net California diversions, as is well known, is the fact that their appropriative filing date back largely from 50 to 80 years, and even the latest about 20 years or more. The chief irrigation diversion for California projects were long supplied from natural, unregulated Colorado River flow, until Lake Mead storage was substituted for such natural-flow rights, by the terms of the Colorado River compact. The vested appropriative water rights of presently constructed and operating California projects would, if not now contolled and circumscribed by the limitation act, have materially exceeded the total of the California contracts for Lake Mead storage. The margin of such surrendered water rights would be far greater on the basis of the Arizona interpretation of the compact, as previously discussed. The California contract rights to net diversion at their project intakes will therefore certainly be maintained and defended by every available legal means, and it must not be presumed that the Arizona objectives of this misinterpretation will be achieved without a serious, all-out controversy.

There is at present no basis for a determination of just how the lower-basin reservoir losses will finally be allocated, or even, whether they will be charged against compact-apportioned or surplus water supplies. In any case, the error of this particular misinterpretation will seriously affect plans for proposed Arizona diversions and most of all, the central Arizona project. The error involved is on the order of 554,000 acre-feet annually. It might be slightly less if part of such losses can be shifted to other States or other projects, or it will be somewhat increased in case these losses have been underestimated. In combination with the effect of the other mentioned errors of interpretation, this reservoir-loss item makes even more certain that after final judicial determination, no water supply will be found to be available for the proposed central Arizona project.

Other water-supply factors: In addition to the three major corrections of misinterpretations of the central Arizona project water-supply studies, other less important variations may be noted. The burden of the Mexican treaty allocations will certainly and unavoidably exceed the listed 1,500,000 acre-feet. It is concluded that this item will probbaly approximate 1,700,000 acre-feet annually, due to the treaty allocation of 200,000 acre-feet additional in years of so-called but undefined surplus. Regulation losses for which no treaty credit can be claimed will also be material in amount.

The present statement of Mr. Larson indicates that it is now estimated by the USBR that 376,000 acre-feet annually will have to be forced out of the central Arizona project area, under ultimate development conditions in order to maintain the project salt balance. Also, that this outflow will result in a credit of 123,000 acre-feet annually for additional return flow to the Colorado River.

In contrast, to show the uncertainty of such theoretical estimates, the statement—page 15—of Mr. E. M. Debler at this hearing shows an added return of 133,000 acre-feet, being 60 percent of a 222,000 acre-foot release from the project to remove additional salt. The assumed ratio of return at the mouth of the Gila is thus double the estimate of Mr. Larson.

The salt-balance problem is not to be minimized or discounted, in appraising the feasibility, or its lack, of the proposed project. But the necessity for some such outflow does not in the least insure or serve as a basis for such renewed optimism as to any of it running the long gauntlet of Gila channel losses or (if of

usable quality) of pumped diversions. It is concluded that none of such releases will dependably reach the Colorado River or at such times as credit can be claimed under the terms of the Mexican treaty.

It seems not unfair to recall that only 2 years ago, at the Senate"s hearing on the Mexican treaty, the burden of this treaty allocation on Lake Mead storage was testified to, by USBR and other Federal and State witnesses of distinction, as never to exceed 600,000 acre-feet annually due to return flow and other related fallacies. In contrast, present USBR and Arizona statements, as well as 1946 and 1947 editions of the USBR Colorado Basin comprehensive report, all agree that this burden will be 1,500,000 acre-feet annually. Such sudden and unexplained variations of profound estimates and solemn, even if unsworn, testimony should at least in some degree affect the weight now given to estimates, equally important and similarly unrelated to observable factual conditions.

Depletion theory comments: Previous statements at this hearing have referred to the relative uniqueness of the Gila River, in having salvaged natural losses very large in amount, compared to the perennial streams of the upper basin and other minor tributaries of the lower basin. In some respects the Gila River situation is truly unique, but this is not at all the case from the water supply point of view.

In such drought years as 1940 and 1947, salvage by means of pumped wells is of chief importance and this practice of pumping happens to be not elsewhere available on a large scale in the lower basin. But historically and over longer periods, salvage of natural losses by storage of floods in reservoirs has been much more important than pumping. This is exactly parallel and similar to the result achieved at Boulder and Parker Dams, where flood waters, formerly wasted into the Gulf of California, are now salvaged and conserved for beneficial consumptive use.

There is no very obvious or apparent reason for any distinction because in one case the natural floods formerly wasted into the ocean and in the other into the sandy desert of the lower Gila Basin. If the salvaged waters of the main Colorado River are to be charged against basin and State apportionments whenever, and to the extent applied for beneficial consumptive use—and no one has ever attempted to argue otherwise—then the similar use of salvaged natural losses along tributaries must certainly be so charged.

In the statement—page 6—of Mr. E. B. Debler at the present hearing, as an argument in support of the depletion theory, there is found the following quotation:

"Congress in section 4 (a) of the Boulder Canyon Project Act * * * uses the words "annual consumptive use (diversions less returns to the river) of water of and from the Colorado River." Congress here defined consumptive use as the depletions of "the" river, meaning the Colorado River. As this definition was made only 6 years after the signing of the Colorado River compact and at a time when there was a full and frank discussion of the numerous contentions and interpretations of the compact, it must be concluded that it was intended that all apportionments were to be based on their effect on Colorado River flows. That interpretation is, therefore, hereinafter used."

With due respect for the usual acuteness of Mr. Debler's arguments, it has seemed unfair to Arizona to apply the above formula literally in determining the beneficial consumptive use of the Gila Basin. If in the phrase "diversions less returns to the river," the Colorado River is meant, as claimed, then these returns to be subtracted from the total of all diversions are really negligible.

Table I of Mr. Debler's statement shows them as having averaged only 76,500 acre-feet for the period 1930–45. The flow at the mouth of the Gila River has actually been zero since August 1941 or for the last 6 years, and for equally long prior periods. The diversions in the quoted phrase necessarily mean from the Gila River, when considering its basin, or from its several tributaries. Due to repeated reuse of return flow in the upper and central Gila Valleys, these diversions—if not adjusted for returns to the Gila River, which the argument does not permit—really add up to astronomical figures, probably much exceeding 5,000,000 acre-feet annually, including the gross pumpage from basin wells. This result is obviously absurd and it necessarily follows that the quoted argument in defense of the depletion theory is equally untenable.

Mr. Debler adds—page 6—that:

"The words 'one-half of any excess or surplus waters unapportioned by said compact' could refer only to such surplus waters as might become available for use by California and Arizona jointly."

The basis for this conclusion is not evident, and presumably if the compact really meant this, it would have said so in specific language. The only apparent grounds for belief in this conclusion is the oft-expressed conviction by representatives of Arizona that the compact, in defining the Colorado River Basin, should have eliminated the Gila Basin. Much sympathy may be felt for this wishful thinking, without approval, however, of such unilateral efforts to rewrite the compact by far-fetched misinterpretations at this late date. The gallant effort thus to produce the desired objective of securing a firm, first priority water right for a newly proposed and very junior irrigation diversion, however, admirable under other circumstances, must in this case be judged by its effect, if successful, on other long-completed and operating projects, publicly owned, even though these may happen to be located in California.

Undisclosed by either the USBR or Arizona statements or reports, the direct result of such new Arizona water rights and diversions would be no Colorado River water right for San Diego, none for Coachella Valley, and none for the metropolitan water district of southern California, with its resident population of over 3,000,000.

Summary: The several separate corrections for misinterpretations in the present water-supply studies for the proposed central Arizona project, as briefly outlined and evaluated in this statement, are here summarized and listed as to their net effect.

1. Depletion theory error—661,000 acre-feet annually.
2. Correction (minimum) for III (*b*) claim—500,000 acre-feet annually.
3. Reservoir loss allocation—554,000 acre-feet annually.
4. (*a*) Mexican water treaty, added burden—92,000 acre-feet annually.
4. (*b*) Salt-balance return-flow credit (probably imaginary)—123,000 acre-feet annually.

Total possible correction, if all controversial interpretations should be judicially or otherwise determined against Arizona—1,930,000 acre-feet annually.

This possible total correction or uncertainty in the central Arizona project water supply is 80 percent greater than the total consumptive use claimed as permissible and available for the project. This means that if only half of the controversial issues are resolved against Arizona's interpretations, there would be practically no water right available for the project, after the ultimate development of the Colorado River is approached. It means also that until at least some of the major controversies are settled, preferably by friendly litigation in order to expedite the judicial decision, Federal authorization of the proposed project must be concluded to be inconceivable, unless sound engineering and long accepted water-supply standards of feasibility are to be totally disregarded.

Senator MILLIKIN. Any questions?

Senator MCFARLAND. Do you agree with the figure of approximately 1,270,000 acre-feet of virgin flow of the Gila River at the mouth where it empties into the Colorado?

Mr. ELDER. Yes; for present purposes. I might quibble slightly on the amount.

Senator MCFARLAND. Approximately?

Mr. ELDER. That is right, sir.

Senator MCFARLAND. And, if Arizona didn't have any dams up there, all of that water couldn't be used by Mexico, could it, even if it went down? If Arizona didn't use it, it would go down in such large quantities that only a small portion of that 1,270,000 acre-feet could be used, couldn't it?

Mr. ELDER. I would say "Yes" because it would without regulation have flood peaks, just as the main stream flow did before Boulder Canyon Dam. Any unregulated water is lost under such circumstances.

Senator MCFARLAND. And so you say that should be judged by effect on other projects?

Mr. ELDER. I didn't say that. I am trying to judge this by the language of the compact.

Senator MCFARLAND. Let's see what you did say.

Mr. ELDER. I am sure that wasn't it. I don't recall it being in there.

Senator MCFARLAND. Here it is:

"* * * however admirable under other circumstances, must in this case be judged by its effect, if successful, on other long-completed and operating projects, publicly owned, even though these may happen to be located in California."

Mr. ELDER. My admiration was to be judged by the effect on other projects—certainly.

Senator McFARLAND. And so really, when you come right down to it, Arizona if she were given credit—and were only charged with a million acre-feet, is doing California a great favor in taking that million acre-feet and using it instead of letting it go down to Mexico, isn't she?

Mr. ELDER. I have failed to detect the favor, sir.

Senator McFARLAND. Well, if they didn't use any of the Gila River at all, Mexico couldn't use as much as a million acre-feet, could they?

Mr. ELDER. I think the treaty gives Mexico 1,700,000 acre-feet.

Senator McFARLAND. They couldn't use it from the Gila River because it goes down in such big floods it wouldn't be usable?

Mr. ELDER. That is true—the same as the main river, until you regulate it.

Senator McFARLAND. So, really, insofar as equitable effect is concerned on the other projects, California benefits very much from the dams on the Gila River and its tributaries, even with our interpretation of depletion, doesn't it?

Mr. ELDER. Whether California benefits by the compact at all is a question. We certainly don't benefit from the compact with such adverse misinterpretation..

Senator McFARLAND. They couldn't use a million acre-feet by any stretch of the imagination, from the Gila River, could they?

Mr. ELDER. Certainly not.

Senator McFARLAND. And California couldn't use it, could she?

Mr. ELDER. No.

Senator McFARLAND. And so, it would just go into the Gulf of Mexico and no one would get the benefit.

Mr. ELDER. I think any water that goes into the Gulf of Mexico would be subject to regulation and California would be very glad to build a reservoir and Arizona would be glad to do the same thing to prevent any such waste. There has been no waste.

Senator McFARLAND. I grant you that California would be willing to build dams, I should say, have the Federal Government build them any place California could get water; but she could not get water out of the Gila River?

Mr. ELDER. Not at present—no, sir. We have no desire to do so.

Senator McFARLAND. As a matter of fact—well, I believe we are agreed on this then, if this virgin flow were left to go down, California could not benefit by it in any way, even by the use of it in Mexico because it would go down in large irregular quantities. Now, I would like to pass on to the next point. Where did you get that figure 2,300,000?

Mr. ELDER. That is my personal judgment after years of study and my own conclusions on this subject and I find it checks with other engineers.

Senator McFARLAND. Where is that measured?

Mr. ELDER. That is measured at the point of inflow. I used Bureau of Reclamation and Geological Survey data which adds up to in excess of 2,300,000 acre-feet.

Senator McFARLAND. That goes in stream?

Mr. ELDER. Goes in stream. Also includes, of course, the Safford Valley which is above the Phoenix area. It includes also under the compact interpretation the valley pumping along the stream which affects the amount of water visible and measurable in surface channels.

Senator McFARLAND. Do you charge Arizona for the amount that is lost in the stream?

Mr. ELDER. No. This 2,300,000 is stated to be net.

Senator McFARLAND. Do you charge Arizona for evaporation in these reservoirs; or do you charge that to the basin?

Mr. ELDER. I think that the reservoir evaporation lost from the Gila Basin is properly chargeable, just like on the main stream. I think the compact leaves no uncertainty.

Senator McFARLAND. Where is it chargeable in this 2,300,000 acre-feet? Is it charged to Arizona or charged to the basin as a whole?

Mr. ELDER. Charged to the project getting the beneficial consumptive use of it. I would expect.

Senator McFARLAND. I am trying to find out how you are arriving at all these figures. Do you charge Arizona with the amount of water that is used by vegetation along the stream?

Mr. ELDER. Not unless it is beneficial in the form of harvested crops.

Senator McFARLAND. Do you know how much water is used along the stream?

Mr. ELDER. Approximately, within rounded figures, of an accuracy of about 2 or 3 percent.

Senator McFARLAND. Do you know how much?
Mr. ELDER. That is the 2,300,000.
Senator McFARLAND. I am talking about the amount used by vegetation along the stream.
Mr. ELDER. That is not included in the figure and therefore is not exactly determined.
Senator McFARLAND. Do you know how much water is actually diverted in the first instance by diversion dams in Arizona?
Mr. ELDER. I have access to all of the records that are available and went into the preparation of this figure. I haven't them in my mind.
Senator McFARLAND. You haven't them broken down. You have that one figure in mind?
Mr. ELDER. They were broken down and I compiled them.
Senator McFARLAND. Will you break them down for us?
Mr. ELDER. The Government has done that and I added that data.
Senator McFARLAND. The Government isn't testifying, Mr. Elder, is it?
Mr. ELDER. That is correct. I have the reports.
Senator McFARLAND. Will you break them down for us and show us how you arrived at this figure?
Mr. ELDER. I would be very glad to do so.
Senator MILLIKIN. Will you submit that for the record.
(Supplemental statement at conclusion of Mr. Elder's presentation.)
Senator DOWNEY. Mr. Elder, this figure of 2,300,000 acre-feet as beneficial consumptive use on the Gila, is in accordance with the findings of the Bureau of Reclamation?
Mr. ELDER. Exactly.
Senator DOWNEY. And your conclusion agrees with their's?
Mr. ELDER. Exactly.
Senator DOWNEY. And you used the data they developed?
Mr. ELDER. I used that data. I did not want to substitute other data for them.
Senator DOWNEY. And the figures are broken down from the Bureau of Reclamation's computations?
Mr. ELDER. Yes.
Senator McFARLAND. I realize this isn't a court of law, but that is not a proper question to say, "Do these figures agree with something."
Senator MILLIKIN. The witness has agreed to submit the break-down.
Senator DOWNEY. No further questions.

SUPPLEMENT TO STATEMENT OF C. C. ELDER, HYDROGRAPHIC ENGINEER, THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

In response to the request of Senator McFarland of Arizona for a statement of the derivation or basis of the determination of the Gila Basin's beneficial consumptive use as approximately 2,300,000 acre-feet annually, on the average, the following statement has been compiled from various official sources, reports, etc., as indicated, and from a report of the writer dated June 21, 1946, on Gila Basin consumptive use of water.

I

An interesting pronouncement, made in the name of the State of Arizona, that must be given due consideration (with proper discount) in connection with the above request, is included in the Arizona bill of complaint (U. S. Supreme Court, October term, 1930) against California, Wilbur, et al., asking for an injunction against Boulder Dam, etc.

(Bill XIV, 3:) "Said (Colorado River) compact defines the term 'Colorado River system' so as to include therein the Gila River and its tributaries, of which the total flow, aggregating 3,000,000 acre-feet of water annually, was appropriated and put to beneficial use prior to June 25, 1929 (in Arizona and New Mexico)."

(Bill VII): "Of the appropriated water (of the Colorado River and its tributaries in the United States) diverted below Lee Ferry, 3,500,000 acre-feet are annually diverted, used, and consumed in Arizona, 2,900,000 acre-feet are diverted from the Gila River and its tributaries. * * * All of the water of the Gila River and its tributaries was appropriated and put to beneficial use in Arizona and New Mexico prior to June 25, 1929. There was not on said date, nor has there since been, nor is there now, any unappropriated water in the Gila River or any of its tributaries."

This assertion of fact as of 18 years ago is probably substantially correct as to appropriation rights in the Gila Basin (or at least no sufficient basis for questioning such an official determination is available), making reasonable allowance for extensions to projects and additional storage reservoirs and pumped wells that have since been constructed and are now operating. The claim, of course, greatly exaggerates the actual consumption of water in the Gila Basin of Arizona as of the date specified, because only in years of above-normal run-off was a full supply of water available for the lands then irrigated or included in projects. The complete use of the Gila Basin water supply, as an historical fact, has only been possible by means of a gradual increase in reservoir storage capacity and in the number of and pumpage from wells. The draft on the accumulated ground water storage of the region has been reported as determined by the United States Geological Survey to have amounted to 2,000,000 acre-feet annually for 1943 and 1944. (Testimony of Mr. Greig Scott of Phoenix, Senate Foreign Relations Committee Hearings on Water Treaty with Mexico, 79th Cong., p. 986.) There was certainly no decrease of the pumped diversions in 1945 and 1946, but probably a continued increase involving a serious overdraft as testified by several witnesses. We may accept for present purposes the data of Statement of V. E. Larson, S. 1175, Eightieth Congress, first session, page 25: "During the period of 1940 to 1944, the pumping overdraft (on the central Arizona project) is estimated to have averaged about 468,000 acre-feet a year." Also: "It is estimated that under present conditions it would be necessary to release 154,000 acre-feet of water with a salt content of 5½ tons per acre-foot in order to maintain a salt balance within the area (to avoid abandonment of some land)." Occasional flood spills at Gillespie Dam might now average about this amount, in any case.

	Acre-feet
Determined as "Used and consumed in Arizona" (per Arizona 1930 bill of complaint)	2,900,000
Pumped overdraft, average	−468,000
Necessary salt balance release	−154,000
Indicated beneficial consumptive use	2,278,000
Future depletions, Gila River Basin (V. E. Larson statement, p. 22)	+20,000
Approximate total beneficial consumptive use	2,298,000
Which may be rounded for present purposes to	2,300,000

II

A sufficiently close check on the average beneficial consumptive use of the Gila Basin is given by Arizona witnesses at the S. 1175 hearings as regards regional irrigated areas and per-acre consumptive use. Mr. R. I. Meeker supplemented his written statement by testifying verbally that the average beneficial consumptive use in the region of the central Arizona project is about 3.0 acre-feet per acre. This average is not to be confused with farm or project rates of beneficial consumptive use, though these differ (if at all) only slightly by in some cases not having been fully corrected for deep percolation losses to the ground-water table. Neither is this average rate of Mr. Meeker's to be confused with basin depletion, which necessarily includes natural losses as well as beneficial uses of water. The same 3.0 acre-feet rate of beneficial use has been stated repeatedly by Attorney Charles Carson, most recently in a carefully prepared address before the national meeting of the American Society of Civil Engineers at Phoenix, Ariz., on April 23, 1947, as follows:

"In the year 1945, which is the last year for which I have figures, the gross value of our agricultural production in this (Phoenix) area exceeded $150 per acre. In that year, I am informed that for every acre-foot of water consumptively used for irrigation, a gross crop value in excess of $50 was produced."

This average basin or regional rate of 3.0 acre-feet per acre for beneficial consumptive use, as thus accepted and announced by Mr. Carson and Mr. Meeker, has attained wide usage in Arizona as a reasonably accurate figure. If in error, it is probably slightly too low, but may be accepted as giving due weight to the partial water shortages that have and do frequently occur in central Arizona, because of overexpansion of the irrigated area.

As regards the present irrigated area of the central Arizona project, Mr. Carson stated in the same A. S. C. E. address of April 23, 1947:

"In central Arizona on the Gila River and its tributaries * * * there are now in intensive cultivation approximately 725,000 acres of very productive land wholly dependent on irrigation water."

In hearings of July 31, 1944 on Senate Resolution 304 before the United States Senate Committee on Irrigation and Reclamation (p. 39), Arizona State Water Commissioner O. C. Williams tabulated a summary of Gila Basin "projects that must have Colorado River water" as having an irrigated area of 724,000 acres, probably as of 1943. Small scattered areas seem to have been omitted, as are the Wellton and South Gila Valley areas of 15,000 acres from both this list and the total of Mr. Carson (his list of counties involved omits Yuma County). These latter Gila Basin areas are at present supplied by pumped Gila Basin water, though completion of the planned Gila-Colorado River project will furnish them with Colorado River water.

In February 1945, Mr. Greig Scott, general counsel, Salt River Valley Water Users' Association (Mexican Water Treaty Senate hearings, p. 985) testified that the irrigated area of the Central Arizona Gila Basin was 750,000 acres probably as of 1944. He also omitted the lower Gila River areas east of Yuma. At the same water treaty hearings, on February 8, 1945, Mr. Victor Corbell, member, board of governors, Salt River Valley Water Users' Association, stated that "In the entire area of South Central Arizona, excluding the area around Yuma in the southwest part of the State, there are from 750,000 to 800,000 acres under cultivation (irrigation)." Allowing for the mentioned lower Gila areas and for 2 years' increase in new lands irrigated by pumped wells, brought in rapidly due to 1945 and 1946 high crop prices, it is concluded that the Gila Basin irrigated area in Arizona for 1946 was not less than 775,000 acres.

Combining this irrigated area with the accepted rate of beneficial consumptive use in the central Arizona region of an average of 3.0 acre-feet per acre gives, as a rounded figure, 2,300,000 acre-feet per annum of beneficial consumptive use for the Gila Basin of Arizona. Due to water shortages and resulting shortages of hydro power to pump ground water from wells, the 1947 beneficial consumptive use may be as much as 500,000 acre-feet less than the above average. In each case, ground water overdrafts are corrected for and omitted as accurately as present tentative United States Geological Survey data permit.

III

Frequently quoted by witnesses at the hearings on S. 1175 are the data of table CXLVI, United States Bureau of Reclamation report of March 1946 on the Colorado River, which shows the natural inflow to the Phoenix area as averaging 2,279,000 acre-feet annually for the period 1897 to 1943, with variations from a minimum of 600,000 acre-feet in 1900 to 7,945,000 acre-feet in 1905. Accepting this table and its data, so far as it goes, as being reasonably accurate and the best available, but allowing (1) for natural losses, now conserved and salvaged, in the Safford and other irrigated regions upstream from the Phoenix-Florence region; (2) also for additional unmeasured side inflow, not fully allowed for in the United States Bureau of Reclamation estimate, both above and below Gillespie Dam, that by its percolation serves to sustain in part the present pumpage from wells; and (3) likewise for deep percolation from occasional cloudburst-type storms that is similarly important in contributing to the present ground water pumping; there is a total usable water supply, as largely regulated by surface reservoirs and ground water storage, averaging not less than 2,800,000 acre-feet in the Gila Basin of Arizona. Deducting natural losses that presently vary from 300,000 acre-feet to 400,000 acre-feet annually, according to the scarcity or abundance of the surface run-off and the consequent amounts of flood waters and return flow; also, the rare spills at Gillespie Dam which average from 150,000 acre-feet to 200,000 acre-feet, but in part contribute to and sustain irrigation pumping for the lower Gilla areas amounting to about 50,000 acre-feet; there remains a net usable, beneficial consumptive use of not less than 2,300,000 acre-feet annually, in rounded figures.

Similar results have been derived from the data of a report called Arizona Stream Flow Summary, dated 1940, by Engineer Donald C. Scott for the Colorado River Commission of Arizona, as brought up to date by means of published United States Geological Survey records and other sources. A check on the results was also derived from a United States Bureau of Reclamation report of December 1934 on stream flow of the Lower Colorado River and its tributaries, the Gila Basin being discussed in exhibit D of that report, and credited to Engineer J. R. Riter. Likewise, little exception need be taken to the water supply data of Mr. R. Gail Baker in his statement at hearings on S. 1175, if the one

major error is corrected, that irrigation pumping from wells in the central Arizona area is entirely ignored and omitted by him. This valley pumping intercepts irrigation return flow that otherwise would reach surface channels and be rediverted by canals; also, other percolating ground waters. In the Phoenix area, no valid distinction can be made between surface diversions and ground water pumpage from well, in any serious study of beneficial consumptive use. This pumpage has been reported variously from 1,700,000 acre-feet annually in statement of Dr. George W. Barr, S. 1175, hearings, to 1,800,000 acre-feet as an average (report entitled "The Case for Water in Central Arizona," published and widely distributed by the Central Arizona Project Association), and even as high as 2,000,000 acre-feet annually as mentioned previously. Allowing for Mr. Larson's estimated pumped overdraft of about 468,000 acre-feet and possibly as much more deep percolation and reuse involved in the pumpage, the value of less than 1,497,000 acre-feet of Mr. Baker's statement, from surface sources only, is easily increased to a net beneficial consumptive use of not less than 2,300,000 acre-feet annually by the addition of net use from pumped wells.

IV

In Mr. Tipton's statement on S. 1175, concern is expressed that the beneficial consumptive use interpretation of California would result in charging the upper basin States with some salvage of natural losses. Though the case is similar to that of the Gila, the amounts involved are negligible in comparison, and certainly would be much less than the reasonable interest of the upper basin in the additional surplus resulting from upholding the California interpretation in the Gila Basin case. Mr. Tipton continues:

"On the other hand, during periods of protracted droughts, should it become necessary for the upper basin to curtail the use of water in order to deliver the 75,000,000 acre-feet (at Lee Ferry) in a 10-year period in accordance with article III (d) of the compact, the curtailment must be in sufficient amount to make up the deficiency at Lee Ferry. The increments of consumptive use which are curtailed will in the aggregate exceed the deficiencies at Lee Ferry by the amount of channel loss required to get the water to Lee Ferry, Calif., therefore in the one instance would not permit the upper basin to enjoy the use of the river losses it salvages, but in the other instance would require that the upper basin make up the river losses by curtailing the increments of consumptive use in an amount sufficient to supply such losses."

This is an exceedingly far-fetched comparison, as losses on added or incremental flows in the canyon sections above Lee Ferry will be too slight to allow for or consider, since the flow of the Colorado River there can be doubled without appreciably increasing the water surface area or its evaporation loss. But in any case, the comparison is irrelevant, as the III (d) guarantee in no way involves considerations of beneficial consumptive use, but is definitely a fixed minimum delivery to be measured at a fixed point (Lee Ferry). The lower basin obviously stands channel losses on such III (d) deliveries below Lee Ferry, even as the upper basin must stand such losses, if any, above Lee Ferry. This simple case cannot possibly be confused with the depletion versus beneficial consumptive use controversy, as Mr. Tipton attempts to do.

V

In the statement of Mr. E. B. Debler on S. 1175, at the hearings before the Senate Subcommittee, Irrigation and Reclamation, in his tables 1 and 4 for the flow of the Gila River at Dome for the years 1943 to 1945, Mr. Debler lists a material run-off as occurring, ascribing the data to the annual United States Geological Survey water supply papers by a footnote. In this case, Mr. Debler seems to contradict a conclusion in my own statement (p. 10) that—

"The flow at the mouth of the Gila has actually been 0.00 since August 1941, or for the last 6 years, and for equally long prior periods."

This conclusion and observed fact is of considerable importance in determining either the depletion or the beneficial consumptive use of the Gila Basin with present conditions of irrigation development. It therefore seems necessary to point out that Mr. Debler, in his tables 1 and 4, has erroneously (and doubtless inadvertently) copied from the respective United States Geological Survey Water Supply Papers Nos. 979, 1009, and 1039, for the years 1943, 1944, and 1945, not the discharge of the Gila River near Dome (12 miles above the mouth of the Gila) as the tables indicate, but instead the annual discharges of the Sunset Canal near Virden, N. Mex., which is some 400 miles eastward by highway dis-

tance. Making this needed correction, the Gila River at its mouth continues to be absolutely dry, as stated.

VI

The present controversy or issue involving depletion versus beneficial consumptive use may possibly be clarified to some degree in spite of the confusion imparted by the explanations offered by the four Colorado witnesses (Debler, Meeker, Tipton, and Stone). None of these experts seemed aware that the hydrographic characteristics, the physical conditions underlying return flow and channel loss estimates, etc., are radically different and in many respects wholly reversed in the extreme desert of the lower Gila River, as compared with the South Platte Valley with which they all are long and thoroughly familiar. Its mile-high elevation, long winter season and mild summers, snow-fed mountain tributaries, and relatively heavy rainfall (five times that of southern Arizona, on the average) are in complete contrast to the Gila's near-sea-level elevation, 12 months' growing season and intense summer heat, side inflow only from rare cloudburst storms, and occasional year-long periods without measurable rainfall.

These Colorado witnesses support the Arizona representatives in starting their computations of Gila beneficial consumptive use at the mouth of the stream, 200 miles from the main area of irrigation use. The California method of computation starts, instead, at the main river gaging stations just above the chief diversion points for the main irrigation project. This avoids the necessity for extreme accuracy in the estimates of river channel losses, though lack of such accuracy does not seem to be a matter of concern to the Arizona computers. However, the direction of approach, from upstream or down, cannot greatly affect the results if the several items of the computation are reasonably determined.

Neglecting several minor factors of relatively slight or no importance, the Gila beneficial consumptive use equals (1) the total available run-off of the watershed, minus (2) natural losses, and minus (3) the flow at the mouth. There is little uncertainty or variation in estimates of the total run-off, and in fact the United States Bureau of Reclamation estimates have been accepted by California engineers with only minor factors suggested for added consideration. There is no uncertainty at all as to the flow at the mouth of the Gila (correcting for Mr. Debler's slight error, as discussed above). The whole point at issue is then whether estimated prehistoric, preirrigation, channel losses should be subtracted, in the simple formula as stated, now and forever into the future, as the Arizona and Colorado witnesses insist; or whether present (but likewise natural) channel losses should be so subtracted to determine present beneficial consumptive use; similarly, 1960 losses subtracted to determine 1960 beneficial consumptive use, etc., as proposed by California representatives. That prehistoric channel losses, no matter how great they may have been, cannot be a proper factor in determining present beneficial consumptive use, seems a wholly reasonable and obvious conclusion. The difference, as stated by numerous witnesses, is on the order of 1,000,000 acre-feet annually, the reduction in present natural losses being due to salvage of former losses by storage of flood flows and ground water pumpage from wells.

The same issue may be presented in a slightly different form, based on the definition of Mr. Meeker's statement that aggregate beneficial consumptive use (in the upper basin at least, under the terms of the Colorado River compact) is depletion by irrigation uses. But in considering the Gila Basin, Mr. Meeker and the other Colorado witnesses, in particular, insist subconsciously at least on revising this acceptable definition to "increased depletion since irrigation began." The latter form of definition is a legalistic fiction, justified neither by the language of the compact nor by well-established engineering usage. The best proof of this fact is that every Arizona representative, from 1922 to 1944, knew exactly what the compact means as to Gila Basin beneficial consumptive use, and accordingly kept Arizona from ratifying the compact.

Mr. SHAW. I will ask Mr. Northcutt Ely to open the rebuttal on behalf of the proponents.

Senator MILLIKIN. Mr. Ely?

Mr. ELY. Mr. Chairman, the report of the Department of the Interior rendered today would appear to make unnecessary detailed argument or further evidence of the existence of very grave controversies.

We have, in our opening, presented to you material falling under two general categories, one relating to the existence and the character of the controversy between Arizona and California, and, second, as to its justiciable character.

With respect to the first group, we have in our opening endeavored to set before the committee the type of disagreement that exists, first, with respect to the consumptive use versus depletion theory, as to the effect upon the burdens under the compact; and, second, with respect to the California Limitation Act—that is, the classification of waters referred to in article III (b) of the compact—and, third, as to the treatment of reservoir losses.

In the rebuttal material which we will submit to you, I shall undertake to deal primarily with the questions arising out of section 4 (a) of the Boulder Canyon Project Act; that is, the California Limitation Act and the related problems involving the III (b) water.

Mr. Howard, who will follow me, will deal with the question of consumptive use versus depletion, and related issues, and Mr. Shaw will take up the questions related to the justiciable character of the controversy.

I should like to digress somewhat from the order in which this matter might ordinarily be presented, to start with a discussion which took place at this table this morning, between Senator Malone and other members of the committee. It appears very clear to us, and we trust to the committee, that there is in existence no compact, no allocation, no determination, which relates specifically to quantities of water for Arizona or Nevada or Utah or New Mexico.

There has been a great deal of discussion of the figure of 2,800,000 acre-feet as applied to Arizona and 300,000 acre-feet as applied to Nevada. Those figures are derived from the authorization contained in the second paragraph of section 4 (a) of the Boulder Canyon Project Act for a lower-basin compact, the compact which has never been entered into. Through repetition of those figures in hearings such as this there has perhaps come to be a feeling that in some document somewhere there must be an allocation in those amounts; but there is none. The only documents which contain upon their face figures corresponding to those are the contracts made by the Secretary of the Interior with Nevada and Arizona; and those contracts, like our own, are subject to the availability of water under the Boulder Canyon Project Act and the Colorado River compact.

The lower basin compact proposed in section 4 (a) of the Boulder Canyon Project Act was offered as an intended compromise. It was not accepted by Utah or New Mexico, obviously, because the paragraph forgot to mention any water for those States at all. It was not accepted by California or Nevada or Arizona.

As a matter of fact, when the Hayden amendment, which contained the authorization for the lower basin compact, was offered on the floor of the Senate, the following colloquy took place, at page 472 of the Congressional Record, Seventieth Congress, on December 12, 1928:

Mr. JOHNSON. * * * with the distinct understanding that this authorization is one that is after all an authorization that is wholly unnecessary, because the parties may, in any fashion they desire, meet together and contract and subsequently come to Congress for ratification of that contract; that there is no impress of the Congress upon the terms, which might be considered coercive to any one of those States, I am perfectly willing to accept the amendment.

again, at page 472:

Mr. JOHNSON. That is all right; but what I want to make clear is that this amendment shall not be construed hereafter by any of the parties to it or any of the States as being the expression of the will or the demand or the request of the Congress of the United States.
Mr. PITTMAN. Exactly not.
Mr. JOHNSON. Very well, then.
Mr. PITTMAN. It is not the request of Congress.
Mr. JOHNSON. I accept the amendment, then.

Now, the amendment so offered by Senator Hayden, and which would have authorized a lower basin compact, was part and parcel of section 4 (a), the first paragraph of which contained the limitation which California should accept.

The two together were intended, if the States should adopt this proposal, to be incorporated in one compact, the first paragraph to state the water for California and the second paragraph the water for Nevada and Arizona. Read alone, the second paragraph of section 4 (a) contains no water for California at all. It relates only to water for Arizona and Nevada.

Consequently, the words used in the first paragraph and the words used in the second paragraph must be given the same definition and meaning. Otherwise the hope of Congress that the States might adopt the proposed formula would have been utterly fruitless.

Arizona, although she has declined to ratify the proposed lower basin compact, as have we, contends that the language in the first paragraph respecting California and the language in the second paragraph respecting Arizona, although intended to be part of one document, to be signed and approved by both States, has an entirely different meaning in two respects as to California, as compared with the meaning of the identical terms in the second paragraph as to Arizona.

In the copy which I have handed you, you will find in the first paragraph, about three-quarters of the way down, the phrase "aggregate annual consumptive use (diversions less returns to the river)."

That is a definition, in the paragraph dealing with California, of the term "consumptive use." Consumptive use is defined as "diversions less returns to the river."

If you drop down to the second paragraph, the third line, of the copy I have handed you, you will again find the phrase "consumptive use." Arizona contends that that phrase, used as to her, does not mean "diversions less returns to the river," the definition assigned in the first paragraph with respect to California; that, as to Arizona it means instead, "the effect which Arizona's uses on the Gila River have upon the outflow from the Gila at its mouth"; that the Arizona diversions do not need to be measured at all; that you measure only the flow out of the Gila after the uses in Arizona are established; that you estimate as best you can what their outflow would have been before the uses were undertaken; and you deduct one outflow from the other.

The second phrase which Arizona contends has different meanings in the first paragraph relating to California and in the second paragraph relating to Arizona, is a phrase which you find in the third line from the bottom of the first paragraph: "Excess or surplus waters unapportioned by said compact." Compare that with the phrase appearing in the fourth line from the bottom of the page, relating to Arizona, saying: "One-half of the excess or surplus waters unappor-

tioned by the Colorado River compact." You will note that neither of these paragraphs in their terms makes any reference to the waters specified in article III (b) of the Colorado River compact. Each of them refers to the waters specified in article III (a) and to excess and surplus.

Arizona says that the omission of any reference to III (b) water in the first paragraph, coupled with the reference to excess or surplus waters, means that California is excluded from the III (b) water, and that the III (b) water is not included in the phrase "excess or surplus"; but that as to Arizona, mentioned in the second paragraph, Arizona says it was the intent of Congress that Arizona should have that million acre-feet, although the terminology is identical with respect to the two States; that the phrase "excess or surplus" with respect to California excludes California from participation in that million acre-feet, but the phrase "excess or surplus" with respect to Arizona permits Arizona to take that million acre-feet.

Now there are two reasons advanced as to why that result should come about. And I propose to analyze those reasons.

The first was the reason advanced in the Supreme Court case, which we called the *Perpetuation of Testimony case* (292 U. S. 342): that it was the intent of the framers of the compact that despite the language appearing on the face of the compact, which permits the lower basin as such to increase its use by 1,000,000 acre-feet, it was their intent, unexpressed, that Arizona should have that million acre-feet, and that it flowed in the tributaries of the Colorado River and not in the main stream.

If Arizona were correct as to that, then upon her argument, she would be entitled to the million acre-feet, if she sustained that proof and if it were admissible, whether or not there had ever been a limitation act, and whether or not there ever had been any authorization for a lower basin compact.

The Supreme Court, in 292 United States, in language which I shall place in the record, if I may, discussed that issue and disposed of it completely, declining to countenance that construction of the compact. Arizona's contention and the Court's decision upon it, were as follows:

In *Arizona* v. *California* (292 U. S. 341), Arizona's bill of complaint (art. IV) alleged (p. 13):

"It was agreed between all of the representatives of the various States and the representative of the United States, negotiating said compact, that said 1,000,000 acre-feet apportioned by subdivision (b) of article III of said compact was intended for and should go to the State of Arizona to compensate for the waters of the Gila River and its tributaries being included within the definition of the Colorado River system and the allocations of said compact. and that said 1,000,000 acre-feet was to be used exclusively by and for the State of Arizona. that being the approximate amount of water then in use within the State of Arizona from the Gila River and its tributaries, and it was agreed that in view of the fact that no appropriation or allocation of water had otherwise been made by said compact directly to any State, the 1,000.000 acre-feet for the State of Arizona should be included in said compact by an allocation for the lower basin. And it was further agreed that a supplemental compact between the States, California, Nevada, and Arizona should be adopted and that such supplemental compact should so provide."

Arizona's brief made the following explanation:

"The testimony herein sought to be perpetuated concerns an agreement from which arise all of the ambiguities and misunderstandings of the Colorado River compact, the Boulder Canyon Project Act and the act of the Legislature of the State of California. Certainly it is material to show the initiation and the

reason for the apparent ambiguities and uncertainities of these various documents and complainant, State of Arizona, hopes and believes that it will be able to thus show that the reason no mention is made in the Boulder Canyon Project Act of the 1,000,000 acre-feet permitted to the lower basin by article III (b) of the compact, is because Congress considered the 1,000,000 acre-feet permitted by article III (b) to be in Arizona tributaries for the sole and exclusive benefit of the State of Arizona, in accordance with the understanding, agreement, intent, and purpose of the framers of the Colorado River compact, as set forth in the bill to perpetuate testimony herein."

The Court's opinion, in *Arizona* v. *California* (292 U. S. 341), stated (p. 348): "The interference apprehended will, it is alleged, arise out of a refusal of the respondents to accept as correct that construction of article III (b) of the compact which Arizona contends is the proper one. It claims that this paragraph, which declares:

" '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' means 'that the waters apportioned by article III (b) of said compact are for the sole and exclusive use and benefit of the State of Arizona'."

(P. 358:) "Arizona is one of the States of the lower basin and any waters useful to her are by that fact useful to the lower basin. But the fact that they are solely useful to Arizona, or the fact that they have been appropriated by her, does not contradict the intent clearly expressed in paragraph (b) (nor the rational character thereof) to apportion the 1,000,000 acre-feet to the States of the lower basin and not specifically to Arizona alone. It may be that, in apportioning among the States the 8,500,000 acre-feet allotted to the lower basin, Arizona's share of waters from the main stream will be affected by the fact that certain of the waters assigned to the lower basin can be used only by her; but that is a matter entirely outside the scope of the compact."

The second Arizona argument is that the wording in the second paragraph of section 4 (a) of the project act, which reads:

* * * and (4) 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. * * *

was intended to refer to the million acre-feet of III (b) water, to identify that with the water flowing in the Gila, and, by this clause, to earmark that million acre-feet for Arizona. Notwithstanding the fact that California and Arizona have not entered into any compact carrying out this language, Arizona says that this expression was a construction of the Colorado River compact, and indeed a construction of the first paragraph, which should be taken into account as determining the intent of Congress with respect to that 1,000,000 acre-feet.

She says, in effect, that the reason the million acre-feet is not mentioned in the paragraph dealing with California is that it was the intention of Congress to deal with it in the second paragraph, in item 3, and to earmark it for Arizona.

To dispose of that argument, I propose now to discuss the legislative history of the Boulder Canyon Project Act in section 4 (a). I shall not endeavor to take your time by analyzing all of the stages through which that amendment passed, but I shall ask you to consider photostats of three or four of the principal amendments.

The suggestion for a division of this general character originated, as has been said, in a conference of the governors of the seven States in Denver in the summer of 1927. On August 30, 1927, the governors of the four upper basin States, after protracted conferences with the representatives of Arizona and California, proposed a division of the

water delivered by the upper basin States at Lees Ferry. They proposed:

Of the average annual delivery of water to be provided by the States of the upper division at Lees Ferry, under the terms of the Colorado River compact—
(*a*) To the State of Nevada, 300,000 acre-feet.
(*b*) To the State of Arizona, 3,000,000 acre-feet.
(*c*) To the State of California, 4,200,000 acre-feet.

And then in a further paragraph they proposed:

To Arizona, in addition to water apportioned in subdivision (b)—

not the celebrated "III (b)", but paragraph (*b*) of this proposal—

1,000,000 acre-feet of water to be supplied from the tributaries of the Colorado River flowing in said State, and to be diverted from said tributaries before the same empty into the main stream * * *.

That is to say, of the water delivered by the upper basin at Lees Ferry, and dealing with that alone, they would have allocated to Nevada 300,000 acre-feet, to Arizona 3,000,000 acre-feet, and to California 4,200,000 acre-feet annually. The entire proposal was as follows:

SUGGESTED BASIS OF DIVISION OF WATER BETWEEN THE STATES OF THE LOWER DIVISION OF THE COLORADO RIVER SYSTEM SUBMITTED BY THE GOVERNORS OF THE STATES OF THE UPPER DIVISION AT DENVER CONFERENCE, AUGUST 30, 1927

The governors of the States of the upper division of the Colorado River system suggest the following as a fair apportionment of water between the States of the lower division subject and subordinate to the provisions of the Colorado River compact insofar as such provisions affect the rights of the upper basin States:

1. Of the average annual delivery of water to be provided by the States of the upper division at Lees Ferry, under the terms of the Colorado River compact—
(*a*) To the State of Nevada, 300,000 acre-feet.
(*b*) To the State of Arizona, 3,000,000 acre-feet.
(*c*) To the State of California, 4,200,000 acre-feet.

You will note that is a reduction in Arizona's contention that she was entitled to half the water, from 3,600,000 acre-feet to 3,000,000 acre-feet.

2. To Arizona, in addition to water apportioned in subdivision (*b*), 1,000,000 acre-feet of water to be supplied from the tributaries of the Colorado River flowing in said State, and to be diverted from said tributaries before the same empty into the main stream; said 1,000,000 acre-feet shall not be subject to diminution by reason of any treaty with the United States of Mexico, except in such proportion as the said 1,000,000 acre-feet shall bear to the entire apportionment in 1 and 2 of 8,500,000 acre-feet.

3. As to all waters of the tributaries of the Colorado River emptying into the river below Lees Ferry, not apportioned in paragraph 2, each of the States of the lower basin shall have the exclusive beneficial consumptive use of such tributaries within its boundaries before the same empty into the main stream, provided the apportionment of the waters of such tributaries flowing in more than one State shall be left to adjudication or apportionment between said States in such manner as may be determined upon by the States affected thereby.

4. The several foregoing apportionments to include all waters necessary for the supply of any rights that now exist, including water for Indian lands for each of said States.

5. Arizona and California each may divert and use one-half of the unapportioned water of the main Colorado River flowing below Lees Ferry, subject to further equitable apportionment between the said States after the year 1963, and on this specific condition, that the use of said waters between the States of the lower basin shall be without prejudice to the rights of the States of the upper basin to further apportionment of water, as provided by the Colorado River compact.

That proposal was unacceptable to both Arizona and California. It has since been claimed, in various hearings, by representatives of Arizona, that that State accepted the governors' proposal, that California did not; that it amounted to an arbitration, perhaps informal, but nevertheless an arbitration; that the issues were submitted to the upper State governors as arbitrators; and that they came forward with a a decision which was carried forward into the Boulder Canyon Project Act, as was said here yesterday, "modified only as to the figures." Now, that is totally incorrect.

That matter was threshed out during the debate on section 4 (a) in the Senate, and on December 7, 1928, in the Seventieth Congress, page 233 of the Congressional Record——

Senator MILLIKIN. May I interrupt, Mr. Ely? What was the official status of the governors' meeting to which you have referred?

Mr. ELY. As I understand it—and I am subject to correction, Senator Millikin—it was one of many meetings with which we have been familiar over the years, in an effort to resolve this controversy; in an effort, by the extension of the good will of the offices of the governors, all seven of them, to mediate; and later the four upper State governors, advanced their own proposal.

Senator MILLIKIN. Were those governors authorized to effect an arbitration?

Mr. ELY. No, sir. There was no legislative authorization for the meeting. It was informal in that sense. It was an effort at mediation rather than arbitration.

Senator MCFARLAND. Pardon me. What Congressional Record are you referring to?

Mr. ELY. That is from the Congressional Record of the Seventieth Congress, second session, December 7, 1928, page 233. Senator Johnson was speaking, and he was summarizing testimony in the hearings. The quotation is as follows from the Congressional Record:

> Commissioner Wilson [that is, of New Mexico] on January 19, 1928, testified on the same subject before the Senate Committee on Irrigation and Reclamation as follows [Johnson quoting Wilson]: "At the Denver conference Arizona accepted the proposals of the governors of the upper-basin States on the allocation of water, but attached a condition to the effect that the tributaries of Arizona must be released and relieved from the burden which might be hereafter impressed upon them by virtue of any treaty between the United States of America and the Republic of Mexico.
>
> * * * * * * *
>
> [Johnson continuing:] "The upper basin governors gave the matter considerable consideration and rejected Arizona's condition in this connection * * *."

Senator Johnson ends the quotation from Mr. Wilson and continues himself:

> That is quoted from page 193 of the printed and bound record of the hearings on Senate bill 728.

He continued:

> The Arizona Colorado River Commission, in reply to the proposal of the upper States, submitted in writing a document entitled "Response of Arizona to Proposal of the Governors of the Upper Division, Colorado River Basin States, Which Was Submitted to the Lower Division States Under Date of August 30, 1927," copy of which is found on page 349 of the printed and bound record of hearings on Senate bill 728.

Senator Johnson continued:

> In such response the Arizona Colorado River Commission, referring to conditions attached to Arizona's acceptance of the proposal submitted by the four

upper-basin States, including the condition for the exemption of Arizona's tributaries from any charge in meeting Mexican water demands. It is stated in reference to these conditions:

"It must clearly be understood that it is only upon condition that they are resolved affirmatively that we will accept the first item of the proposal relating to the allocation of water.

"The condition attached by Arizona to its acceptance of the proposal of the four upper-basin States, as to the division of water, was rejected by those States, and therefore Arizona's so-called acceptance neither occurred nor could occur under the circumstances."

There was no further contention that Arizona had accepted that proposal of the upper-basin governors and that California had, to the contrary, rejected it.

There the matter stood in the fall of 1927.

Senator MILLIKIN. Before any proposal of the upper-States governors could be accepted and have binding force, the upper-States governors would have to have authority to submit that kind of a proposal; would they not?

Mr. ELY. Exactly so.

Senator MILLIKIN. And you say there was no such authority?

Mr. ELY. I am under that distinct impression, sir. Nor was the cause ever submitted to them by authorization from the contesting parties for arbitration.

On March 20, 1928, the Johnson bill, S. 728, Seventieth Congress, was reported out by the Senate Committee on Irrigation and Reclamation. It appears in the Congressional Record, Seventieth Congress, first session, page 5025. And it contained the following as a committee amendment to section 5 of the bill. Section 5, you may recall, dealt then, and deals now, with contracts for the use of stored water.

The committee annexed a committee amendment, offered by Senator Kendrick, of Wyoming, printed in italics in the photostat I hand you, which, at the end of the authorization for water storage and delivery contracts, added the following:

Provided, however, That said contracts shall not provide for an aggregate annual consumptive use in California of more than 4,600,000 acre-feet of the water allocated to the lower basin by the Colorado River compact mentioned in section 12 and one-half of the unallocated, excess, and/or surplus water: *Provided, further,* That no such contracts shall be made until California, by act of its legislature, shall have ratified and approved the foregoing provision for use of water in said State.

Then it continued with the language which is still in the act, reading:

No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated.

On May 28, 1928, Senator Pittman offered for the record a compromise amendment, which I shall refer to in a moment.

If I may anticipate the story somewhat, you will recall that the first session, as Senator Hayden mentioned this morning, ended with a filibuster, and the Swing-Johnson bill did not pass the Senate at that session. It had passed the House, but without the amendment to which I have just referred. This was a Senate committee amendment which I have just read.

Senator Pittman, on May 28, 1928, during this first session, made the following statement:

I wish to place in the record at this point a suggested amendment. It is not to be proposed, because that would be perfectly useless, but it has been suggested.

It is in accordance with the conference to which I have just referred and it is designed to carry out that idea at some date. It was largely drawn by Mr. Wilson, the Commissioner of New Mexico, in the course of the conference to which I have just referred. It is only to be published in the record; it is not offered as an amendment.

Thereupon he placed in the record the text of a proposed amendment, which is identical with the amendment which Senator Hayden took hold of and presented, at the following session of the Congress, and which I shall refer to later.

I may say in general that it proposed to deal specifically with the III (a) water, the III (b) water, and the excess or surplus water.

Perhaps I had better read a portion of it here. It proposed a limitation act upon California which should be coupled with a provision for a seven-State compact, and would have required California to so limit herself that the aggregate annual consumptive use by that State of waters of the Colorado River—

shall never exceed 4,200,000 acre-feet of the water apportioned to the lower basin by paragraph (a) of article III of said compact, and that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said article III; and that the use by California of the excess or surplus waters unapportioned by the Colorado River compact shall never exceed annually one-half of such excess or surplus water. * * *

The second paragraph of the Pittman proposal authorized a lower basin compact, and it spelled out also references to III (a), III (b), and surplus, saying 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 3,000,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) of the 1,000,000 acre-feet in addition which the lower basin has the right to use annually by paragraph (b) of said article there shall be apportioned to the State of Arizona 500,000 acre-feet for beneficial consumptive use, and (3) that the State of Arizona may annually use one-half of the excess or surplus waters unapportioned by the Colorado River Compact * * *—

And here is item 4, and I ask your particular attention to it:

and (4) 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.

Now, that item is identical, if I may refer back to my earlier statement, with the language finally appearing in section 4 (a) of the Boulder Canyon Project Act:

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.

That is to say, the compact proposed in the act as enacted and the compact proposed by Senator Pittman, both referred in that way to the waters of the Gila, although at the time Senator Pittman offered his amendment he specifically spelled out the disposition of the waters of III (a), III (b) and surplus. In other words, in his amendment, item 4, which relates to the use of the Gila, was not a disposition of the million acre-feet. He had specifically provided for disposition of the million acre-feet of III (b) water earlier in both the first and the second paragraphs.

Senator Pittman made an interesting explanation of how his proposal came about. He read portions of the recommendation of the

upper basin Governors and said, at page 10259 of the Congressional Record, volume 70, first session:

In other words, those State Governors believed that there was only 7,500,000 acre-feet of water to divide, and they proposed to divide it, as I have said, 4,200,000 acre-feet to California; 3,000,000 acre-feet to Arizona; and 300,000 acre-feet to Nevada.

He continued:

California said, "We cannot possibly do with that amount of water; we must have 4,600,000 acre-feet instead of 4,200,000 acre-feet." Arizona would not yield more. Then, we came back here, and, while no agreement was reached and never has been, and there is no provision in the bill with regard to the division of water, in a meeting that was held in my office between friendly representatives of California and friendly representatives of Arizona and the Nevada delegation it was discovered that there was another paragraph of article III, which is (b), which reads as follows:

"(b) In addition to the apportionment in paragraph (a) the lower basin is hereby given the right to increase its beneficial consumptive use of such waters by 1,000,000 acre-feet per annum."

Pittman continued:

In other words, we discovered that there were 1,000,000 acre-feet of water more to divide than we had discussed at Denver. Then we said, "divide that 1,000,000 acre-feet between California and Arizona." What is the result? California will get 4,700,000 acre-feet, which is 100,000 acre-feet more than she finally insisted on at Denver; Arizona will get 500,000 acre-feet more than she insisted on, and Nevada would get exactly the same as originally planned. So there is plenty of water there.

Pittman continued:

While that tentative agreement was reached, between certain representatives of the three States after the bill was reported out of the Senate, because this extra million feet was not discovered until after the bill had been reported, for one reason and another, we have the deadlock which we find here.

That ends the quotation.

At that same first session, several other proposed amendments were printed, but none of them, including Senator Pittman's was ever brought to a vote.

When the Senate reconvened, in December of 1928, the Swing-Johnson bill was the unfinished business. On December 5, 1928, Senator Hayden had printed a proposed amendment, of which I have a photostat for the record, if I may present it, which was identical with the Pittman amendment to which I have already referred. That is to say, there is spelled out specifically, both as to California, in paragraph 1, and Arizona, in paragaph 2, the disposition of all of the water, III (a), III (b) and surplus, the million acre-feet being divided equally and specifically between the two States. And it contained, just as Senator Pittman's proposal contained, at the end of this complete disposition of all the water of the lower basin, that same clause:

And (4) 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.

In other words, that was not an apportionment or an allocation over and above the disposition Senator Hayden had just proposed, of the III (a), III (b) and surplus waters, because he just finished disposing of all of it. It was a qualification that Arizona should have the exclusive use of the waters of the Gila, but as a part of and not in addition to the waters available, which had already been referred to, namely, III (a), III (b), and surplus.

The text of the Hayden amendment (Congressional Record, p. 162) was as follows:

"SEC. 4. (a) This Act shall not take effect and no authority shall be exercised hereunder, unless and until the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact mentioned in section 12 hereof, and the President, by public proclamation, shall have so declared: *Provided*, That the ratification act of the State of California shall contain a provision agreeing that the aggregate annual consumptive use by that State of waters of the Colorado River shall never exceed 4,200,000 acre-feet of the water apportioned to the lower basin by paragraph (a) of article III of said compact, and that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said article III; and that the use by California of the excess or surplus waters unapportioned by the Colorado River compact shall never exceed annually one-half of such excess or surplus waters; and that the limitations so accepted by California shall be irrevocable and unconditional, unless modified by the agreement described in the following paragraph, nor shall said limitations apply to water diverted by or for the benefit of the Yuma reclamation project for domestic, agricultural, or power purposes except to the portion thereof consumptively used in California for domestic and agricultural purposes.

"The said ratifying act shall further provide that if by tri-State agreement hereafter entered into by the States of California, Nevada, and Arizona the foregoing limitations are accepted and approved as fixing the apportionment of water to California, then California shall and will therein agree (1) that 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 shall be apportioned to the State of Nevada three hundred thousand acre-feet and to the State of Arizona three million acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) of the one million acre-feet in addition which the lower basin has the right to use annually by paragraph (b) of said article, there shall be apportioned to the State of Arizona five hundred thousand acre-feet for beneficial consumptive use, and (3) that the State of Arizona may annually use one-half of the excess or surplus waters unapportioned by the Colorado River compact, and (4) 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 (5) that the waters of the Gila River and its tributaries 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 apportioned by said compact, then the State of California shall and will mutually agree with the State of Arizona to supply one-half of any deficiency which must be supplied to Mexico by the lower basin, and (6) that the State of California shall and will further mutually agree with the States of Arizona and Navada 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 (7) that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact."

On page 21, line 13, after the word "approval", strike out lines 13, 14, 15, and 16 to the word "date", inclusive, and on line 16, strike out the words "in the latter case", and on line 22, strike out the words "prior to June 1, 1928."

On page 22, strike out all of lines 22, 23, and 24, and on page 23, all of lines 1 to 7, inclusive.

On page 27, line 21, after the word "Dam", strike out the semicolon and insert a period, and strike out all of line 21 thereafter and all of lines 22 and 23, and on page 28, all of lines 1, 2, 3, and 4.

On page 29, line 21, after the word "States", strike out the comma, insert a period, and strike out the remainder of the line, and all of lines 22 and 23, and on page 30, all of lines 1 to 5, inclusive.

It should be pointed out that the Hayden amendment specifically provided that the waters apportioned by article III (b) should be divided equally between California and Arizona.

You will note on that photostat that in the first paragraph Senator Hayden, when he speaks of the III (b) water, says "apportioned," and

when he refers to the III (b) water in the second paragraph he does not say "apportioned." He says, "which the lower basin has the right to use"; indicating what I think a study of the debates as a whole will show, that those words, "apportioned" and "allocated" and "right to use" were all used rather loosely and for designation. The word "apportioned" was not, at this stage of the game at least, a word of art, as we are perhaps accustomed to thinking of it now.

On the face of the very amendment, the III (b) water is referred to as "apportioned" in one place and as water "which the lower basin has the right to use" in another. It didn't make very much difference; what they intended to do was very clear. The Hayden amendment was proposing to allow California 4,200,000 acre-feet of the water apportioned to the lower basin by paragraph (a) of article III and half of everything else, and as a mark of caution said that Arizona, out of that water, should surely have the exclusive use of the Gila; whereas Senator Phipps, in the committee amendment, on the other hand, proposed that California should have not to exceed 4,600,000 acre-feet of the III (a) water, and half of everything else.

Senator MILLIKIN. Did I hear you say "Senator Phipps"?

Mr. ELY. Yes. The committee amendment was offered by Senator Phipps. He was chairman.

Senator Hayden made some interesting explanations of what he did intend. On December 6, Senator Hayden introduced the amendment which he had just had printed, which I have handed to you, saying that it was identical with that suggested by Senator Pittman, which I have already referred to, and that it had been prepared by Mr. Wilson, the New Mexico Commissioner. Senator Hayden, at page 162 of the Congressional Record for the Seventieth Congress, second session, referring back to Senator Pittman's explanation said:

> The Senator from Nevada [Pittman] then stated that based upon the recommendations made by the upper basin Governors plus an equal division of the additional 1,000,000 acre-feet, Mr. Francis B. Wilson, Interstate River Commissioner of the State of New Mexico, had prepared an amendment which the Senator asked to have printed in the Record. He did not offer it at that time but merely asked to have it printed for the information of the Senate. I now offer that amendment to the bill.

Further, at page 163, Senator Hayden explained that under the Colorado River compact:

> There was apportioned to the upper basin in perpetuity 7,500,000 acre-feet of water and there was apportioned to the lower basin in perpetuity 7,500,000 acre-feet of water. The lower basin in addition thereto was allowed to appropriate annually 1,000,000 acre-feet, making a total apportionment to the lower basin of 8,500,000 acre-feet.

You will notice, within the bounds of that one paragraph, two approaches to the question of the million acre-feet. It was not a permanent apportionment, to be gained whether we use it or not. It was a right to appropriate. "Apportioned" was still not a word of art to anybody at that stage of the debate.

Several Senators called attention to the narrow margin of difference between the two States after the formal introduction of the Hayden amendment. Thus, Senator King, on December 6, at page 164, said:

> There is a difference now of 400,000 acre-feet between the two States.

In other words, the Phipps amendment, 4,600,000 acre-feet, and the Hayden amendment, 4,200,000 acre-feet, related, in both instances, to III (a) water and each of them obviously intended half of everything else to go to each State.

Senator Bratton, on the same date, at page 165, had the following colloquy with Senator Hayden:

The Senator from Arizona now is proposing an amendment to this legislation looking to an adjustment of the differences between Arizona and California. As I understand the purport of the amendment, it is to provide that in the act of ratification the State of California shall obligate herself not to claim more than 4,200,000 acre-feet annually of the apportioned water, and no more than 500,000 acre-feet annually of the unallocated or unapportioned water.

Mr. HAYDEN. No; the Senator has not had an opportunity, perhaps, to read the amendment very carefully.

Mr. BRATTON. I have not read it carefully, and I shall appreciate it if the Senator will correct me.

Mr. HAYDEN. The provision in the amendment is that the State of California shall agree not to use more than 4,200,000 acre-feet of the water apportioned in perpetuity to the lower basin, and not more than 500,000 acre-feet of the additional 1,000,000 acre-feet which the compact authorizes to be appropriated in the lower basin.

Senator Hayden is speaking with great exactness at that point.

Mr. BRATTON. That is the thought I had in mind, although I did not express it accurately.

A few minutes later, Senator Bratton indulged in the following colloquy with Senator Johnson, of California:

Mr. BRATTON. Discussing the subject of water separate and apart from all other features of the bill, there seems to be a difference of 400,000 acre-feet between Arizona and California.

Mr. JOHNSON. So there seems.

Mr. BRATTON. Without taking sides either way, we in the upper basin States desire to adjust the whole matter satisfactorily to all of the States concerned. Any other attitude would be unbecoming a State.

Mr. JOHNSON. I am sure that is the attitude of the gentlemen who confront me here.

Then there followed additional colloquy between Senator McKellar and Senator Hayden, to much the same effect, Senator McKellar saying [p. 170]:

Mr. MCKELLAR. Mr. President, may I ask the Senator from Arizona a question? I just want to see if I understand the differences between the Senator from Arizona and the Senator from California in reference to this bill.

First, as I understand the Senator, there is a difference of 400,000 acre-feet of water. California claims that much more than the Senator representing Arizona is willing to give. Is that correct?

Mr. HAYDEN. It might well be stated in that way.

Mr. MCKELLAR. It might be stated in that way—400,000 feet out of 7,500,000 feet?

Mr. HAYDEN. Yes.

Mr. MCKELLAR. Under those circumstances, it seems to me that the Senators from Arizona and California surely ought to adjust that difference. If it is only 400,000 acre-feet out of 7,500,000 acre-feet, there ought not to be any real difference on that score.

Then Senator Hayden, at pages 172 and 173, explained his amendment further. He recounted the Denver conference, Mr. Pittman's efforts, and so on, and he said:

The senior Senator from Nevada [Mr. Pittman] * * * invited a number of us to conferences to his office and there we talked over the situation.

Senator Hayden continued:

It was discovered at that time, as the Senator said, that instead of being able to divide the 7,500,000 acre-feet of water, which was not enough to satisfy the demands of all the States, we could legally, under the terms of the Colorado River compact, divide an additional million acre-feet. Therefore the proposal was made that the recommendation made by the governors of the four upper basin States be accepted and that there be added thereto the additional million acre-feet apportioned by the compact to the lower basin, and that that quantity of water be divided equally between California and Arizona, which would increase the total apportionment to each State by 500,000 acre-feet. By the new plan the State of California would have 4,700,000 acre-feet of water in the main stream of the Colorado River or 100,000 acre-feet more than that State asked for at Denver, and the State of Arizona would have 3,500,000 acre-feet, or within 100,000 acre-feet of the quantity she originally asked for at Denver. By such an arrangement it was felt that the rights and the desires of all of the States could be accommodated. That arrangement has been incorporated in the amendment which I have offered to the bill which is now pending. I would like to discuss that amendment in detail.

Then Senator Hayden went on with a rather detailed discussion, which I shall not take time for here. And at page 174, after outlining his proposal, he says:

Mr. HAYDEN. The hour is getting late. If I may, I should like to continue the reading of the amendment that I have offered so that I may explain its terms. I have read the proposal now contained in the bill as reported to the Senate and as recommended by the Senate Committee on Irrigation and Reclamation for the purpose of pointing out that the committee placed in the bill the 4,600,000 acre-feet of water, which, as I have said, was the demand made by California; whereas in the amendment that I have offered is 4,200,000 acre-feet of water, which is the quantity recommended for apportionment to California by the governors of the four upper basin States. Thus far the provisions are the same except for the difference of 400,000 acre-feet. To go on with the amendment, which provides further—

And that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said article III.

He said:

That refers to the extra million acre-feet apportioned to the lower basin by the Colorado River compact. So that, adding together the 4,200,000 acre-feet apportioned by paragraph (a) of article III of the Colorado River compact and the 500,000 acre-feet apportioned to the lower basin by paragraph (b) of the same article of the compact, the total quantity of water which we ask the State of California to be limited to is 4,700,000 acre-feet out of the main stream of the Colorado River, which is 100,000 acre-feet more than California demanded at Denver.

Then he continues and says:

I have read what California is required to do and how that State is limited. Let me now tell the other side of the story, as it appears in the amendment.

Then Senator Hayden takes up, one by one, the five items comprised in the second paragraph of the photostat I have handed you, and, when he gets down to item 2, he says:

And (2) of the 1,000,000 acre-feet in addition which the lower basin has the right to use annually by paragraph (b) of said article, there shall be apportioned to the State of Arizona 500,000 acre-feet for beneficial consumptive use—

He comments:

Again dividing the water equally with California so far as the additional million acre-feet are concerned—

And he continues reading:

and (3) that the State of Arizona may annually use one-half of the excess or surplus waters unapportioned by the Colorado River compact, and (4) 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.

Then he goes on with an explanation of the Gila.

Now, on the following day, December 8, Senator Bratton, of New Mexico, in an attempt to compromise this problem, introduced an amendment of his own. I have the photostat here. I am sorry I do not have enough for each of you. Senator Bratton's amendment was very much like Senator Hayden's except that he did not include in it any provision for a lower-basin compact. It dealt entirely with the limitation which he proposed should be imposed on California, and his proposal was that in effect whether the compact should materialize as a seven-State or six-State agreement. [Reading:]

In either event the ratification act of the State of California shall contain a provision agreeing that the aggregate annual consumptive use by that State of waters of the Colorado River shall never exceed 4,400,000 acre-feet of the water apportioned to the lower basin by paragraph (a) of article III of said compact, and that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said article III; and that the use by California of the excess or surplus waters unapportioned by the Colorado River compact shall never exceed annually one-half of such excess or surplus waters;

And so on. The full text is as follows:

SEC. 4 (a). This Act shall not take effect and no authority shall be exercised hereunder, unless and until (1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact mentioned in section 12 hereof, and the President, by public proclamation, shall have so declared, or (2) if said States fail to ratify the said compact within one year from the date of the passage of this Act then, until six of said States, including the State of California, shall ratify said compact and shall consent to waive the provisions of the first paragraph of Article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and shall have approved said compact without conditions, save that of such six-State approval, and the President by public proclamation shall have so declared: *Provided*, That in either event the ratification act of the State of California shall contain a provision agreeing that the aggregate annual consumptive use by that State of waters of the Colorado River shall never exceed 4,400,000 acre-feet of the water apportioned to the lower basin by paragraph (a) of Article III of said compact, and that the aggregate beneficial consumptive use by that State of waters of the Colorado River shall never exceed 500,000 acre-feet of the water apportioned by the compact to the lower basin by paragraph (b) of said Article III; and that the use by California of the excess or surplus waters unapportioned by the Colorado River compact shall never exceed annually one-half of such excess or surplus waters; and that the limitations so accepted by California shall be irrevocable and unconditional, unless modified by mutual agreement subsequently entered into by all of the States affected, to wit: Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, nor shall said limitations apply to water diverted by or for the benefit of the Yuma reclamation project for domestic, agricultural, or power purposes except to the portion thereof consumptively used in California for domestic and agricultural purposes.

Again Senator Bratton had undertaken to dispose of all the water available, III (a), III (b), and surplus.

In explanation, Senator Bratton said:

If I understand, California holds to the belief that 4,600,000 acre-feet is an irreducible minimum. Arizona contends that a maximum of 4,200,000 acre-feet is the largest that she will consider.

Then he goes on to say that he is not wedded to either figure and that he is trying to compromise.

Senator King interrupted him to say:

Mr. KING. Mr. President, will the Senator yield?

Mr. BRATTON. I yield.

Mr. KING. I will ask the Senator if it is not a fact that at the time when the governors' conference considered the matter and recommended a settlement upon a basis of 4,200,000 acre-feet to California, there had not been fully discussed and fully appreciated the fact that there was probably a million acre-feet subject to capture which, under the compact, was allocated to Arizona and to California, so that if 4,200,000 acre-feet were awarded out of the 7,500,000, there would be an additional 500,000 acre-feet out of this 1,000,000 acre-feet which, under the compact, was to be allocated to the two States, so California in the aggregate would get 4,700,000 acre-feet?

Mr. BRATTON. That is true if the estimated surplus actually exists. At the same time, Arizona would get her 3,000,000 acre-feet agreed to by the governors as her just share of the allocated water, plus 500,000 acre-feet, being one-half of the unallocated surplus, so that while California would get 4,700,000 acre-feet, Arizona would get 3,500,000 acre-feet. The surplus to which the Senator from Utah referred would be equally divided between Arizona and California. Neither State would get an advantage by reason of the division of the surplus.

Again referring to the million acre-feet, and calling it surplus.

So if I may pause here: You have seen how in the course of this debate the million acre-feet is referred to sometimes as apportioned, sometimes as allocated, sometimes as surplus; but by whatever language it was designated, the intent of every Senator who addressed himself to the subject was that Arizona should get half and California half. There was no intent that California should ever be excluded from that million acre-feet.

On December 10, 1928, Senator Phipps offered a proposed amendment to section 4 (a), as follows——

Senator MCFARLAND. On what page is that?

Mr. ELY. He explains it on December 10, 1928, at page 335. He had printed in the Congressional Record a proposed amendment to section 4 (a), which in effect simply repeated the language of the committee amendment, with some additional provisions relating to sections of the act that are not involved in this matter.

With respect to our problem, he proposed that section 4 (a) should now contain the committee amendment, which, in the bill as reported by the committee, has been placed in section 5, which I read earlier. That is to say, the limitation applicable to California, should—

not exceed 4,600,000 acre-feet of the waters apportioned to the lower basin States by the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact.

The full text is as follows:

"SEC. 4. (a) This Act shall not take effect and no authority shall be exercised hereunder and no work shall be begun and no moneys expended on or in connection with the works or structures provided for in this Act, and no water rights shall be claimed or initiated hereunder, and no steps shall be taken by the United States or by others to initiate or perfect any claims to the use of water pertinent to such works or structures unless and until (1) the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming shall have ratified the Colorado River compact, mentioned in section 12 hereof, and the President by public proclamation shall have so declared, or (2) if said States fail to ratify the said compact within one year from the date of the passage of this Act then, until six of said States, including the State of California, shall ratify said compact and shall consent to waive the provisions of the first paragraph of

article XI of said compact, which makes the same binding and obligatory only when approved by each of the seven States signatory thereto, and shall have approved said compact without conditions save that of such six-State approval, and the President by public proclamation shall have so declared, and, further, until the State of California, by act of its legislature, shall agree with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of this Act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed four million six hundred thousand acre-feet of the waters apportioned to the lower basin States by the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact."

On page 6, strike out line 25, and on page 7, lines 1 to 8, inclusive, and insert in lieu thereof the following: "permanent service and shall conform to paragraph (a) of section 4 of this Act. No person shall".

On page 12, after line 14, add the following paragraph to section 6:

"The Federal Power Commission is hereby directed not to issue or approve any permits or licenses under said Federal Water Power Act upon or affecting the Colorado River or any of its tributaries in the States of Colorado, Wyoming, Utah, New Mexico, Nevada, Arizona, and California until this Act shall become effective, as provided in section 4 herein."

Senator Hayden asked him to explain it. That is at page 335. He asked Senator Phipps how he arrived at the 4,600,000 acre-feet. The two Senators engaged in a certain amount of discussion, 4,600,000 versus 4,200,000, but neither of them evidenced any intention that by settling on either one figure or the other they intended to exclude California from the waters over and above the III (a) water.

Now, a difficult parliamentary situation developed, because the Johnson bill, S. 728, had been offered in its entirety as an amendment to the Swing bill, H. R. 5773, and consequently these amendments were all in the second degree. Senator Hayden explained that he wanted to get a separate vote on several items contained in the Phipps amendment.

Consequently, Mr. Hayden withdrew his, with the understanding that the Phipps amendment should have the right-of-way and he might thereupon offer amendments of his own to the Phipps amendment.

So from this time on, the Phipps amendment, which I have just read, became the working document out of which evolved section 4 (a).

Senator Hayden's first amendment (p. 383, December 11, 1928) was to strike the words "Four million six hundred thousand" in Senator Phipps' proposal and to substitute "Four million two hundred thousand."

And on the yeas and nays, that was rejected, 48 to 29, at page 384 of the Record.

Whereupon, Senator Bratton came forward with an amendment, at page 385, to—

strike out the word "six" and insert in lieu thereof the word "four," so as to read: "* * * shall not exceed 4,400,000 acre-feet of the waters apportioned to the lower basin States by the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact."

The Bratton amendment reducing 4,600,000 to 4,400,000 was approved by the Senate on December 11, 1928, at page 387 by a vote of 48 to 29.

Whereupon, on December 11, 1928, page 388, Senator Hayden offered an amendment which would remove the permission in the Phipps proposal for a six-State compact and require a seven-State compact in its stead.

Now, in the course of discussing that, he referred to the III (b) water as follows:

The Colorado River compact. as originally written, contemplated that the seven States of the Colorado River Basin would enter into an agreement apportioning 7,500,000 acre-feet of the waters of that basin to the upper basin, 7,500,000 acre-feet to the lower basin, and reserving to the lower basin the right to increase its beneficial consumptive use of water by an additional 1,000,000 acre-feet.

Again referring very precisely to the two classifications, III (a) and III (b).

I reiterate that there was no intention expressed by any Senator at any time, by whatever language, to exclude California from that 1,000,000 acre-feet. It was all a question of how to compromise 4,600,000 versus 4,200,000; and they thought, apparently, they had done that.

Now, on the yeas and nays, Senator Hayden's amendment, changing a six-State to a seven-State authorization, was rejected, 53 to 17. (Congressional Record, December 11, 1928, p. 394.)

On December 12, Senator Phipps moved to perfect his amendment, with the following explanation, at page 459 of the Record:

Mr. PHIPPS. Referring to the amendment which is now before the Senate, in order to remove any possible misunderstanding regarding the 4,400,000 acre-feet of water, I desire to perfect the amendment by inserting on page 3, line 4, after the word "by" the words "paragraph (a) of article 3 of," so that it will show that that allocation of water refers directly to 7½ million acre-feet of water that are mentioned in paragraph 3.

Mr. HAYDEN. I will state that I have no objection to the amendment offered by the Senator from Colorado to his own amendment, because it makes it even more in conformity with the amendment that I now offer.

Whereupon the presiding officer ruled that Mr. Phipps had a right to perfect his amendment, and Mr. King of Utah asked Mr. Hayden to yield, and said:

Mr. KING. If I may have the attention of the Senator from California and the Senator from Colorado, I direct attention to line 5, page 3, of the amendment offered by the Senator from Colorado. Let me read back a few words: "Plus not more than one-half of any excess or surplus waters unapportioned by said compact."

Mr. King continued:

I was wondering if there might not be some uncertainty as to what surplus waters were therein referred to. I think it was the intention to refer to the surplus waters mentioned in paragraph (b) of article III of the compact, being the 1,000,000 acre-feet supposed to be unappropriated.

Mr. JOHNSON. No; that is not quite my understanding. It is by no means certain that there is any other, and it is by no means certain that there is the 1,000,000; but the language referred to any other waters.

Mr. KING. Speaking for myself, I have no objection; but I was under the impression that the purpose was to link it with paragraph (b) so as to be sure that California was to receive one-half of the 1,000,000 acre-feet.

Mr. JOHNSON. Not necessarily. This gives one-half of the unapportioned water, and I think it is a better way to leave the matter.

Mr. KING. If it is sufficiently certain to suit the Senators of the lower basin, I have no objection.

Mr. JOHNSON. I think it is.

Again, no indication by anyone, Senator Hayden nor anyone else, of an intent to exclude California from the million acre-feet of III (b) water; Senator King thinking they had better be more specific about it, and Senator Johnson thinking they did not have to be. But no one breathed one word of an intent to exclude California.

Whereupon, Senator Hayden on December 12, 1928 (p. 460), offered an amendment to authorize the lower basin compact. He proposed to add a new paragraph, as follows:

> The said ratifying act (that is, the California Limitation Act) shall further provide that if by tri-State agreement hereafter entered into by the States of California, Nevada, and Arizona, the foregoing limitations are accepted and approved as fixing the apportionment of water to California, then California shall and will therein agree (1) that of the 7,500,000 acre-feet annually apportioned to the lower basin by paragraph (a) of article III of the Colorado River compact, there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet for exclusive beneficial consumptive use in perpetuity, and (2) that the State of Arizona may annually use one-half of the excess or surplus 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 so on; item 3, respecting the Gila, being identical with the language that he had in his earlier draft (Congressional Record, p. 162, December 6, 1928), at a time when that draft specifically disposed of the III (b) water.

On page 460, in explanation of his amendment, Senator Hayden said in part:

> The first part of my amendment is a mere corollary to the amendment offered by the Senator from Colorado. It provides that of the remainder of the 7½ million acre-feet there shall be apportioned to the State of Nevada 300,000 acre-feet and to the State of Arizona 2,800,000 acre-feet, which, combined with 4,400,000 acre-feet which the State of California will use, completely exhausts the 7½ million acre-feet apportioned in perpetuity to the lower basin.
>
> The second proposal in my amendment is that the State of Arizona may annually use one-half of the surplus or unapportioned water, which is likewise a corollary to the proposal made by the Senator from Colorado, which likewise disposes of the total quantity of surplus or unapportioned waters in the lower basin.
>
> Mr. KING. And that is provided in the compact, is it not?
>
> Mr. HAYDEN. Yes; the compact has been so interpreted. If the Senator from Utah is interested in an interpretation of the meaning of surplus unapportioned water, I might well read to him an answer to a question I addressed to Mr. Hoover shortly after the compact was written.

He goes on with a question and answer from Mr. Hoover, after which Senator King speaks.

Senator O'MAHONEY. Why not read the question and the answer?

Mr. ELY. That reads as follows (p. 460):

> I asked Mr. Hoover:
>
> What is the estimated quantity of water which constitutes the undivided surplus of the annual flow of the Colorado River and may the compact be construed to mean that no part of this surplus can be beneficially used or consumed in either the upper or the lower basins until 1963, so that the entire quantity above the apportionment must flow into Mexico, where it may be used for irrigation and thus create a prior right to water which the United States would be bound to recognize at the end of the 40-year period?

Mr. Hoover's answer to that question was:

> The unapportioned surplus is estimated at from 4,000,000 to 6,000,000 acre-feet, but may be taken as approximately 5,000,000 acre-feet.

Mr. Hayden continues:

He referred to the unapportioned surplus in both basins.

Then, quoting Mr. Hoover, Mr. Hayden continues:

The right to the use of unapportioned or surplus water is not covered by the compact. The question cannot arise until all the waters apportioned are appropriated and used, and this will not be until after the lapse of a long period of time, perhaps 75 years. Assuming that each basin should reach the limit of its allotment and there should still be water unapportioned, in my opinion, such water could be taken and used in either basin under the ordinary rules governing appropriations, and such appropriations would doubtless receive formal recognition by the Commission at the end of the 40-year period.

Continuing Mr. Hayden's quotation of Mr. Hoover:

There is certainly nothing in the compact which requires any water whatever to run unused to Mexico, nor which recognizes any Mexican rights, the only reference to that situation being the expression of the realization that some such right may perhaps in the future be established by treaty. As I understand the matter, the United States is not "bound to recognize" any such rights of a foreign country unless based upon treaty stipulations.

Mr. Hayden continues (p. 460):

So Mr. Hoover, who was the Chairman of the Commission which made the compact, expresses it as his opinion that surplus and unappropriated waters above the allocation in the compact are unaffected by the compact and are subject to appropriation in any State. I think that is not only a very important interpretation of the compact, but it is a sane, logical and legal conclusion.

The following colloquy then took place between Senator King and Senator Hayden, page 460:

Mr. KING. Mr. President, will the Senator yield?

Mr. HAYDEN. I yield.

Mr. KING. Does the Senator interpret the compact to mean that if there is any unappropriated water in addition to the 1,000,000 acre-feet referred to in the compact, that that is subject to the same disposition or division as the 1,000,000 acre-feet?

Mr. HAYDEN. There is no question about it, in the light of the statement that I have just read, which was written to me in answer to a specific question that I propounded to Mr. Hoover.

If I may interpose at that point: Again there is no intention disclosed to exclude California from the 1,000,000 acre-feet.

Senator MCFARLAND. Will the Senator read the question and answer, then, on the bottom of page 460 and at the top of page 461? Do you have it there?

Mr. ELY. I think I have it here.

Senator MCFARLAND. Or may I read it to you?

Mr. ELY. You can go ahead and read it, Senator.

Senator MCFARLAND. This is from the Congressional Record:

Mr. KING. Does the Senator interpret the compact to mean that if there should be, for instance, 16,000,000 acre-feet of water in the river, and by any treaty negotiated between the two Governments, Mexico should be allocated 1,000,000 acre-feet, that that 1,000,000 acre-feet should be taken from the 1,000,000 surplus, that is, the 16,000,000, and not any part of the 15,000,000 be called upon to meet that payment?

Senator Hayden's answer:

Mr. HAYDEN. The compact, from a literal interpretation of its words, means that the upper basin and the lower basin shall meet that deficiency equally, regardless of how much water is apportioned to each basin.

In further answer to the Senator from Utah, the compact states that any water must first be supplied to Mexico out of the surplus of unapportioned

water, but if it is necessary to supply Mexico with any water out of that water which is apportioned in each basin—that is to say, the 7,500,000 acre-feet apportioned to the upper basin and the 8,500,000 acre-feet apportioned to the lower basin—then the upper basin is burdened with furnishing one-half of the water, and these words, I think, should convince the Senator:

"* * * and if such surplus shall prove insufficient for this purpose, then the burden of such deficiency shall be equally borne by the upper basin and the lower basin, and whenever necessary, the States of the upper division shall deliver at Lees Ferry, water to supply one-half of the deficiency so recognized, in addition to that provided in paragraph (d)."

Mr. ELY. I shall refer, in further comment upon what Senator McFarland has just read, to one of the quotations from the Arizona briefs that I mentioned the other day, but I will do it later, if I may.

Following the discussion of the Hayden amendment, proposing the lower basin compact, to which I have referred, Senator Pittman, on December 12, 1928, page 469, said that he did not like the form of it; that it would require California to enact or to approve terms of such a lower basin compact in the same manner that she was required to limit her own use of water; that that was coercive; that he thought there ought to be an authorization for a three-State agreement, and not a requirement for one. And after some discussion between Senator Pittman and Senator Hayden and Senator Johnson, the amendment was accepted by Senator Johnson, with the colloquy that I read at the beginning, namely, the understanding that he stated (p. 472):

That there is no impress of the Congress upon the terms, which might be considered coercive, to any one of those States—

and again (p. 472)—

that this amendment shall not be construed hereafter by any of the parties to it or any of the States as being the expression of the will or the demand or the request of the Congress of the United States.

Then (p. 472):

Mr. PITTMAN. It is not the request of Congress.
Mr. JOHNSON. I accept the amendment, then.

That is, it was permissive only.

The amendment in the form proposed, as modified by Senator Pittman, was accepted, became a part of the Project Act, and is the basic language that we are discussing today.

I should call your attention to the fact that section 8 of the Boulder Canyon Project Act, which contains several references to the Colorado River compact and also to the authorization for a lower basin compact in section 4 (a), contains the following, with respect to the lower basin agreement:

It provides:

(b) Also the United States, in constructing, managing, and operating the dam, reservoir, canals and other works herein authorized, including the appropriation, delivery and use of water, for the generation of power, irrigation, or other uses, and all users of water thus delivered, and all users, and appropriators of waters stored by said reservoir and/or carried by said canal, including all permittees and licensees of the United States or any of its agencies, shall observe and be subject to and controlled, anything to the contrary herein notwithstanding, by the terms of such compact, if any, between the States of Arizona, California, and Nevada, or any two thereof, for the equitable division of the benefits, including power, arising from the use of water accruing to said States, subsidiary to and consistent with said Colorado River compact, which may be negotiated and approved by said States and to which Congress shall give its consent and approval on or before January 1, 1929; and the terms of any such compact concluded between said States, and approved and consented to by Congress after

said date: *Provided*, That in the latter case, such compact shall be subject to all contracts, if any, made by the Secretary of the Interior under section 5 hereof, prior to the date of such approval and consent by Congress.

That is to say, if a compact in this identical language should now be entered into by the three States of Arizona, California, and Nevada, it would be subject to the contracts heretofore made by the Secretary of the Interior.

Since we must recess shortly, I will pause at this point to just summarize briefly the legislative history of section 4 (a) of the Project Act.

It was an attempt on the part of Congress to compose the differences between Arizona and California and Nevada, first by imposing a limitation upon the use of water by California, which should be a protection to the upper basin States, primarily in the event that Arizona should not become a party to the compact; if it should be only a six-State compact, then it should be a six-State compact plus a limitation as to California, the fear being that California might put so much water to use that that, added to the water Arizona might use, might impose a burden which the upper basin States could not meet.

Second, it authorized a lower basin compact. It intended that the provisions with respect to California expressed in the Limitation Act and the provisions respecting Arizona and Nevada, should all be in one document, signed by all three, as one compact, and ratified by all three. It intended the words used with respect to California to have identically the same meaning as the identical words used with respect to Arizona; for example, when it said "consumptive use" and defined it as "diversions less returns to the river," in the paragraph referring to California. Again, when it used the phrase "excess or surplus" in the first paragraph, relating to California, it had identically the same meaning as in the second paragraph, relating to Arizona. It surely was not the intent of Congress to withhold that 1,000,000 acre-feet from both States. The 1,000,000 acre-feet was intended to be made available, and the problem is: on what terms? Never, in the debate, did any Senator express any indication or wish to exclude California from participation. To the contrary, every Senator who wrote language concerning III (b) water into his amendment, or discussed it on the floor, thought those two States ought to have it equally. Nor did any Senator disclose that by omitting reference to III (b), both as to California and Arizona, he intended to take from one and give to the other. The only possible statutory construction which permits Arizona to now claim a better result in consequence of staying out of the three-State compact than she could have claimed had she gone into one, is by assigning to the words "and Arizona shall have use of the Gila River," a meaning "over and above and in addition to" the allocations of water specifically spelled out before that.

Such a result is mathematically impossible. It was not the construction adopted in the Senate nor in the negotiations between the two States. They both thought they knew what this language meant.

When the Arizona Legislature undertook to ratify unilaterally the three-State lower basin agreement Arizona declined to accept this language as written in the Project Act. She amended it when her own legislature undertook to ratify it unilaterally, and I shall indicate the material character in which she amended it.

We shall be ready to continue at your pleasure. I shall try not to take very much longer.

Senator MILLIKIN (after a recess). You may proceed.

Mr. ELY. I have said that the Arizona Legislature, when it undertook to approve unilaterally the lower-basin compact proposed in the second paragraph of section 4 (a) of the Project Act, modified and amended it materially.

It did so with respect to item No. 3, appearing in the second paragraph of section 4 (a), which reads:

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.

As I have endeavored to demonstrate, in all of the forms which section 4 (a) took in the Senate, that phrase was used, not to identify the waters of the Gila River as over and above and in addition to the waters allocated between the two States by the provisions of the sections of the compact referred to in section 4 (a) but simply as assuring Arizona that the waters of the Gila, while included within those quantities, should be available exclusively to her.

When the Legislature of Arizona took action (act of March 3, 1939, Laws of 1939, ch. 33), care was taken to amend that item 3.

Instead of saying, as the Federal statute does, "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," the Arizona statute, after enumerating the items with respect to the III (a) water and the surplus, and so forth, provides:

(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. [Emphasis supplied.]

In other words, this Arizona statute, which set forth verbatim the terms of a compact which the officials of Arizona were authorized to sign with Nevada and California, was not content to rest upon the language of the Project Act as it stood. Arizona recognized, apparently, that as the Project Act stood, it did not have the effect of earmarking the Gila water as additional to the quantities otherwise specified; and Arizona undertook to accomplish that result by changing the language of the proposed agreement, so as to read: "in addition to."

Needless to say, neither California nor Nevada accepted the three-State compact as so modified by Arizona.

In recent hearings, representatives of Arizona have been asked by members of House committees whether they would accept that three-State compact as written in the Project Act, and have replied that interpretations would be necessary to enable them to do so.

In fairness to Arizona, as well as ourselves, it should be stated that the proposed three-State compact is unworkable on its face, because it would purport to exclude Utah and New Mexico from any participation.

I have gone over the legislative history of section 4 (a) and have, I hope, demonstrated the fact that it was not the intention of the Congress to exclude California from participation in the 1,000,000 acre-feet of water as referred to in article III (b). That conclusion can be emphasized by a recital of the subsequent negotiations among

the States. It is reinforced by the language in the Colorado River cases, which went to the Supreme Court, and is, of course, in accord with the references to apportioned water in the reports by the negotiators of the Colorado River compact.

At this point, if I may, I should like to place in the record reference to certain of these documents. I should like to include, if I may, extracts from the reports of the negotiators of the Colorado River compact, bearing on the question of whether the waters referred to in article III (b), are "apportioned," together with certain references as to "consumptive uses."

Senator MILLIKIN. That will be included at this point in the record.

(The document referred to is as follows:)

EXTRACTS FROM REPORTS OF NEGOTIATORS OF THE COLORADO RIVER COMPACT BEARING ON (1) "CONSUMPTIVE USES" AND (2) THE QUESTION OF WHETHER THE WATERS REFERRED TO IN ARTICLE III (B) ARE "APPORTIONED"

ARIZONA

Extract from the statement of Richard E. Sloan, legal adviser to the Arizona commissioner (and chairman of the drafting committee of the Colorado River Commission), printed in the Arizona Mining Journal January 15, 1923:

"* * * It will be observed that the compact does not divide the waters of the river. What is apportioned is the right to the beneficial consumptive use of the water for agriculture and domestic uses. In other words, it gives to each basin the right to acquire title as against the other basin to rights of appropriation up to a maximum sufficiently large to cover all known probable uses, leaving the disposition of title to the remainder to be made after a period of 40 years.

"In paragraphs A and B of article III there is apportioned to the upper basin the exclusive consumptive use of 7,500,000 acre-feet of water per annum and to the lower basin the exclusive beneficial consumptive use of 8,500,000 acre-feet per annum. The legal effect of this apportionment is that the lower basin may not complain of the diversion and use of water in the upper basin for agriculture and domestic uses provided the annual limit of 7,500,000 acre-feet is not exceeded, but may complain if that limitation is exceeded so as to prevent the full use of 8,500,000 acre-feet annually in the lower basin. * * * There is nothing in the compact that restricts or limits the use of water in the lower basin, and the full flow of the stream may be diverted and used without any interference from the upper basin, or without any limitation created by the compact. The effect of the compact is merely to place the two basins of use within the limitations upon a parity of right of 7,500,000 acre-feet for the upper basin and 8,500,000 acre-feet for the lower basin. Any use in either basin above these limits will acquire merely a secondary right of appropriation with respect to appropriations made within the definite allotments and title to which it is deferred to a later date.

"It may be of interest to know why the figures of 7,500,000 acre-feet for the upper basin and 8,500,000 acre-feet for the lower basin were reached. It grew out of the proposition made by the upper basin that there should be a 50–50 division of rights to the use of the water of the river between the upper and lower basin which should include the flow of the Gila, and the insistence of Mr. Norviel, commissioner from Arizona, that no 50–50 basis of division would be equitable unless the measurement should be at Lee's Ferry. As a compromise the known requirements of the two basins were to be taken as the basis of allotment with a definite quantity added as a margin of safety. The known requirements of the upper basin being placed at 6,500,000 acre-feet, a million acre-feet of margin gave the upper basin an allotment of 7,500,000 acre-feet. The known future requirements of the lower basin from the Colorado River proper were estimated at 5,100,000 acre-feet. To this, when the total possible consumptive use of 2,350,000 acre-feet from the Gila and its tributaries are added, gives a total of 7,450,000 acre-feet. In addition to this, upon the insistence of Mr. Norviel, 1,000,000 acre-feet was added as a margin of safety, bringing the total allotment for the lower basin up to 8,500,000 acre-feet. This compromise agreement is justified when we consider that the flow of the river will not be affected by any artificial division, but will continue uninterrupted, to be used

for any beneficial purpose recognized, including power, as freely as though no such apportionment had been attempted.

"In clause D of article III of the compact there is a provision which in effect guarantees that the States of the upper division will not cause the flow of the river at Lee's Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years, reckoned in continuing progressive series. Manifestly, the only purpose of this provision is to safeguard the lower basin during periods of prolonged drouth. The period of 10 years is not one definite block of 10 years but is a continuing progressive series, so that it is impossible to group any definite number of wet years in any one series, and the upper basin must each year guard against the possibility of future shortage and against having to make up an unknown deficit in the future."

CALIFORNIA

Extract from the report of W. F. McClure, commissioner for California, January 8, 1923, to the Governor of California:

"In conclusion permit me to add that the terms of the compact do full justice to the States in interest, and the equitable division and apportionment of the use of the waters of the Colorado River system whereby the lower basin is allocated 7,500,000 acre-feet per annum, with an allowable increase of 1,000,000 acre-feet per annum by reason of the probable rapid development upon the lower river, and fully guarantees to California an ample water supply to adequately care for the enormous future growth of the Imperial Valley and adjacent territory * * *."

COLORADO

Extract from the report of Delph Carpenter, commissioner for Colorado on the Colorado River Commission, to the Governor of Colorado, December 15, 1922:

"Seven million five hundred thousand acre-feet exclusive annual beneficial consumptive use is set apart and apportioned in perpetuity to the upper basin and a like amount to the lower basin.

* * * * * * *

"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 surplus waters of the river.

"No further apportionment of surplus waters of the river shall occur within the next 40 years. At any time after 40 years, if the development in the upper basin has reached 7,500,000 acre-feet annual beneficial consumptive use or that of the lower basin has reached 8,500,000 acre-feet, any two States may call for a further apportionment of any surplus waters of the river, but such supplemental apportionment shall not affect the perpetual apportionment of 7,500,000 acre-feet made to each basin by this compact.

* * * * * * *

"The repayment of the cost of the construction of necessary flood-control reservoirs for the protection of the lower-river country, probably will result in a forced development in the lower basin. For this reason a permissible additional development in the lower basin to the extent of a beneficial consumptive use of 1,000,000 acre-feet, was recognized in order that any further apportionment of surplus waters might be altogether avoided or at least delayed to a very remote period. This right of additional development is not a final apportionment. This clause does not interfere with the apportionment to the upper basin or with the right of the States of the upper basin to ask for further apportionment by a subsequent commission."

Extract from the supplemental report of Delph E. Carpenter, commissioner of Colorado to the Colorado Legislature, March 20, 1923, page 37:

"In my original report (printed in the Senate Journal of January 5, 1923) I discussed and defined the term 'beneficial consumptive use.' In addition to the discussion there contained, I might add there is a vast difference between the term 'beneficial use' and the term 'beneficial consumptive use.' A use may be beneficial and at the same time nonconsumptive or the use may be partly or wholly consumptive. A wholly consumptive use is a use which wholly consumes the water. A nonconsumptive use is a use in which no water is consumed (lost to

the stream). 'Consume' means to exhaust or destroy. The use of water for irrigation is but partially consumptive for the reason that a great part of the water diverted ultimately finds its way back to the stream. All uses which are beneficial are included within the apportionments (i. e., domestic, agricultural, power, etc.). The measure of the apportionment is the amount of water lost to the river. The 'beneficial consumptive use' refers to the amount of water exhausted or lost to the stream in the process of making all beneficial uses. As recently defined by Director Davis of the United States Reclamation Service, it is the 'diversion minus the return flow' (Congressional Record, January 31, 1923—p. 2815)."

NOTE.—Mr. Carpenter's report was introduced in the Congressional Record (Senate, 70th Cong., 2d sess., December 14, 1928, vol. 70, pt. 1, pp. 557–579, 584–585) and was before the Senate during the consideration of section 4 (a) of the project act.

WYOMING

Extract from the report of Frank C. Emerson, commissioner of the State of Wyoming, to the Governor and the Wyoming Legislature, January 18, 1923 (p. 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 the 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."

Mr. ELY. Also, I should like to include references in Colorado River cases to the question of whether the waters referred to in article III (b) of the Colorado River compact are "apportioned," within the meaning of section 4 (a) of the Boulder Canyon Project Act.

I have quoted from certain of those expressions in our opening, and shall not repeat them here, but would like these extracts to go in the record at this point, if I may.

Senator MILLIKIN. They may go in.

(The references referred to are as follows:)

REFERENCES IN COLORADO RIVER CASES TO THE QUESTION OF WHETHER THE WATERS REFERRED TO IN ARTICLE III (B) OF THE COLORADO RIVER COMPACT ARE "APPORTIONED" WITHIN THE MEANING OF SECTION 4 (A) OF THE BOULDER CANYON PROJECT ACT

I

In *Arizona* v. *California* (283 U. S. 423), Arizona's bill of complaint (art. XIV) alleged:

"(2) Said compact does not apportion or attempt to apportion all of the water of said Colorado River system, but attempts to apportion only 15,000,000 acre-feet thereof, and leaves unapportioned the remaining water of said system, aggregating 3,000,000 acre-feet annually. Said unapportioned water is a part of the unappropriated water of said Colorado River system. Said compact attempts to withdraw said unapportioned water from appropriation and to prohibit the appropriation thereof. This said compact attempts to do by providing that Mexican rights shall be supplied from said unapportioned water, and that said unapportioned water shall be subject to apportionment after October 1, 1963. Thus, said compact attempts to deprive the State of Arizona, its citizens, inhabitants, and property owners of their right to appropriate said 3,000,000 acre-feet of unappropriated water, all of which is now subject to appropriation in Arizona."

Arizona's brief, in 283 U. S. 423, stated (p. 4):

"To each basin is apportioned the annual beneficial consumptive use in perpetuity of 7,500,000 acre-feet of water, which must satisfy all existing appropriations as well as all future appropriations. There are existing appropriations totalling 6,500,000 acre-feet annually in the Lower Basin and 2,500,000 acre-feet annually in the Upper Basin. The Upper Basin States agree not to deplete the flow of the main stream at Lee Ferry below 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series. The flow of the system in excess of 15,000,000 acre-feet annually is not apportioned. So far as the Lower Basin States are concerned, they may use, but not appropriate, this unapportioned water, if and when it is available for use, subject to any rights which may be recognized in Mexico, and subject to its apportionment after Octo-

ber 1, 1963. If the satisfaction of recognized Mexican rights reduces the unapportioned water below 1,000,000 acre-feet annually, the Lower Basin may require the Upper Basin to deliver from its apportionment one-half such amount."

Arizona's brief, in 283 U. S. 423, further stated (p. 33):

"Under the Compact, then, the only water of which the right to exclusive beneficial use in perpetuity may be acquired in the Lower Basin is the water apportioned to that Basin. Such apportionment is limited to 7,500,000 acre-feet of water per annum by Article III (a). The Colorado brief, page 40, contends that paragraph (b) of Article III operates to increase this apportionment to 8,500,000 for the Lower Basin. This, we submit, is not the case. If it had been intended to apportion the larger amount, the Compact could easily have said so. The difference in language between paragraphs (a) and (b) is plain, and the difference in meaning is clear. Paragraph (b) does not *apportion in perpetuity*, as does paragraph (a), any beneficial use of water. It is very careful not to do this. It is to be read with paragraph (c) and relates solely to the method of sharing between the basins any future Mexican burden which this Government might recognize. This burden is to be satisfied first out of 'surplus' waters, and surplus waters are defined, not as surplus over quantities 'apportioned,' but as surplus over quantities '*specified* in paragraphs (a) and (b).' Any deficiency remaining is to be borne equally by the two basins. Thus the Lower Basin, which without paragraph (b) might use water in excess of its apportionment without acquiring any exclusive right in perpetuity thereto, is enabled to retain such uses to the extent of 1,000,000 acre-feet per annum against the first incidence of the Mexican burden. Thereafter it is entitled to require the Upper Basin to share from its apportionment equally in the satisfaction of any deficiency. In other words, all that paragraphs (b) and (c) accomplish is to require the Upper Basin to reduce its apportionment in favor of Mexico before the Lower Basin is required to do so, the Lower Basin being entitled to contribute first, to the extent of 1,000,000 acre-feet, water which it may have used but to which it has no exclusive right in perpetuity—that is, water not apportioned to it. The water apportioned is that to which exclusive beneficial use in perpetuity is given in paragraph (a), less any deductions which may have to be recognized as provided in paragraphs (b) and (c)."

Arizona's brief, in 283 U. S. 423, further stated (p. 62):

"As to water not yet appropriated, the Compact (which the Act approves and attempts to enforce) provides, in effect, that each Basin may increase its present consumptive use of water in perpetuity until each has reached a total of 7,500,000 acre-feet. (Bill, 52.) This means that the Upper Basin may add 5,000,000 acre-feet and the Lower Basin 1,000,000 acre-feet annually to present consumptive uses in perpetuity. (Bill, 7.) The Compact also provides that the Lower Basin may further increase its consumptive use of water (but not in perpetuity) by an additional 1,000,000 acre-feet annually. (Bill, 53.) Deducting these amounts from the total annual flow of 18,000,000 acre-feet (Bill 7), there remains 2,000,000 acre-feet of unapportioned water from which any rights accorded Mexico are to be satisfied. (Bill, 53.) By the terms of the Compact, any part of this 2,000,000 acre-feet not required by Mexico shall (together with the 1,000,000 acre-feet temporarily awarded to the Lower Basin) be subject to apportionment between the two Basins in 1963, or at any time thereafter."

II

Arizona's brief in *Arizona* v. *California* (292 U. S. 341), nowhere claimed that the waters referred to in Article III (b) of the Compact were "apportioned" waters. Instead, the brief repeatedly and carefully used the word, "*permitted*," instead of "*apportioned*" (p. 9):

"* * * the 1,000,000 acre-feet of water *permitted* to the lower basin by Article III (b) of the Colorado River Compact * * *."

(P. 9:) "* * * In reality they propose to use in California from the main stream of the Colorado River, 4,400,000 acre-feet of the water *apportioned* to the lower basin by Articles III (a) of the Colorado River Compact (Bill, p. 17), the entire 1,000,000 acre-feet permitted to the lower basin by Article III (b) (Bill, p. 18) and one-half of the very small surplus remaining in the river * * *."

(P. 11:) "If the 1,000,000 acre-feet *permitted* to the lower basin by Article III (b) of the Compact had been considered to be in the main stream of the Colorado

River, then the provision of Article III (d) should have been that the states of the upper division will not cause the flow at Lee Ferry to be depleted below an aggregate of 85,000,000 acre-feet for any period of 10 consecutive years * * *."

(At p. 11:) "* * * otherwise the *permission* contained in Article III (b) becomes meaningless and valueless for the reason that the upper basin might, without violating any terms of the Compact, prevent its use by withholding the water * * *."

(P. 11:) "* * * the framers of the Compact intended that the 1,000,000 acre-feet per annum *permitted* to the lower basin by Article III (b) was not in the main stream at all, but was in the tributaries existing in the lower basin * * *."

(P. 13:) "Under the construction of that document (the Limitation Act), as contended for by defendant Harold L. Ickes, and the California defendants herein, California could use from the main stream of the Colorado River (1) 4,400,000 acre-feet of the 7,500,000 acre-feet *apportioned* to the lower basin by Article III (a) of the compact, and (2) 1,000,000 acre-feet *permitted* to the lower basin by the terms of Article III (b) of the Colorado River Compact, and (3) one-half of the excess or surplus waters, if any, unapportioned by the Colorado River Compact * * *."

(P. 14:) "* * * Thus California would seek to get not only the 1,000,000 acre-feet *permitted* by Article III (b) of the Compact * * *."

(P. 14:) "Further, it must be pointed out that the Boulder Canyon Project Act nowhere seeks to deal with the water *permitted* to the lower basin by Article III (b) of the Compact and in the limitation imposed by that Act upon the State of California, makes no mention of the water *permitted* by Article III (b) of the Compact * * *."

(P. 15:) "* * * it was never intended either by Congress or the California Legislature that any person in California would ever claim the right to use any portion of the 1,000,000 acre-feet *permitted* to the lower basin by Article III (b) of the Compact, else *permission* to do so would have been incorporated in the Boulder Canyon Project Act and in the Act of the Legislature of the State of California."

(P. 16:) "* * * the reason no mention is made in the Boulder Canyon Project Act of the 1,000,000 acre-feet *permitted* to the lower basin by Article III (b) of the Compact, is because Congress considered the 1,000,000 acre-feet *permitted* by Article III (b) to be in Arizona tributaries for the sole and exclusive benefit of the State of Arizona * * *."

(P. 17:) "* * * the 1,000,000 acre-feet per annum *permitted* to the lower basin by Article III (b) of the Colorado River Compact * * *."

(P. 17:) "* * * The complainant State of Arizona hopes to be able to show in the case hereafter to be brought by it, by competent, relevant, and material evidence of the hearings and reports of the Congressional Committees and statements made in Congress and the legislative history of the Act, that it was the intent of Congress to impose a limitation on California by the terms of the Boulder Canyon Project Act of 4,400,000 acre-feet of the water *apportioned* by Article III (a) of the Compact, plus one-half of the surplus or unapportioned waters of the main stream of the Colorado River, thereby saving to Arizona its tributaries and the 1,000,000 acre-feet per annum therefrom *permitted* by the understanding, of which testimony is sought to be perpetuated and *assuring to Arizona and those claiming under it the right to appropriate one-half of the surplus or unapportioned waters* of the main stream present in the lower basin for use, *in excess of the 7,500,000 acre-feet apportioned* to the lower basin by Article III (a) of the Colorado River Compact."

(P. 19:) "The Act of the Legislature of the State of California follows exactly, as to the limitation imposed upon use of waters of the Colorado River system within the State of California, the language of the Boulder Canyon Project Act and makes no reference whatsoever to Article III (b) of the Colorado River Compact.

"The omissions, ambiguities, and conflicting provisions of the Colorado River Compact, the Boulder Canyon Project Act, and the Act of the Legislature of the State of California, as hereinabove pointed out, can be explained, resolved, and reconciled in no other way, except that they were drawn in accordance with and in order to give effect to the understanding, agreement, purpose, and intent of the framers of the Colorado River Compact, of which Arizona desires the testimony to be perpetuated in this proceeding, * * *."

(P. 25:) "* * * defendant Harold L. Ickes and the California defendants assert that the 962,000 acre-feet relate to and include the water *permitted* to the lower basin by Article III (b) * * *."

(P. 26:) "* * * Arizona insists that it (the 962,000 acre-feet) can include no part of the water *permitted to it* by Article III (b) of the Compact, none of which is present in the main stream of the Colorado River at all, and all of which is in the tributaries of the State of Arizona for use within the State of Arizona."

Mr. ELY. With respect to the tenor of the subsequent negotiations, I should like to refer you to the statement of Senator Hayden in the Congressional Record on June 26, 1930, beginning at page 12194 of the daily issue. The page numbers seem to change in the bound volumes.

Senator MCFARLAND. What volume?

Mr. ELY. That is volume 72, No. 155, June 26, 1930.

This was a statement by Senator Hayden during the debate on the first appropriation for the construction of Hoover Dam.

In it he undertook to summarize the negotiations between Arizona and California which succeeded the passage of the Project Act, and while this statement is, of course—as it should be—a statement from Arizona's viewpoint, Senator Hayden did place in the Record a report of Colonel Donovan, who had presided over these negotiations on behalf of the United States, and who undertook, as impartially as he could, to show the conflicting claims of the two States.

Senator MILLIKIN. What is the date of that, Mr. Ely?

Mr. ELY. The date of the Record is June 26.

Senator MILLIKIN. Of what year?

Mr. ELY. 1930.

Senator MILLIKIN. Very well.

Mr. ELY. This refers to a proposal made in a tri-State conference in March 1929, in which Arizona, while she undertook to define the apportioned water as being 8,500,000 acre-feet, and not 7,500,000 acre-feet, as we defined it, nevertheless conceded to California the right to participate in one-half of the 1,000,000 acre-feet of III (b) water. And also, from page 12199, I should like to include a table, which is identified in the text of the record as having been a proposal or a compromise which members of the Arizona delegation and certain members of the California delegation attending these interstate negotiations had put on paper, in which again it was assumed that the 1,000,000 acre-feet was available for California.

Senator MILLIKIN. All of it?

Mr. ELY. No; that it was available, one-half for California. There is a tabulation captioned "Proposal and findings of Governors" which was prepared by Arizona. It likewise shows, in separate columns, Arizona's analysis of the original California proposal made to the governors at Denver, in 1927, and, in the next column, findings of the governors, and in the third column, the Boulder Canyon Project Act as interpreted by Arizona, and in the fourth column, Arizona's "present position."

In that column, which is the significant one, it proposes "To Arizona, her tributaries, including the Gila, except such waters reaching the main stream," and "To Nevada, 300,000 acre-feet of III (a)

water," and as to the balance of the III (a) water, "To Arizona, 2,800,000 and to California, 4,400,000."

As to III (b) water in main stream, divided equally between California and Arizona;

As to surplus water in main stream, divided equally between California and Arizona;

Mexican burden not mentioned.

(The following was submitted for the record:)

[From the Congressional Record, June 26, 1930, pp. 12199–12200]

Based on 10,500,000 acre-feet of water of main stream after eliminating Gila and all other tributaries

	A-3	B-3—Next 1,000,000, divide 50–50	Surplus—Next 2,000,000 divide 50–50	Total
California	4,400,000	500,000	1,000,000	5,900,000
Arizona	2,800,000	500,000	1,000,000	4,300,000
Nevada	300,000			300,000
Total				10,500,000

Dividing Mexican burden 800,000 acre-feet between Arizona and California out of main stream

Leaves—	*Acre-feet*
California	5,500,000
Arizona	3,900,000
Nevada	300,000
Out of main stream—	
Mexico	800,000
Total	10,500,000
Imperial Valley	4,000,000
Blythe, etc	400,000
Metropolitan district	1,100,000
Total	5,500,000
Imperial Valley now	2,600,000
New water	1,400,000
Total	4,000,000

1/26/30. J. M. R.—C. B. W.

(The above is a true copy of the "yellow slip" made at Reno, Nev., by Ward & Heffner.)

Proposal and findings of governors

Governor Young's proposals to Denver conference (August, 1927)	Findings of the upper basin governors (August, 1927)	The Boulder Canyon project act (December, 1928)	Arizona's present position
1. To Arizona her tributaries except such waters reaching the main stream.	Same	1. To Arizona the Gila River except such waters reaching the main stream.	To Arizona her tributaries including the Gila, except such waters reaching the main stream.
2. To Nevada 300,000 acre-feet of 3a water.	Same	Same	Same.
3. The balance of 3a water; to Arizona 233,800 acre-feet perfected rights; to California 2,159,000 acre-feet perfected rights; balance divided equally between States, or Arizona, 2,637,400; California, 4,562,600.	Arizona, 3,000,000; California, 4,200,000.	Arizona, 2,800,000; California, 4,400,000.	Arizona, 2,800,000; California, 4,400,000.
4. 3b water in main stream divided equally between California and Arizona.	Given to Arizona to be supplied from tributaries.	Not mentioned	Divided equally between California and Arizona.
5. Surplus water in main stream divided equally between California and Arizona.	Same	Same	Same.
6. Mexican burden not mentioned.	Same	One-half burden of lower basin to be borne by Arizona and one-half by California.	Same.
7. Limitation on Arizona's time to use water, 20 years.	No limitation	No limitation	No limitation.

NOTE.—The documents referred to are part of the record of the Denver proceedings, the Boulder Canyon Project Act, and the minimum Arizona requirements.

Senator MILLIKIN. I believe that it would be a useful thing if each side would put into the record a digest of its views, of its own rights to water in absolute terms and in contingent terms, with summary citations to the authority for the view. (See pp. 515 and 516.)

In other words, I should like to know what Arizona's exact claim is as to Arizona water, and what Arizona's viewpoints are as to the water of other States in the lower basin.

I should like to have the same thing from Nevada and California.

Senator MCFARLAND. Mr. Chairman, the difficulty of the thing that Mr. Ely is doing now is this:

He is attempting to pick out little extracts from the record, going over a period of years.

When you take the record and read it as a whole, it is plain, and the intent of it is plain. But you cannot take any little part of it and pull it out and get an interpretation out of it.

Senator MILLIKIN. That is, it would be impossible to supply for the record what I have asked?

Senator MCFARLAND. I did supply sufficient yesterday, to show that Senator Johnson stated definitely that California was limited to 4,400,000 acre-feet of water.

Senator MILLIKIN. What I am talking about is getting this in summarized form, all together.

Senator MCFARLAND. We would be glad to do that. But the point that I am trying to make is that the act itself, the Boulder Canyon Project Act itself, is plain, and speaks for itself, and you cannot take any little part of the Congressional Record, as Mr. Ely is attempting to do, and prove anything by it. You have to take it and read it as a whole, and when you do that, you cover months of time.

Mr. ELY. We should be happy to comply with your suggestion, Mr. Chairman.

Senator MILLIKIN. I do not want to ask for it if it is not practical. It seems entirely practical to me that X State can say, "We have this much firm water," and put under that A, B, C, D, authorities which support that. X State has so much contingent water and put under that the authorities that support that.

Senator MCFARLAND. I am not disagreeing with that.

Senator MILLIKIN. Personally I do not see why that is not possible. It certainly would be helpful to those who will have the burden of studying this whole record if in one place we can look and see a summarization of these conflicting claims.

Senator MCFARLAND. We will be happy to do that, Mr. Chairman. I was only pointing out the burden that it would place upon this committee if they read all of these Records, which they will have to do if they are going to start in reading the Records and trying to find out what Senator Hayden meant by this and that. You have to read all of it, you cannot just read one or two parts of it.

It is our contention that the act speaks for itself and as the chairman well knows when these compromises are worked out the language is worked out frequently behind doors and not on the floor.

Senator MILLIKIN. Well, that all goes to the weight of the evidence that has been adduced here; I am not passing on that at all at this time.

Again I repeat, if I am making an impractical request I would be glad to have it brought to my attention now. If I am not making an impractical request it would be very helpful to have that sort of digest prepared.

Mr. ELY. We will do that.

Mr. SHAW. We suppose that what you are suggesting is not a brief but a skeleton outline.

Senator MILLIKIN. I would like to be able to visualize it on say one typewritten page per side.

Mr. ELY. I was about to suggest that the report of Mr. Donovan to the Secretary of the Interior be placed in the record summarizing these offers and counter-offers, indicating them impartially and rather fairly.

Senator MILLIKIN. Will you identify that for the record?

Mr. ELY. Page 12203 of the Congressional Record of June 26, 1930, daily issue, to page 12206. It starts with the date line "February 14."

Senator MILLIKIN. That will be made a part of the record at this point.

(The information is as follows:)

[From the Congressional Record, June 26, 1930, pp. 12203–12206]

FEBRUARY 14, 1930.

Hon. RAY LYMAN WILBUR,
The Secretary of the Interior, Washington, D. C.

MY DEAR MR. SECRETARY: I am inclosing a memorandum of events of the recent conferences held at Reno and at Phoenix. It is devoid of rhetoric or of characterization. It is simply a bare summary of what transpired, although I think you were fully advised of events from day to day.

Sunday, February 9, I wired you as follows:

"The new California water proposal, which really offered basis for settlement, ruined by being conditioned on all other matters being submitted to Secretary of Interior. When all States objected, then California could not agree whether it should be eliminated. She had terrific fight in own ranks last night and this

morning looked hopeless. At once called meeting of all States and situation saved. Finally I suggested that further action be deferred until I talked with you. This agreed to. Am on way east, and will call you in Washington Thursday. This conference has resulted in certain definite gains.

"The gains that I mentioned are these:

"(1) That there now exists an entirely different attitude toward the administration and toward the Department of Interior. This is evidenced by the willingness of all the States to come to Washington and sit down during the process of negotiations to discuss with the Interior Department questions that may need interpretation or explanation.

"(2) That it has been clearly developed that the real difficulty lies in the internal differences in California, and that before California can negotiate as a State she must solve those internal differences.

"(3) That on the division of water a very definite advance has been made, in that for the first time there is full recognition by California that the Gila and other tributaries of Arizona must be excluded. Arizona stated that upon this basis there is real hope for a determination of this question.

"(4) That while there will be differences of opinion as to power allocation and certain other features pertaining to charges for domestic water, it is evident that the spirit in approaching those problems could be greatly improved as soon as the water question is settled; that there should not be any restraint on a full discussion of these problems, even though ultimately many of the questions involved should not be embodied in a compact. Arizona has indicated her willingness to deal with the question of power in what she describes as a perfectly reasonable and businesslike method."

The question has been raised about the intervention of Utah and New Mexico. It must be borne in mind that those States for certain purposes are lower basin States. In point of fact from a legal standpoint to avoid any question, once the matter of water is decided upon by Arizona and California and Nevada, it is considered necessary by all parties that sanction must be given to this by Colorado, Utah, and New Mexico, because of the possible effect the Mexican burden might have upon the upper States. This could be done either by approval at the foot of the document or by an actual joining in the compact.

Therefore, while at first glance three weeks' negotiation would seem a waste of time, and although the conference was saved from disruption on several occasions only by a hair, in truth it was agreed by all present that there was a better mutual understanding and a closer drawing together of the States. This, in my opinion, warrants a further attempt at settlement, and I believe that the point has now arrived when that could be best accomplished at Washington.

Respectfully,

WILLIAM J. DONOVAN.

On the opening day of the conference at Reno it was asked by California if Arizona desired to proceed upon the principle of exchange of water for revenue. This suggestion was made because of the belief that Arizona was more concerned with revenue from the project than she was in the division of water. Arizona, however, stated that she considered the vital question to be that of the division of water, and that so far as revenue was concerned she was prepared to take her chances with the other States. Arizona further stated that since the very threshhold of the problem was the division of water and if there could be no agreement upon that there could be no agreement at all, she deemed it essential that the water question be first determined. While California contended that in her view it was important to consider all questions together, she acquiesced in the suggestion of Arizona and the conference proceeded accordingly.

The following proposal was first submitted for discussion. While not a definite proposal it may fairly be said to have expressed the California viewpoint:

1. Water physically present in lower basin system to be divided as follows:

(a) Nevada, 300,000 acre-feet.

(b) Deduct for present irrigated acreage in both States.

(c) Balance of water to be divided equally between Arizona and California.

(d) Mexican demand to be satisfied first from water flowing across international boundary line. Remainder of lower basin obligation to be supplied 50-50 by Arizona and California.

2. Gila and its tributaries to be Arizona's. To be fully protected. To be subject neither to Imperial burden nor to Mexican allocation. However, to be a charge against Arizona on Arizona's share of the water in the lower-basin system.

Arizona at once objected to this suggestion, pointing out that it was based upon the principle of dividing the waters present in the system of the lower basin including a charge upon Arizona of the waters of the Gila and its other tributaries. Arizona asserted that the true principle should be the division of the waters of the main stream; that any other method was vague and indefinite and that unless her tributaries were excluded Arizona could never accept a compact.

Then there was submitted the following proposal:

1. Gila and all Arizona tributaries out, except return flow.
2. From the main stream water following divisions to be made:

	Acre-feet
3A:	
A. California	4,400,000
B. Arizona	2,800,000
C. Nevada	300,000
3B: 1,000,000	50–50

Fifty-fifty main stream surplus.

Fifty-fifty Mexican burden—main stream.

Any shortage in main stream without preference or priority.

Reduction from Santa Fe and Washington, 200,000.

Arizona urged the adoption of this suggestion. It was pointed out that it followed the theory of compromise indicated in the Swing-Johnson bill that all discussions brought us back to such a compromise, and that its embodiment in the bill was the result of many weeks of discussion by the congressional representatives of the States concerned.

In order to reduce this proposal to figures a table was prepared and submitted to Arizona and California. This table was based on the assumption of engineers that 10,500,000 acre-feet of water would pass through Boulder Canyon Dam per annum. If that assumption were correct, then, it was said that there would be below the dam 9,400,000 acre-feet of water for diversion by all other interests except the Metropolitan Water District, which it was estimated would need 1,100,000 acre-feet at the dam.

The following schedule of diversions for the 10,500,000 acre-feet was suggested:

	3-A	3-B	Surplus	Total
California	4,400,000	500,000	1,000,000	5,900,000
Arizona	2,800,000	500,000	1,000,000	4,300,000
Nevada	300,000			300,000
	7,500,000	1,000,000	2,000,000	10,500,000

Assumed Mexican burden of 800,000 acre-feet divided 50–50 between Arizona and California.

On this set-up, this would leave diversions out of physical water present in the main stream, as follows:

	Acre-feet
California	5,500,000
Arizona	3,900,000
Nevada	300,000
Mexico	800,000
Total	10,500,000

Objection to this proposal was made by California upon the ground that it would not give California sufficient firm or title water for estimated future needs, and that Arizona was getting a much larger diversion than she could use profitably, consumptively, and beneficially in the next 50 years.

In answer Arizona replied that she, as well as other upstream States, had to protect her people against appropriation by a lower State; that the water unused would be available for California; and that even if used there would be for all time a return flow to the main stream.

All engineers who discussed the problem agreed that for the next 50 years there would be available 10,500,000 acre-feet of water or more, and that the only question would arise at the expiration of that period. It was said that if there is not available for 50 years or more 10,500,000 acre-feet for use in the above diversion, then it is of no use talking about building the dam, because

power could not be generated to pay for building the dam and California could not take up the deficiency by a charge for storage of water to the Metropolitan Water District because the added price of storage and the cost of creating additional power at the dam site to pump the water over the hill to the metropolitan area would make a prohibitive cost per acre-foot for water delivered in the Metropolitan area.

In order to bring these questions to a focus, a joint meeting was held by Arizona and California. At this meeting, Senator Pittman was present. He stated to the conference that in his opinion unless agreement was reached there would be no appropriation for the dam and that the States concerned will be back where they were before the bill was passed. In this view Senator Hayden concurred.

During the course of this conference a telegram was received from Governor Young, which was read to the meeting. In this telegram Governor Young urged that no local interest be emphasized to the point of endangering agreement, but that the matter be considered from a broad, State-wide viewpoint.

A reply was made to this telegram, fully and frankly setting forth the situation. This telegram was submitted to each of the State commissions.

It was then felt necessary in order to avoid a break in the conference to take a recess. Upon the invitation of Arizona the conference was adjourned to Phoenix on Wednesday, February 5, at the request of California, who desired the opportunity of having meet together those of her people particularly interested in the division of water.

The conference was resumed on Thursday, February 6, at Phoenix. California at once submitted the following proposal:

"California, after mature consideration of the proposal submitted by Arizona for division of the waters of the Colorado River, feels constrained to reject the same, on the following grounds:

"(*a*) Such proposed division allows to California far too little water for its well-established requirements, and at the same time allots to Arizona much more water than is needed or can be put to beneficial use in that State.

"(*b*) Sound reclamation principles forbid an allocation of water in perpetuity to any State in excess of its requirements. Such excess can be of no benefit to the State to which it is given and is unavailable with title to another State needing it for proper development.

"California, however, is prepared to enter into a compact on the following basis:

"The use of the waters of the Colorado River system in the lower basin for agricultural and domestic purposes shall be divided, 300,000 acre-feet per annum to Nevada, the balance of the water physically present at any time equally between Arizona and California; any water necessary to make up a physical shortage of water to those parts of Utah and New Mexico in the lower basin and the Republic of Mexico to which they or it have actual need or legal right shall be furnished equally by Arizona and California."

To this Arizona formally replied:

"The proposition now made by California means that California would get one-half of the waters of the main stream plus one-half of the waters of the Gila and the other Arizona tributaries. That is to say, in addition to 50 percent of the main-stream water she would get out of the main stream enough more to represent one-half of the waters of the Gila and of the tributaries.

"Arizona from the first has tried to make it clear that we cannot and will not discuss a division of our tributary waters or the water of the Gila. We have insisted and still insist that if any division of water is to be made it must be confined to water actually reaching and flowing in the main stream.

"Arizona has always conceded that any water from the Gila or her other tributaries reaching the main stream become main-stream water and subject to division, and has always based her proposals on that assumption."

Following this there was a discussion which disclosed that Arizona would not recede from her insistence upon the exemption of the Gila and her other tributaries. It developed also in the discussion that unless there was a definite division of water the engineers in the particular State concerned would make their own computations of the water in the stream under the California proposal, with resultant confusion and possible litigation; that in addition there was danger that the people themselves would ultimately feel that such a division was lacking in a frank disclosure of the true situation. It was then asked if the net result of the various proposals and their rejection was to be a deadlock. The reply was made that such was not the case and an endeavor would be had to present a new set-up of the water division.

On the following day, Friday, February 7, the States of Utah and New Mexico, through their representatives, W. W. Ray and Francis C. Wilson, respectively, presented their views and suggested the following allocation of the power to be generated at Boulder Dam.

On the basis of 650,000 firm horsepower—	*Horsepower*
To California	200,000
To Arizona	175,000
To Nevada	175,000
To Utah	50,000
To New Mexico	50,000

All at 1.75 mills per kilowatt-hour. The power allocated to be used, sold, or otherwise disposed of by the State or its agency either within or without the State of allocation, each State or its agency to be given not less than 90 days from the date when a State is notified by the Secretary of the Interior to present applications with guaranties satisfactory to him for the fulfillment of any contract which shall be entered into by the Secretary of the Interior with the applicant, and in default of any such application with sufficient guaranties within the time limited, then the Secretary of the Interior shall offer the allocation at a price of not less than the 1.75 mills per kilowatt-hour; and in the event of the sale of such unappropriated allocations the successful applicant shall purchase the power subject to the right of the State or its agent to which the original allocation has been made to recapture the same after 15 years succeeding the date of the completion of the project, upon notice to the contractee of such intention, giving to the latter one year from the date of such notice to surrender the power. As to the contractee for capital investment, the recapturing State shall pay to the contractee such reasonable compensation as may be agreed upon, or in default thereof, then the recapture provisions of the Federal Water Power Act as now in effect shall control.

Mr. Ray, for Utah, and Mr. Wilson, for New Mexico, presented detailed data as regards the economic application of the power within the State of Utah, and in the future when transmission methods are perfected more than at present, within New Mexico, arguing that those States are entitled to their share of the power for the upbuilding of their own industries.

Mr. Wilson went at length into advantages which would accrue to agricultural interests throughout the United States from the use of firm and excess power at Boulder Dam in the production of nitrates for fertilizer at prices considerably below those at which these products are now available anywhere in this country, bringing a reduction in present costs of from one-third to two-thirds, depending on firm horsepower or excess horsepower, of the cost of electricity elsewhere in the United States for the production of fixed nitrogen.

He also went into the possibilities of the electrochemical industry, supporting his statement by detailed figures indicating lower prices than those prevailing in Niagara Falls area today. Ray, of Utah, presented forceful argument for the development of Utah resources with cheap power within an area for transmission less than the distance to power centers in California, and made a plea for the development of his State by the use of power from Boulder Dam.

In the afternoon a conference was held between Arizona and California, at which time Arizona presented the following statement:

"Arizona is not at this time making any statement in regard to the allocations of power and the revenue-producing features of the act, for the reason that we deem it necessary for the ultimate success of this conference that water division be disposed of first. We have been much interested in the able addresses made this forenoon by Messrs. Wilson and Ray, and in the main we concur in the substance of these addresses.

"It might, however, be helpful if we again restate Arizona's position with reference to the power allocations and revenue features. We believe that the purpose and intent of the Boulder Canyon project act contemplates a compact between Arizona, Nevada, and California with reference to the benefits to be derived from the project by Arizona and other States.

"We believe also that it is within the contemplation of the act that an agreement between the States shall be binding upon the Secretary, when approved by Congress, and shall control him in the administration of the act. We want at this time to state that when we come to the discussion of these questions in their due order Arizona's plan of solution will be fair, reasonable, and we hope will appeal to the business judgment of those to be financially interested in the project, to the end that it may be a financial success."

Thereupon it developed that there was some divergence of views between California and Arizona as to the power of the conference to enter into an agreement with regard to the power allocations and revenue features of the act which would be binding upon the Secretary of the Interior and, when approved by Congress, would control him in the administration of the act.

Arizona then declared that she was prepared to continue the negotiations if there were any hope or expectation of an agreement being reached. She stated, however, that in her opinion it was useless to continue negotiations if California felt at this time that she was not in a position to enter into a compact. Arizona said further that if California would frankly state that she was not prepared to go forward, Arizona was ready to terminate the entire proceedings.

It was then suggested that California should face the situation frankly and determine whether there could be a reconciliation of the divergent views in her State—whether as to power or as to water—and then to appear the following day and state exactly what she purposed doing. California said she would have a meeting of her own delegation and be able to report at a full meeting the next morning.

On Saturday, February 8, at California's suggestion, a conference was held between the States of Arizona and California. At this conference California submitted the following proposal:

"California, anxious to make one more effort to bring about an agreement, makes the following proposal for the division of the waters of the lower Colorado River system:

"To Nevada, 300,000 acre-feet of water.

"Utah and New Mexico to have all water necessary for use on areas of those States lying within the lower basin.

"Arizona to have all waters of the Gila system and her other tributaries, excepting such water as reaches the main stream, also her present uses from the main stream, within the State.

"California to have water now diverted in California for agricultural and domestic use in California.

"Balance of water in main stream to be divided one-half to Arizona and one-half to California.

"Mexican obligations to be met one-half by Arizona and one-half by California from main-stream water.

"All other points to be left to determination of the Secretary of the Interior, under the act."

There was discussion as to its meaning. California said that she had endeavored to avoid figures in the belief that there was sufficient water in the river and that by avoiding figures each State would be able to get sufficient water for its needs. To this Arizona replied that while it was desirable to avoid figures, it would not seem possible to escape their consideration; that in order to see the effect of this proposal upon both States it was necessary to start with the actual use of water from the main stream by the respective States. After considering the problem it was felt that upon that basis she would be getting much less water than the Swing-Johnson bill contemplated or that she would have under the former proposals of California.

There then arose the question as to the concluding sentence of the proposal, which was: "All other points to be left to the determination of the Secretary of the Interior, under the act."

California was asked if she would eliminate that clause so that water would be considered alone. California felt that she could not do so. Arizona then suggested that in view of the fact that it involved considerations other than water she would have to talk with the other States concerned. California withdrew, and the other States appeared, and after some consideration by them California returned, and then each State in turn—Nevada, Utah, and New Mexico—stated that they would not accede to such a condition, and Nevada and Arizona stated that they would not sign a compact which did not deal with power as well as with water. Recess was then taken.

On Sunday, February 9, an open meeting was held of all the States. The chairman then announced it would appear we had all reached the moment when there could be no further discussion; that this being so, he had prepared a chronological summary of events; that this was bare of rhetoric and of characterization; that it did not undertake to blame anyone for failure, that perhaps failure lay in the inherent nature of the problem; that in the event one State had its internal problems it was not so much a matter of criticism as of sympathy; that all States had experienced such difficulties and could understand their existence; that this was

a serious moment for the destiny of the Boulder Dam Project Act and for the entire Southwest; that it might be that it was insoluble; that, of course, it was absurd to say that it should have been disposed of quickly.

After so many years of controversy it was impossible to drain out the poison of disagreement, distrust, and suspicion in a few months. But that it was hoped that time and patience were fighting on the side of common sense and of common interest and that they indicated a speedy determination; that, however, if both time and patience had been exhausted it was better to stop now while the relationship among the commissioners was friendly and pleasant. The chairman then asked California if she had any statement to make, to which she replied she had not, and then he asked for her reply to questions from other members of the conference as to whether she intended making any statement to the press. California replied that she had not decided, but if she did so she would, of course, give copies to the other members of the conference.

Thereupon the chairman asked Arizona if she had any statement to make. She replied by submitting the following, which I read to the conference:

"California's proposal for water division, presented yesterday, considered apart from the reference to revenue and power, in one important respect represents a distinct advance over any authoritative proposal heretofore presented to us by the California commission, namely, it approaches the problem with a suggestion that Arizona have her tributaries and the Gila, and that water division be confined to main-stream waters.

"But the proposal is immediately clouded and rendered impossible by California's insistence that any compact dividing the water must not deal specifically with quantities or classes of water; in other words, must not indicate what water is to be received by each of the two States.

"The Colorado River compact and the project act deal with specific quantities of water, which was true also of the findings of the upper-basin governors at the Denver conference in 1927. From Arizona's standpoint, it is essential that any compact making a division of water shall deal specifically with classes and quantities of water so that no uncertainty may be left as to the actual meaning and effect of any division agreed upon.

"The phrase 'California to have water now diverted in California for agricultural and domestic use in California' obviously is open to many interpretations. California's Colorado River Commission suggested that the actual public records of diversions from the Colorado River for the past 2 years be taken as the proper interpretation. The conference was advised that these diversions were approximately 3,000,000 acre-feet. Upon further discussion they suggested 2,850,000 acre-feet as a figure in interpreting the foregoing phrase. Applying this figure to a flow of the river available for the lower-basin States of 7,500,000 acre-feet, the water would be divided as follows:

"California, 4,900,000; Arizona, 2,300,000; Nevada, 300,000.

"With 8,500,000 acre-feet available, the division would be as follows:

"California, 5,400,000; Arizona, 2,800,000; Nevada, 300,000.

"With the above minimum flows of the main stream available for division in the lower basin, California would receive under her proposal vastly more water than is allocated to them under the Boulder Canyon Project Act.

"At the Denver conference in 1927 California claimed her uses to be 2,159,000 acre-feet. Apply that figure to California's present proposal, the water would be divided as follows:

"California, 4,555,000; Arizona, 2,645,000; Nevada, 300,000, for a flow of 7,500,000 acre-feet; and California, 5,055,000; Arizona, 3,145,000; Nevada, 300,000, for a flow of 8,500,000 acre-feet.

"In Los Angeles last fall California claimed her uses to be 2,335,000 acre-feet. Applying that figure to the present water proposal, the division would be as follows:

"California, 4,640,000; Arizona, 2,560,000; Nevada, 300,000; and California, 5,140,000; Arizona, 3,060,000; Nevada, 300,000 for flows of 7,500,000 and 8,500,000 acre-feet, respectively.

"Coupled with this last water proposal is the provision 'all other points to be left to determination of the Secretary of the Interior under the act.' This, California states, is not related to water, but covers the revenue provisions and allocation of power. California refuses to separate this from their water proposal. The allocation of power and the revenue features to be discussed between the States should be taken up after the water agreement; the two cannot be discussed together. We would not be willing to trade one against the other. More-

over, the revenue provision and the allocation of power involves the interests of States other than California and Arizona, and the water division, it is conceded by all of the basin States, is a matter solely between Arizona and California."

At the conclusion of its reading Commissioner Ward, of Arizona, stated that he desired to supplement that by an oral statement. In effect this was a return to the so-called "yellow sheet" which was identified as the result of a conference between Mr. Heffner (an interested but unofficial member of the California delegation), and Mr. Ward, of Arizona, and which it was understood was acceptable to both California and Arizona, which so-called "yellow sheet" was an extension in figures of the principle set forth in a proposal made at Reno, in which there had been a division of the waters in the main stream on the basis of 4,400,000 acre-feet to California, and 2,800,000 acre-feet to Arizona.

Nevada made a statement through Mr. Thomas Cole, in the following language:

"Without commenting one way or the other upon the merits of the compromise proposals exchanged between Arizona and California, we are, of course, regretful at the inability thus far of these two States to develop the attitude of flexibility so necessary to settle their differences over the division of water and thereby to make it possible for Arizona to feel that she may with safety enter the Colorado River compact which all of the seven States save her alone have now signed.

"We regret the failure of the Imperial Valley and adjacent territory on the one hand and the metropolitan water district and the city of Los Angeles on the other to agree on how to divide the water between themselves. That in the end California will succeed in reconciling her internal differences scarcely admits of doubt. She has too much at stake to do otherwise—silt and flood control, the all-America canal on money advanced by the Government and reimbursable without interest, water for the extension of irrigated areas and for the cities of her coastal plain, and power for pumping and other purposes. Indeed, it would be incredible, the period for reflection and internal adjustment past, that regional rivalries could be permitted to so dominate the common interest as to render the State itself impotent in the advancement of its welfare.

"The continued failure on the part of Arizona and California to agree may delay construction of the project, either through opposition to appropriations by Congress, or through litigation, or both. We refuse to believe that California, the original sponsor and chief direct beneficiary under the Boulder Canyon Project Act, because of dissensions within, will cause either frustration or delay. We believe that at a resumption of the sessions of the conference both States will be in a position to carry the present negotiations to a satisfactory conclusion."

In this statement Mr. W. W. Ray, for Utah, Mr. Francis C. Wilson, for New Mexico, concurred. The chairman then asked the wishes of the meeting. There was no willingness indicated by anyone to definitely break up the conference. The meeting was then recessed for 10 minutes, and the chairman held conferences with the individual States, and as a result when the meeting resumed the following suggestion was made by Mr. Cole: That the meeting should recess subject to the call of the chairman; that the chairman should get in touch with the Secretary of the Interior with a view of determining a course of action. In this view all present concurred, and the meeting recessed with that understanding.

Mr. ELY. To our mind this indicates, from an impartial source, the construction placed by both parties upon the intent of section 4 (a) with respect to III (b) water. I should enter a caveat here to the effect that California, in these negotiations, insisted for a time at least that the intent was not to place any restriction whatever on California with respect to that III (b) water, and that it was subject to appropriation by either State to its full extent; that the limitation in section 4 (a) applied to III (a) water, and applied to surplus, but imposed no restriction at all with respect to the million acre-feet.

It may very well be that when this matter is ultimately adjudicated that will be held to be the proper construction of the act.

As we have indicated in these hearings our calculation of the water available for California fully supports the figure of 5,362,000 acre-feet without resort to the position that we are entitled to the whole million acre-feet. We do not waive that possibility.

The primary purpose of this review of the legislative history of the Project Act has been to demonstrate that when the State of California through its legislature and the United States through its Congress entered into a statutory compact between them as required by section 4 (a), they did so with a definite understanding as to its terms; that it is completely beyond the power of either legislature, by any interpretation it might now place upon the Project Act, to affect that agreement between the two sovereigns; and that the suggestion advanced here, that by some device Congress might settle this matter by now redefining terms, either "consumptive use" or any other of the disputed terms, is for that reason fallacious.

California has relied upon the statutory compact evidenced in the Limitation Act: California has changed its position in reliance upon it and invested many hundreds of millions of dollars. While our opponents like to speak of it as though it were a Limitation Act on California, it is a reciprocal act restrictive of both California and the United States.

Those rights are expressed in the statutes and explained by the legislative history.

I may say that in the first Supreme Court case (283 U. S. 423) the reply brief of Colorado, Wyoming, New Mexico, Nevada, and Utah advanced the very interesting position that Congress in enacting the Project Act and authorizing a six-State compact plus a Limitation Act, was in effect making a counter proposal to the States of the basin. The brief reads at page 84:

"It is apparent from the above language that the conditions precedent contained therein, upon which the taking effect of the act was made to depend, constituted nothing less than a counterproposal or offer on the part of the United States Government to authorize the States to enter into the compact, or in the absence of the ability of all of them to agree, to authorize six of said States, including California, to enter into the said compact, provided they should conform to and comply with the conditions specified in said act.

"Furthermore, as distinct *inducements* for the States to accept its counterproposal, the Congress, not only consented that the Boulder Canyon Project Act should be subject to the terms of and controlled by the Colorado River compact, 'in the construction, management, and operation of said reservoir, canals, and other works, and the storage, diversion, delivery, and use of water for the generation of power, irrigation, and other purposes, anything in this act to the contrary notwithstanding, and all permits, licenses, and contracts shall so provide' (bill pp. 58, 70); but in section 13 (b) thereof it expressly provided that—

" 'The rights of the United States in or to *waters* of the Colorado River and its tributaries howsoever claimed or acquired, as well as the rights of those claiming *under* the United States, shall be *subject* to and controlled by said Colorado River compact.' "

(P. 85:) "* * * In accepting the counterproposal of Congress, they did so with full knowledge of, and consent to, the fact that they were accepting the definite counterproposal upon which Congress had made its consent to the Colorado River compact, depend, to wit, that they could agree to the taking effect of said compact, only by complying with the conditions stating in said act, and not otherwise. Consequently new rights became vested in each of said signatory States upon the ratification of the compact and the declaration of that fact by the President of the United States, by reason of which the Boulder Canyon Project Act automatically became effective; * * *."

In *Arizona* v. *California* (292 U. S. 341), the Court's opinion said (p. 351):

"*Third.*—In this suit Arizona asserts rights under the Boulder Canyon Project Act of 1928, not under the Colorado River compact, which she has refused to ratify. That act approved the Colorado River compact subject to certain limitations and conditions, the approval to become effective upon the ratification of the compact, as so modified, by the legislatures of California and at least five of the six other States. It was so ratified."

Again in the allegations of Arizona in the last Supreme Court case (292 U. S. 341), this agreement between California and the United States is referred to as a "statutory contract" and its effect in terms of water is stated. As you recall I mentioned the other day that it was conceded by Arizona that under that "statutory contract" California was entitled to 5,485,000 acre-feet.

It is of course a mathematical impossibility for Arizona to be entitled to 2,800,000 acre-feet of III (a) water from the main stream plus the Gila River, if the Gila uses are classified as III (a) water; and Mr. Acheson did properly so classify them.

At the opening we introduced extracts from the reports of negotiators as to the intent with respect to the III (b) water indicating plainly that it was not regarded as apportioned water. Those reports, or at least that of Mr. Carpenter, were before the Senate when it acted on section 4 (a).

I also call your attention to the very interesting about-face made by Arizona as to whether that III (b) water is available in the main stream or in the tributaries. In the debate on the Project Act it is very clear that it was regarded as water available in the main stream and so also in the brief of Messrs. Acheson and Matthew which we placed in the record earlier in the first *Arizona* v. *California* case:

Arizona's bill of complaint in *Arizona* v. *California* (283 U. S. 423), alleged (bill, art. VII, p. 8):

"* * * Since said compact provides that the water apportioned thereby shall include all water necessary to supply existing rights, the effect of including the Gila River and its tributaries as a part of said system would be to reduce by 3,000,000 acre-feet annually the quantity of water now subject to appropriation in Arizona."

Mr. Acheson's brief said (p. 38):

"All existing uses must be satisfied from the 7,500,000 acre-feet apportioned by article III (a). Arizona has existing uses totaling 3,500,000 acre-feet."

Currently their position, as I understand it, is that the million acre-feet of III (b) water is identified with water in the Gila River. That has very interesting consequences to the users on the Gila because, as is pointed out in the Arizona brief in the first Supreme Court case, the first water which the lower basin will be required to yield in the event that the surplus is insufficient to meet the Mexican demand is water available to it under article III (b) of the compact.

Now, obviously, the old vested rights on the Gila River are, by definition, perfected rights, and hence to be accounted for under article III (a). It is inconceivable that anyone should contend that those old rights are to have a junior and more vulnerable status with respect to Mexico than the new projects proposed on the main stream.

Senator MILLIKIN. Will you refresh my memory please on what is the depletion on the Gila figured at its mouth?

Mr. ELY. My recollection is that Arizona's present contention is that depletion is of the order of 1,275,000 acre-feet whereas under our contention the consumptive use is of the order of 2,400,000 acre-feet.

That depletion figure which you have just mentioned received some interesting comment during the debates on the Project Act and I will insert, if I may, some comments with respect to it from the Congressional Record of December 12, 1928, at page 463. Senator Hayden indicated that the figure was given to him by the Geological Survey.

Senator MCFARLAND. Will you repeat that reference, please?

Mr. ELY. Page 463.

Senator McFARLAND. What Congressional Record?

Mr. ELY. That is the same series.

Senator Hayden indicated that the figure of 1,100,000 acre-feet for the Gila River originated in the Geological Survey, which stated that the figure was the average for the years 1903 to 1920 based on the available records; and obviously, inasmuch as Roosevelt Dam was built during that period, and the Salt River project was largely developed, any figure for that period does not represent the virgin flow into the river.

Senator MILLIKIN. The specific section of the Congressional Record to which you have just referred will be made a part of the record at this point.

(The information is as follows:)

Mr. HAYDEN. * * * In 1923 I addressed a question to the Chief of the United States Geological Survey on that very subject:

[Extract from Congressional Record, December 12, 1928, p. 463]

"What part of the total flow of the Colorado comes from the Gila River?"

That, the Senator will understand, is the only tributary that I am seeking to have made exempt from the Mexican burden.

The answer is:

"Records showing the flow of the Gila River near the mouth are fragmentary. The Reclamation Service, however, has made an estimate of the total flow for the years 1903 to 1920 (a period of 17 years), based on the available records and measurements of the Gila at or near Yuma. These estimates indicate an annual run-off of the Gila during 1903 to 1920 varying from less than 100,000 to 4,500,000 acre-feet, with a mean of about 1,100,000 acre-feet, which is about 6 percent of the mean annual flow of the Colorado at Yuma."

So the Gila River, which the Senator will observe upon the map, furnishes on the average less than 6 percent of the total flow of the Colorado River at Yuma, and the average annual discharge over that 17-year period was a little over a million acre-feet.

Senator MILLIKIN. What is California's view as to the virgin flow of the river?

Mr. ELY. It is first, as you probably recognize, from our viewpoint immaterial what it may have been. We say charges are measured by the consumptive use, by diversions less return flow.

Senator MILLIKIN. Yes.

Mr. ELY. If depletion should be assumed as the measure of use but without conceding it, we say that the charge against each State must be on an annual basis, and that it would be necessary to make some assumption as to what the virgin flow would have been in a year comparable to that in which the charge is made. That is to say, obviously, the figure of 1,250,000 acre-feet as the outflow of the Gila represents a long-term average of some kind, whereas the compact is not on the basis of averages at all, but on the basis of annual consumptive use. I do not think that there is great difference between any of us as to what the long-term average flow would be. But as to what the outflow would be in a particular year, in the state of nature, nobody knows, it is a matter of conjecture.

The Reclamation Bureau has made certain conjectures and I am not sure that our engineers have attempted to calculate their own because we start from the position that the figure is immaterial.

I might say, Mr. Chairman, that the California water contracts have been in existence in whole or in part during the pendency of all of the three cases that have gone to the Supreme Court, and in none

of these cases, with the exception of the first one, was the validity of these contracts challenged by Arizona.

In the first one, 283 U. S. 423, the Secretary had entered into one contract only with the Metropolitan water district.

Senator MILLIKIN. What was the date of that case?

Mr. ELY. The case was decided in 1931.

Senator MILLIKIN. When was it brought?

Mr. ELY. In the fall of 1930.

In that, the Secretary had entered into one such contract; it was challenged more or less indirectly by Arizona, her basic challenge being as to the validity of the compact. A reference was made in the opinion of the Court; the Court was fully cognizant of the existence of that contract.

In the second case, *Arizona* v. *California* (292 U. S. 341), Arizona set out the existence of these contracts in full; they had all been executed by that time. The case was decided in 1934. Arizona recited them in some detail and alleged that they were made on an improper theory of the compact, and she wanted to take testimony to show what the compact did mean. The Court referred to the existence of those contracts, stating their total quantities in its opinion.

In the third case—298 United States, page 558—Arizona specified them in detail, adding them up, naming the parties, and saying that—

Plaintiff alleges that the total of the waters for the storage and delivery of which it was so contracted is substantially the entire amount which may legally be diverted from said river and consumptively used in the State of California under the terms of said statutory contract between the State of California and the United States, and is far in excess of California's equitable share of said waters. * * *

The contention being there that California under the Limitation Act might take 5,485,000 acre-feet and that that was too much; for that very reason Arizona wanted to ignore the compact and the act.

May I place in the record the extract from the cases which I have cited?

Senator MILLIKIN. That may be done.

(The extracts are as follows:)

REFERENCES TO THE CALIFORNIA WATER CONTRACTS IN SUPREME COURT LITIGATION

I

In *Arizona* v. *California* (283 U. S. 423), Arizona's bill of complaint (art. XXXII) alleged, with respect to the contract of the Metropolitan Water District of Southern California (p. 35):

"Said 1,050,000 acre-feet of water, together with the 6,500,000 acre-feet of water heretofore appropriated and now being used in said Lower Basin, will exceed the full amount of 7,500,000 acre-feet of water which said compact attempts to apportion to said Lower Basin. The delivery of said 1,050,000 acre-feet of water to said District, as in said pretended contract provided, would exhaust said apportionment, and, by the terms of said compact and of said Boulder Canyon Project Act, no water would then be available for or subject to appropriation in said Lower Basin, although there would still remain in said Colorado River System 7,950,000 acre-feet of unappropriated water per year * * *."

In 283 United States, page 423, Arizona's brief said (p. 17):

"For the purposes of the present case it makes little difference whether the apportionment to the Lower Basin is 7,500,000 or 8,500,000 acre-feet per annum. The present appropriations of 6,500,000 acre-feet and the threatened delivery of 1,050,000 acre-feet to Los Angeles will exhaust the former, and out of the latter leave only 950,000 acre-feet for the three Lower Basin States * * *."

II

In *Arizona* v. *California* (292 U. S. 341), Arizona's bill of complaint (art. IV (K)) alleged (p. 64):

"(k) That your complainant is reliably informed and believes and, therefore, alleges that certain of the defendant public corporations of the State of California and Honorable Harold L. Ickes, Secretary of the Interior of the United States, are now claiming and asserting that the true meaning and intent of subdivision (b) of Article III of the Colorado River Compact, hereinabove set out, is that the waters referred to in said subdivision (b) of Article III of said compact have no reference to the Gila River and its tributaries in Arizona and that the said water was not intended by the framers of said compact, nor by said compact, for the benefit of the State of Arizona and that the contracts made by the Secretary of the Interior of the United States for the use of waters of the Colorado River within the State of California to the amount of 5,362,000 acre-feet per annum thereof relate to and include 4,400,000 acre-feet of water allocated by subdivision (a) of Article III of said compact and 962,000 acre-feet per annum of water allocated by subdivision (b) of Article III of said compact and that said defendants are thereby undertaking to give a meaning to subdivision (b) of Article III of said compact different from that intended by the framers and signers thereof and agreed to by them, and attempting to assert a right to appropriate said one million acre-feet of water per annum from the waters of the Colorado River outside of the State of Arizona so as to interfere with the enjoyment by Arizona, and those claiming under it, of rights already perfected and with the right to make additional legal appropriations and enjoy the same. And the State of California refuses to agree to the exclusion of the Gila River from the limitation imposed on the lower basin by the terms of the Colorado River Compact as suggested by the Boulder Canyon Project Act and asserts that in addition to the waters contracted, it is entitled to appropriate from the Colorado River one-half of the surplus or unappropriated waters thereof, and further asserts contrary to and in violation of the true intent of said compact, Boulder Canyon Project Act and Act of the Legislature of said State, as hereinabove alleged, that in computing the amount of such surplus or unappropriated waters the entire flow of the Gila River shall be added to the flow of the Colorado River."

In 292 U. S. 341, Arizona's brief stated:

"As set out in the Bill, page 63, defendant Harold L. Ickes has contracted with California users for delivery of 5,362,000 acre-feet of water per annum from the main stream of the Colorado River for use in the State of California and as stated in the Bill, page 65, defendant Harold L. Ickes and California defendants now assert that all waters heretofore or hereafter contracted to be delivered for use in the State of California in excess of 4,400,000 acre-feet, relate to and comprise (1) the 1,000,000 acre-feet of water permitted to the lower basin by Article III (b) of the Colorado River Compact, and (2) one-half of the surplus water unapportioned by the Colorado River Compact. In this way the California defendants and the defendant Harold L. Ickes propose to avoid and violate the limitations imposed upon the State of California for the benefit of the complainant State of Arizona by the Boulder Canyon Project Act and the Act of the Legislature of the State of California, hereinabove referred to. In reality they propose to use in California, from the main stream of the Colorado River, 4,400,000 acre-feet of the water apportioned to the lower basin by Article III (a) of the Colorado River Compact (Bill, p. 17), the entire 1,000,000 acre-feet permitted to the lower basin by Article III (b) (Bill, p. 18) and one-half of the very small surplus remaining in the river."

The Court's opinion in *Arizona* v. *California* (292 U. S. 341, 355), states:

"4. In support of the contention that Article III (b) of the Compact has a bearing on the interpretation of the limitation of Sec. 4 (a) of the Act, Arizona points to the fact that while the Boulder Canyon Project Act makes no mention of the 1,000,000 acre-feet assigned to the lower basin by Article III (b) of the Compact, Sec. 4 (a) of the Act limits California, in terms, to 4,400,000 acre-feet of the waters apportioned to the lower basin under Article III (a) of the Compact plus one-half of the 'surplus waters unapportioned by said compact'; that Sec. 4 (a) declares that such uses by California are 'always to be subject to the terms of said compact'; that California claims that, in addition to the waters already mentioned, she is entitled, as one of the parties to the Compact, to draw upon the Article III (b) waters; and that, acting upon this assumption, the Secretary of the Interior has already contracted with California users for delivery of 5,362,000 acre-feet of water per annum from the main stream of the Colorado River, though

this water is not yet being delivered; whereas Arizona contends that by a proper interpretation of Article III (b) California is excluded from all the waters thereunder in favor of Arizona."

III

In *Arizona* v. *California* (298 U. S. 558) Arizona's bill of complaint (art. XIX) alleged (p. 26):

"XIX. WATER CONTRACTS BETWEEN SECRETARY OF INTERIOR AND CALIFORNIA CORPORATIONS

"The Secretary of the Interior, pursuant to the provisions of Section 5 of the Boulder Canyon Project Act, during the years 1931 and 1933 entered into contracts with the California corporations named below for the storage in Boulder Reservoir and the delivery of Colorado River water for domestic and irrigation purposes in California, in acre-feet per year, as follows:

Metropolitan Water District	1,100,000
Imperial Valley and others	3,850,000
City of San Diego	112,000
Palo Verde	300,000
Total	5,362,000

"Plaintiff alleges that the total of the waters for the storage and delivery of which it was so contracted is substantially the entire amount which may legally be diverted from said river and consumptively used in the State of California under the terms of said statutory contract between the State of California and the United States, and is far in excess of California's equitable share of said waters."

In *Arizona* v. *California* (298 U. S. 558) the opinion of the Court stated (p. 564):

"The Secretary of the Interior, acting under authority of sec. 5 of the Boulder Canyon Project Act, has entered into contracts with California corporations for the storage in the Boulder Dam reservoir and the delivery, for use in California,[6] of 5,362,000 acre-feet of water annually. * * *."

(P. 566:) "The right of the California corporations to withdraw from the river a total of 5,362,000 acre-feet annually under the contracts with the Secretary of the Interior is challenged only insofar as the prayer for relief asks that the unappropriated water of the river be equitably apportioned among Arizona and the defendant states, and that any increased amount to which the Republic of Mexico may be entitled be directed to be supplied from the amount to which California may otherwise be found to be equitably entitled."

(P. 570:) "* * * Section 5 provides that 'no person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated.' Section 5 also provides that the Secretary of the Interior may contract for the storage of water and for delivery thereof upon charges which will provide revenue, and sec. 5 (c) directs that 'Contracts for the use of water * * * shall be made with responsible applicants therefor who will pay the price fixed by the Secretary with a view to meeting the revenue requirements herein provided for.' Acting under this authority the Secretary of the Interior has substantially completed the project and has entered into contracts, so the bill of complaint alleges, for the delivery of 5,362,000 acre-feet of stored water to California corporations, and for the financing and construction of Parker and Imperial Dams and the All-American Canal to facilitate the use of this water in California."

(P. 570:) "The 'equitable share' of Arizona in the unappropriated water impounded above Boulder Dam could not be determined without ascertaining the rights of the United States to dispose of that water in aid and support of its project to control navigation, and without challenging the dispositions already agreed to by the Secretary's contracts with the California corporations, and the provision as well of sec. 5 of the Boulder Canyon Project Act that no person shall be entitled to the stored water except by contract with the Secretary."

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[6]

	Acre-feet
Metropolitan Water District	1,100,000
Imperial Valley and others	3,850,000
City of San Diego	112,000
Palo Verde	300,000
Total	5,362,000

II

In *Arizona* v. *California* (292 U. S. 341) the Court's opinion said (p. 351):
"*Third.* In this suit Arizona asserts rights under the Boulder Canyon Project Act of 1928, not under the Colorado River Compact, which she has refused to ratify. That Act approved the Colorado River Compact subject to certain limitations and conditions, the approval to become effective upon the ratification of the Compact, as so modified, by the legislatures of California and at least five of the six other states. It was so ratified."

Mr. ELY. In short, Arizona has had three opportunities, at least, to challenge the validity of those contracts, which have been referred to in the opinions of the Court; and the challenge has not been made.

Mr. Chairman, in view of the material we would like to present further and the lateness of the hour, I think that the portion of the argument assigned to me should be brought to a close. I thank you for the very great consideration I have received from your committee, and in closing simply want to reemphasize our main point again: that there is an irreconcilable conflict between Arizona and California and 25 years of negotiation had failed to solve it. The problem arises out of a difference of construction of the statutes and the Colorado River compact.

Arizona says, as Senator McFarland very clearly said a few minutes ago, that the language is perfectly plain to her and we say it is perfectly plain to us. Each of us comes to a different conclusion; the result of that difference amounting to an aggregate of 2,000,000 acre-feet. The dispute involves only questions of law and the consideration of matters of which the Court will take judicial notice. A judicial determination is essential and can be speedily obtained on these questions of law.

We say that the statutory compact between the United States and California embodied in the Limitation Act is an agreement upon which both parties are entitled to rely. We do rely on it, we assert that the United States is bound by it as we are. We say, and Mr. Howard will enlarge upon it, that the language with respect to Arizona and California should have identically the same interpretation.

In short, we ask the committee to give favorable consideration to Senate Joint Resolution 145 to the end that we may have a speedy resolution of these questions.

Senator MILLIKIN. We will start the hearing at 10:30 tomorrow morning.

Senator MCFARLAND. Mr. Chairman, may I ask what additional time will be allotted to California?

Senator MILLIKIN. How much time do you want?

Mr. SHAW. We hope to conclude by noon unless there is extensive cross-examination.

Senator MCFARLAND. Of course, Mr. Chairman, they have already used more than half a day.

Senator MILLIKIN. I do not want to start pinching down on the time and I will rely on California finishing as early as it can.

Senator MCFARLAND. What I am referring to is that the pinch comes on the other way if they use all the time.

Senator MILLIKIN. If Arizona has half a day, at least one afternoon?

Senator MCFARLAND. But they have had more than half a day.

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Senator MILLIKIN. If Arizona wants more than half a day we will stay tomorrow night. I do not want any disfigurement of this record over time. I want everybody satisfied that he has had a full hearing.

Mr. WEHRLI. Before we close, may I ask a question, Mr. Chairman?

Senator MILLIKIN. Yes.

Mr. WEHRLI. Did you prepare the answers to Senator O'Mahoney's questions? I understood you were going to prepare that in written form so that we might have it?

Mr. ELY. They have not been prepared as yet.

Mr. WEHRLI. I wanted to mention it so that you would have opportunity to have it tomorrow.

Mr. ELY. Before the record is completed, we will have some of the figures. I am not sure that we have them available here but we will have them as rapidly as possible.

Senator MILLIKIN. I do hope in view of the fact that California has had time which may run over half a day that you will condense yourselves as much as possible.

We will recess until 10:30 tomorrow morning.

(Whereupon, at 4:55 p. m., the subcommittee recessed to reconvene at 10:30, May 14, 1948.)

COLORADO RIVER WATER RIGHTS

FRIDAY, MAY 14, 1948

UNITED STATES SENATE,
SUBCOMMITTEE ON IRRIGATION AND
RECLAMATION OF THE COMMITTEE
ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met at 10:30 a. m., pursuant to recess, in room 224 of the Senate Office Building, Senator Eugene D. Millikin (chairman of the subcommittee) presiding.

Present: Senators Millikin, O'Mahoney, and McFarland.

Senator MILLIKIN. The hearing will come to order.

Mr. ELY. Mr. Chairman, Senator O'Mahoney asked me several questions the other day to which I responded that we would prepare the answers and place them in the record, and I now have those and if agreeable will place them in the record at this point.

Senator MILLIKIN. They may be placed in the record at this point.

(They are as follows:)

ANSWERS TO QUESTIONS ASKED OF MR. ELY BY SENATOR O'MAHONEY AT HEARINGS ON SENATE JOINT RESOLUTION 145, MAY 10, 1948

Following is a copy from the transcript of the hearings showing the form in which certain questions were asked by Senator O'Mahoney:

"Senator O'MAHONEY. We are dealing here with a water system, a river system which has a flow inadequate to meet all of the demands that are being made upon it. Now, from the point of view of California, how much water have you actually put to use under contract?

"Mr. ELY. I should prefer to place that figure in the record, if I may. It is available, I am sure, and I do not have it accurately in mind.

"Senator O'MAHONEY. Let me ask you to put it in the record in this form: (*a*) The amount of water to which you feel California is entitled, and (*b*) the amount of water which has already been apportioned and utilized by existing systems, and (*c*) the amount of additional water which California desires to use, and (*d*) the source from which that additional water will come; and, finally, whether or not the sum of all of these is, in the opinion of California, within the existing law and limitation."

In answering these questions, it is assumed that question (*b*) relates to present uses and that any reference to "uses" or quantities of water in the questions means "consumptive uses" under the Colorado River compact and as defined in the Boulder Canyon Project Act (diversions less returns to the river) and not as Arizona seeks to define "consumptive uses" as being depletion of the Colorado River at the international boundary.

Question: (*a*) The amount of water to which you feel California is entitled?

Answer: California maintains that it is entitled to a beneficial consumptive use within the State of not less than the total amount of water for which contracts with the United States are outstanding; i. e., 5,362,000 acre-feet per year.

Question: (*b*) The amount of water which has already been apportioned and utilized by existing systems (present uses)?

Answer: At the present time the total beneficial consumptive use in California amounts to about 3,230,000 acre-feet per year.

Question: (c) The amount of additional water which California desires to use?

Answer: The amount of additional water California desires to use is the difference between the total amount of water specified in existing contracts (and for the utilization of which projects are now constructed) of 5,362,000 acre-feet per year and present uses of 3,230,000 acre-feet, or 2,132,000 acre-feet per year.

Question: (d) The source from which that additional water will come?

Answer: The source of the additional water is the same as that for present uses; i. e., the Colorado River system.

Question: Whether or not the sum of all of these is in the opinions of California within the existing law and limitation?

Answer: California is firmly of the opinion that the total of the foregoing amounts, 5,362,000 acre-feet per year, is definitely within existing law of which the limitation act referred to is a part.

Senator O'Mahoney also asked the following question of Mr. Ely:

"Senator O'MAHONEY. I would like to know whether in your opinion there is any difference in the amount of water which California claims in the Limitation Act, and under the compact, and the Boulder Canyon Act?"

Answer: "No; there is no difference. These three instruments are interrelated and combine to fix the quantity of water which California may use."

Mr. ELY. Mr. Chairman, may I also ask whether, in the various cases where we have made citations or referred to quotations but where, because of the time element, we did not wish to read the text, we may have some indulgence in the revision and extension of the record to place these memoranda and tables in the record?

Senator MILLIKIN. Of course; but, needless to say, we cannot repeat the substance of anything.

STATEMENT OF JAMES H. HOWARD, GENERAL COUNSEL, METROPOLITAN WATER DISTRICT, LOS ANGELES, CALIF.

Mr. HOWARD. Mr. Chairman, in view of the admonition of the Chair yesterday, I have made every effort to pare down what I have to say. There are certain salient points that came up in the presentation of the opponents of the pending resolution that I think should be commented upon.

The first in the series that I intend to discuss relates to beneficial consumptive use. Judge Howell, the first spokesman for the opposition, said that while the phrase was not in terms defined in the compact, nevertheless the use of the word "depletion" in subdivision (d) of article III of the compact defined and limited the term "beneficial consumptive use" as outlined in paragraph (a) of article III.

That suggestion to my mind reverses what I have always understood to be a cardinal rule of statutory and contractual interpretation; that is, when the parties to a contract or the framers of a statute use different words, the presumption ordinarily is that they mean different things, and I think that that is obviously true in the case that confronts us here.

In article III (a) the term "beneficial consumptive use" is deliberately used. It relates to use per annum, and is to be computed not on an average basis but on annual basis.

Then you drop down to subdivision (d) of article III, in which the States of the upper division agree not to deplete the river below 75,000,000 acre-feet for every 10-year period, reckoned in progressive series. We are dealing there with an entirely different subject matter.

There can be no identity of the two phrases. That is quite obvious on the face of the document. Obviously the 75,000,000 acre-feet every

10-year period is a guaranty on the part of the upper basin. It is not to be identified and cannot be identified with the water apportioned to the lower basin. The water apportioned to the lower basin includes the output of all of the tributaries, so that it is a mathematical impossibility that the 75,000,000 acre-feet at Lee Ferry could be interpreted in terms of beneficial consumptive use in the lower basin. It just does not work that way.

Beneficial consumptive use is defined in the Boulder Canyon Project Act itself, in section 4 (a), parenthetically, but nevertheless defined as "diversions less returns to the river." As nearly as I can analyze the statements that have been made here, the opponents of this resolution are capitalizing the "river" and inserting the word "Colorado" ahead of it so that the phrase would be directed solely to the Colorado River to the exclusion of the tributaries. I take it that the phrase is used in the abstract; that is, "diversions less returns to the river" represent the definition that has been used for that phrase in a great many documents unrelated to the Colorado. The phrase relates to the Colorado River system in its entirety.

The compact at no point mentions natural conditions. As a matter of fact, once man-made works have interrupted a stream of that sort, there is no way of computing with any accuracy at all what the depletion for each year would be.

You take the Gila River as an example. Under natural conditions the output of that river in water varied, and I am speaking now of the point of confluence with the Colorado, varied from practically zero during the years of drought to flood flows of upward of 4,000,000 acre-feet.

Now, once that natural condition has been interrupted, there is no basis of determining on an annual basis what the virgin flow of the river would be at the point of confluence with the Colorado as of any one year. The tendency seems to be, on the part of the opponents of this resolution, to measure the depletion with reference to long-time averages, but that violates the fundamental basis of division as set out in the compact itself.

In the upper basin, Mr. Breitenstein suggests a very interesting conclusion. He takes the position that if, in the State of Colorado, there are transmountain diversions, taking water out of the tributaries in the higher reaches, and transporting that water completely out of the basin so that there is no return flow at all, the measure of consumptive use is not the amount of such diversion but the amount of such diversion reduced by an estimated quantity of water which, in a state of nature, would have been lost by evaporation, transpiration, and seepage, and so forth, between the point of diversion and Lee Ferry.

In other words, if he diverts actually 400,000 acre-feet and the engineers compute, by some magic, that 100,000 acre-feet of that water would have been lost between the point of diversion and Lee Ferry, he is only to be charged for the beneficial consumptive use of the net of 300,000 acre-feet.

I am just picking those figures out of the air for illustration, and I do not know that those were the figures that Mr. Breitenstein used.

Let us interpret that situation as of the activities of my particular client, the Metropolitan Water District. We divert water from the Colorado River at Parker, or near Parker, at about 200 miles above the

international border. According to Mr. Breitenstein, the depletion in the lower basin is to be computed as of the international border. Under natural conditions, which we cannot possibly reconstruct even for purposes of estimate, there were great quantities of water lost in the lower reaches of the Colorado by spreading out onto overflow lands and the rather marshy area down there, so that if Mr. Breitenstein's theory is correct it would be entirely proper for my district, assuming that we divert 1,000,000 acre-feet—and ours is transmountain diversion; we take it entirely out of the basin over to the coast—we then proceed to say that under natural conditions we will say 300,000 acre-feet of that 1,000,000 acre-feet would have been lost in the lower river, and, therefore, we are only chargeable with 700,000 acre-feet.

That would be in direct derogation of the language of the Limitation Act, and if we attempted any such artificial construction, I am very, very confident that our friends from the Arizona side and our friends from the upper basin would be extremely critical. They would say we were trying to avoid the effect of the Limitation Act; that we were taking more water measured by diversions less returns to the river than that to which we undertook to limit ourselves.

But that illustrates something that has been mentioned here before—that the same rule should be applicable throughout the basin. If California is to be limited on a measurement of diversions less returns to the river, so should every other agency.

Take another illustration that Mr. Breitenstein set up. He said that they have certain meadow lands in the upper basin where, in a state of nature, the water spread out over the lands and a great deal of it was lost; that by control works that water has been salvaged. He used some figures that I do not recall, but just for purposes of illustration assume that in a given area 300,000 acre-feet were lost in a state of nature, and by control works that water is saved and is applied to beneficial use; Mr. Breitenstein argues that the charge against the upper basin should not be the amount of beneficial consumptive use—the words of the compact—but should be the net—the difference between the amount actually used and the amount which would have been lost in a state of nature.

Let us assume for a moment that those of us in the lower basin attempted to go up into the upper basin and channelize this meadow that we are talking about, so that there would be no loss of water up there or no appreciable loss, and attempted to take that water down and use it. I can imagine that there would be a terrific storm go up; that the upper basin would very properly consider that to be upper basin water. The fact that it was lost in a state of nature does not mean that it is not their water. But when they salvage that water and apply it to beneficial use, they certainly should be charged with beneficial use just as we in the lower basin are charged with the beneficial use of water salvaged that would in a state of nature have flowed to the Gulf; that is, water salvaged by the Hoover Dam.

I think the framers of the compact deliberately used the phrase "beneficial consumptive use of water" because that is something that can be measured. To try to reconstruct the virgin conditions of a river as of any year and then determine the amount that the man-made works have depleted that flow is a mathematical impossibility.

Another rather interesting illustration that came out of Judge Howell's testimony is the idea that we might look upon Hoover Dam

and Lake Mead, for test purposes, as an offchannel reservoir. He assumed that there was no site on the river where a dam could be constructed and water impounded, but there was a site somewhat off the channel to which flood flows could be diverted and stored.

Supposing that happened and, during a year of flood, water is diverted from the river and put into this reservoir, and then the lower basin draws that water off as required. In what year could it be said that the river itself is depleted? Is it the year when the water is diverted to storage, or is it the year in which the water is taken from storage and applied to beneficial consumptive use? There would be a vast difference in the mathematical effect of those two methods. So far as the location of the reservoir is concerned, it is immaterial whether it is on the channel or off the channel. The same principle is applicable.

We take the position that beneficial consumptive use means what it says, and that the measurement of such use is the application of that water to use during the year in which it is used, and that it is unrelated to the time when the water is salvaged.

I do not believe it is necessary to repeat the definitions of consumptive use that have been set out by Mr. Carpenter and by the Mexican water treaty as explained by Mr. Tipton. That last explanation is a very interesting one, and I hope it will not be overlooked. He describes quite accurately the method by which, for compact administration, the consumptive use is to be measured. I will indulge in that one quotation. This is a quotation from the testimony of R. J. Tipton, one of the negotiators of the Mexican water treaty, in the hearings on that treaty, page 1224 and following. He says:

> Water is measured at the head of the irrigated area for administrative purposes in Colorado. The water commissioner of a given water district every single day during the irrigation season phones the proper official of each canal system and tells him how much water he can take from the stream in the order of the priority of the water rights of his system. So we have good stream-gaging stations to measure the inflow to the area. We know how much water comes in and we know how much water goes out, and it is simply a matter of deducting one from the other to determine the consumptive use. The extraordinary drought provisions of this treaty will be invoked, as I say, when these areas up here begin to suffer deficiencies. We indicated to the Mexican negotiators that the entire basin must be considered, and we put the words "consumptive use" in because it will 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 area, and many more will be installed for the purpose of determining, for compact administration, what the various States are consuming.

I have no doubt that he was referring to the Colorado River compact administration.

I turn now to the subject of evaporation. If we were arguing this matter before a court, I would be on this all day, but I am just touching some of the more salient points.

An examination of the records as of the time the Colorado River compact was made make it perfectly clear that in apportioning the waters of the Colorado River, the commissioners from the seven States were not dealing with the river on the basis of the natural unregulated flow. In fact, it would have been impossible to apportion as much water as was apportioned had the flow not been regulated.

Mr. Caldwell, commissioner from Utah, speaking at the thirteenth meeting of the Colorado River Commission at Santa Fe, on November

13, 1922, said this—this is a quotation from the minutes of that meeting:

> It seems to me that it is not possible to think of this problem with respect to the partition of water and divorce from our thoughts the idea of the control of the river. If this river were brought under control or if it flowed uniformly, we could divide it. It does not flow uniformly, and that is our great difficulty. The only way to bring about anything like a uniform flow is to provide storage in the river. We do know something of the amount, in acre-feet, that the river will deliver. What we want to do is divide up the river on the basis of acre-feet between the upper and the lower divisions.
>
> If you consider it in connection with storage and control, we can do it. If we don't consider it in connection with storage and control, we are going to have difficulty. The development may take place, according to the necessities of the case, in either basin, but we can proceed to divide the river as if it were controlled, and when the exactions of the compact are imposed upon either basin, control must be had accordingly so the compact may be lived up to.

The salvage and control of water, however, does not represent a net gain. When water is stored in a reservoir for control purposes, there is more water available for beneficial use than would be the case if the water were permitted to run away, but that is not a net gain. The very fact of storage involves losses.

So that in computing the water made available by control, it seems to me fair to say that we are dealing with the net water which results from the control, allowing for the price that has to be paid for storage; that is, the evaporation losses and other losses that have to be paid in water before you can operate on a controlled basis.

Taking it in that light, the language of the latter part of section 4 (a) of the Project Act becomes more understandable. It was pointed out in the teestimony here that when the framers of the Project Act used the words "4,400,000 acre-feet" for California, "2,800,000 acre-feet" for Arizona, and "300,000 acre-feet" for Nevada, that they had used up the III (a) water, that is, the 7½ million, and had made no provision for evaporation, so that it would necessarily follow that evaporation was to be prorated among them.

I do not think it follows that way at all. The water which is lost by evaporation, for all practical purposes, is water that never existed. You have to pay, in that evaporation, for your salvage, and you have a certain amount of water left for distribution. So that in dividing up the firm water, that is, the III (a) water, in such fashion as to exhaust the 7½ million acre-feet, the framers of that language apparently considered the losses to occur at the other end of ths scale—that is, out of excess and surplus—rather than out of the III (a) water. That is a perfectly logical way to look at it, and I think the evidence indicates that they did look at it in that way.

Judge Howell indicated that the word "diversion" as used in the California Limitation Act may include—and I do not think that he was very positive about it, he stated the matter quite fairly—"may include evaporation." In saying that, he was referring to the language of the Limitation Act, and the corresponding language in the Project Act which limits California to certain diversions less returns to the river. He entirely overlooks the fact, at least he did not mention it, that that phrase is immediately followed by the phrase "for use in the State of California;" and it would be an extremely strained construction to say that evaporation of water at Lake Mead, which lies up between the States of Arizona and Nevada, would constitute a use of water in the State of California.

That is exactly what the Limitation Act says, "diversions for use in the State of California."

Another point that may be mentioned as a matter of contemporary administrative interpretation of the Limitation Act is that there are in the record now water-delivery contracts. And I will refer specifically to the contract between the United States, through the Secretary of the Interior, and the metropolitan water district. That contract calls for delivery of 1,100,000 acre-feet to which has been added the San Diego 112,000 acre-feet of water, at a point immediately above Parker. The delivery is not made at Hoover Dam. The river is used by the United States as a channel for the purpose of conveying the water, but the contracted point of delivery is at Parker, or immediately above Parker. So that that constitutes a contemporary administrative determination, for whatever force it may have, that the point of delivery is at Parker and that our rights are to be measured by diversions at that point.

Some mention was made of the fact that the Metropolitan water district contract and the San Diego contract provide for hold-over storage at Lake Mead. That is true. The aggregate is 5,000,000 acre-feet, or roughly one-sixth of the storage capacity of the reservoir.

It has never been entirely clear to me just how that provision would operate, but obviously if the water is lost at that point it would not be available for delivery down below, but that is merely hold-over storage. And instead of representing forty-four seventy-fifths of the water, as the Arizona spokesman would have us believe, it would represent about one-sixth of the water. And if there is anything to prorating evaporation losses on that basis, I am sure it would be entirely unacceptable to our friends across the river.

Mr. Breitenstein, in response to questions from the Chair, said that he was not aware of any law that would control evaporation losses here. I find that law in the project act itself, particularly in section 4 (a), so far as charging evaporation against the 4,400,000 acre-feet of III (a) water. That water is, in terms, water diverted from the river less any returns; and there is, so far as the Metropolitan water district is concerned, no return.

The other subject that I would like to mention, and I think it is of considerably more than academic interest here, is the matter of Arizona's status with reference to the Colorado River compact. I am indebted to Mrs. Bush for a very apt illustration that would not have occurred to my unromantic and more prosaic mind. She spoke about the young lady who received a proposal of marriage and said "No," and then later accepted.

That is not quite the situation that exists here, if Arizona is the young lady and we will say California is the young man. The offer was made and was rejected, but the young man married another girl before the offer was accepted, so we have an entirely different set-up, and I am quite sure that under those circumstances the young lady's acceptance of the offer would be a bit late. The other young lady I refer to is the Limitation Act.

The situation, in brief, was that the compact was signed at Santa Fe, N. Mex., in 1922, and it had been discussed for a matter of 4 years. Some of the States had made qualified ratifications, which were later made unconditional. The time came when the Project Act went into

effect, and there the road divided. The Project Act contained the provision that it might become effective when seven States had signed the compact and the President had so proclaimed; or it is in the disjunctive—if there were no seven-State compact within 6 months, then the Project Act might become effective when the President found that six of the States, including California, had ratified, and California had adopted a Limitation Act, and the President had so proclaimed.

During that 6 months, California, in direct response to the Project Act, said:

> In the event that there is no seven-State compact within 6 months, then upon the expiration of the 6 months California agrees to be bound.

The 6 months went by, and in that period there was a definite rejection of the compact by Arizona, so that the President took the alternative, the second course, and he proclaimed that there was no seven-State compact, and there was a six-State compact, plus the Limitation Act, and the Project Act was thereby put into effect.

Now, the roads divided at that point. You cannot find a trace of intent, looked on as legislative intent or contractual intent, on the part of either the United States or the State of California to bring California within the Limitation Act in the event there was a seven-State compact.

For a matter of 15 years Arizona applied an interpretation to the compact which is very much along the line that California has consistently applied. I am referring particularly to the treatment of the Gila, and the consumptive use, and the status of the III (b) water.

Going on from that point, that very interpretation of the Colorado River compact was the reason that Arizona did not want to ratify it. They considered on that side of the river that the compact was unfair to Arizona, and made a great play in the courts to have it voided for that reason.

Along about 1944 a revised interpretation comes in, and on the strength of that revised interpretation, in which they proceed to construe California as excluded from III (b) water, and invent the depletion theory as a matter of consumptive use on the Gila, on the strength of that interpretation the Arizona Legislature adopts an act purporting to ratify the compact.

We have never accepted the revised interpretation, and there has been no meeting of the minds on those things. The Arizona counsel decided that was the way to make progress, and made that interpretation; and on the strength of it proceeded to advise the State legislature to ratify the compact, and the legislature adopted an act purporting to accomplish that result.

Assuming that California is correct in her interpretations of the compact, and the matter is determined judicially that consumptive use means what it says, and that III (b) water is available to California, Arizona might very easily say, and properly say, "Well, that is not the compact that we ratified; we don't subscribe to any such idea as that; it is utterly unfair to Arizona, and we reject it."

I appreciate the sincerity of Senator McFarland and Mr. Carson and Mrs. Bush in saying that Arizona intends to be bound by the compact, but by that they mean Arizona intends to be bound by the compact as she interprets it.

There has been no acceptance, on the California side, of any such interpretation, so I do not consider it at all beyond the bounds of possibility that when the compact is correctly construed—and by saying that I mean according to California's viewpoint—a completely different situation will confront our friends on the other side of the river.

As I said, the road branched in 1929, and the President has never proclaimed the existence of a seven-State compact; and, in fact, he proclaimed the existence of a six-State compact. And it has never been clear to me, in looking upon the compact as a contract—and regardless of what other aspects it has, it is a contract—how it is possible that Arizona, having put California in the position of adopting a limitation act by staying out of the compact, can now by its unilateral act, and not negotiating its way in but just by a unilateral declaration, become a party to the compact, and at the same time leave California with the limitation act.

Now, if by any chance the President should proclaim a seven-State compact, it is entirely possible that the limitation act would have no bearing on the problem and would cease to operate. We do not urge that as a conclusion, but it is true that if we are thrown over to the first alternative of the project act, which was a seven-State compact provision, there is no mention there of a limitation act, and no consideration for a limitation act. If the 6 months' period means nothing in the project act, it probably means nothing in the California Limitation Act. And there, you will recall, the language is repeated:

> In the event there be no seven-State compact within 6 months, then California is bound by the limitation act.

If you wipe out that 6 months' period in both the project act and the limitation act, and the President proclaims a seven-State compact, then we would be thrown under the first alternative of the project act rather than the second.

Senator McFarland, in his comments, spoke of the ability of Congress to interpret its own language, referring particularly to the section 4 (a). I think that the Senator possibly overlooks the point that the early part of section 4 (a) represents one side of a contract between two sovereignties, that of the United States and that of the State of California. The Congress would be at no greater liberty to make ex post facto interpretations of that document and make them binding than would the legislature of the State of California.

In other words, it is a statutory compact, made in 1929, which must be interpreted judicially according to all of the principles of interpretation—that is, the intent of the parties—and all of the other factors that enter into those problems. The Congress of the United States certainly cannot defeat the legislative intent of the State of California by any interpretations made now which are not in accord with the interpretations upon which that State relied, and everybody else relied, as a matter of fact, as of that time.

There is one other very trivial matter that I would like to mention. The Senator referred to Federal money in California projects. So far as the Metropolitan Water District Act is concerned, there is no Federal money in it at all. The history is that the bonds were issued as municipal bonds, and were sold to the Reconstruction Finance Corporation because at that time, in the early thirties, there was no

municipal bond market. The Reconstruction Finance Corporation has sold all of those bonds to the general public, to institutional buyers, so that at the moment, aside from current power bills and water bills, the metropolitan water district does not owe the United States a penny. There is no Federal subsidy involved in that project.

I merely say that to avoid the implication that the metropolitan water district is operating on Federal money. That is not the case.

Mr. Chairman, that is a very brief summary of the subjects that are really deserving of very detailed and elaborate consideration, that really cannot be given to them in the Halls of Congress. They are questions inherently judicial in character. We feel very sincerely that it has been demonstrated here that there is an actual controversy between the States presently, not based on future considerations, as the Secretary says in his letter received yesterday. One of the statements in that letter that I could understand was that the constructed and operating and authorized projects, Federal and local, in the lower basin, call for more water than there is available in that basin for use under the compact.

Under those circumstances, I think that we have shown here that there is a real and substantial controversy, nothing at all frivolous and nothing trivial, but something very deep-seated and real. There are questions upon which California is certainly entitled to her day in court, and questions that cannot properly be resolved by congressional action.

I earnestly hope that in some form or other—we are not sticklers as to form—but somehow or other the Congress of the United States will make it possible for the State of California to present these matters to a tribunal competent to pass upon them with finality. That is the Supreme Court of the United States. And I certainly hope that some action will be taken to report out this Senate Joint Resolution 145.

May I say also that the courtesies extended to us by the Chair are very deeply appreciated.

Senator MILLIKIN. It has been a very illuminating hearing.

Senator MCFARLAND. I think that we can conserve time if we will wait and present our views in rebuttal rather than by developing it through questions, which I would ordinarily do if we had plenty of time.

STATEMENT OF ARVIN B. SHAW, JR., ASSISTANT ATTORNEY GENERAL OF THE STATE OF CALIFORNIA

Mr. SHAW. I will conclude the rebuttal on behalf of California.

I desire first to clear the record as to two or three miscellaneous matters before attacking the substantive problems which have been indicated.

First—this is perhaps too trivial, but it should be cleared—Judge Howell introduced the Colorado River Basin States Committee, for which he appears, by a peculiarly backhanded description. He called it, and this is quoted from page 260 of the transcript—

> an organization composed of official representatives of all of the Colorado River Basin States, from which California and Nevada had previously withdrawn.

From that statement it is apparent that the name of the committee is a misnomer. It is in fact an upper-basin committee and neces-

sarily represents a minority of the people of the States of the Colorado River Basin, perhaps a third of them.

Judge Howell, at page 303 of the transcript, made this statement:

I think that I should like to conclude by reading from an opinion in the Supreme Court by Justice Frankfurter in *Texas* v. *Florida*.

The chairman may recall that that opinion was one which would very drastically limit the bringing of interstate suits in the Supreme Court. It was a sort of declaration of policy which would make it very difficult to get any such case before the Court.

Entirely inadvertently, I assume, Judge Howell failed to tell the committee that that was a dissenting opinion. In other words, it was not the law, but it was what Mr. Justice Frankfurter thought the law ought to be if the Court had not gone 7 to 2 against him. So the policy of the Court as to interstate suits is not what Mr. Justice Frankfurter stated, but something entirely different.

Mr. Breitenstein, on pages 309 and 310 of the transcript, undertook to question the sincerity of the proponents of this resolution, making these statements, that California has her works—

which have the capacity to divert from the stream approximately 8,000,000 acre-feet of water annually.

And quoting further—

* * * California, by its actions in Congress and elsewhere, has uniformly shown opposition to the larger projects which are now under study for authorization and construction.

As anyone who is familiar with irrigation works knows, all irrigation works are constructed to a capacity to serve the water requirements on the highest day of consumption in the season, usually in the summer season. If California's works were operated to peak capacity every day in the year, they might or might not deliver 8,000,000 acre-feet. That is wholly immaterial, as anyone, as I say, who is familiar with irrigation projects knows. What is material is that California has built the basic works necessary to deliver 5,362,000 acre-feet in accordance with the seasonal curve of water requirements in the localities served, winter and summer.

Now, as to the second statement, Mr. Breitenstein is invited to name the larger projects which California has opposed. So far as we know, the only reclamation projects which California has ever opposed have been the two Arizona projects, the Gila project last year and the year before, and the central Arizona project last year.

Now, we attack, if you please, a problem which the Chair suggested and which is certainly deserving of consideration, although it had not occurred to us as being a problem; that is, the extent of the control of Congress over the operations of the Attorney General.

Mr. Breitenstein correctly stated, at page 336 of the transcript:

I am inclined to think you have a constitutional right to direct him to bring a suit under proper circumstances.

We entirely agree with that statement.

Then the question was raised as to whether you would be controlling discretion of the Attorney General improperly. Senator McFarland, at page 3 of his statement, spent some time on consideration of the case of *Marbury* v. *Madison*, which was the case of the midnight commissions for the justices of the peace. That case, as the Senator prop-

erly described it, referred to a political power of the executive, a power to appoint officers. There is nothing political about the determination of the Attorney General to bring a suit; that is, it is an operation of his office entirely within the ordinary functioning of an executive department, discretionary to some extent, of course, but in no sense political.

Reference was also made by Mr. Breitenstein, and I believe by Senator McFarland, to the thought that the proposed resolution might be considered a control of the judiciary, an encroachment upon the authority of the judiciary, in the sense that it might be argued that Congress, by adopting the resolution, had found that there was a justiciable cause of action.

So far as we are concerned, Mr. Chairman, we think that Congress knows and the Supreme Court knows that the Congress cannot determine judicial questions, and that the adoption of a resolution is subject to the authority of the Supreme Court to make its own decision as to whether there is a justiciable cause of action.

At any rate, we find that the Congress has rather frequently adopted resolutions directing the Executive in the matter of bringing lawsuits. I hand the chairman a set of extracts from statutes, resolutions, and so on, to which I would like to make specific reference.

The first is an act of 1912 which came out of the District of Columbia Committees of both Houses, an act providing for the protection of the interests of the United States in lands and waters comprising any part of the Potomac River, the Anacostia River, or Eastern Branch, and Rock Creek and lands adjacent thereto.

Quoting the act now:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for the purpose of establishing and making clear the title of the United States it shall be the duty of the Attorney General of the United States to institute as soon as may be, or whenever in his judgment it is deemed proper—

That clause makes me think that it might be the case referred to by Senator McFarland—

a suit or suits in the Supreme Court of the District of Columbia against all persons and corporations, or others, who may have, or pretend to have, any right, title, claim, or interest adverse to the complete title of the United States in and to any part or parcel of the land or water in the District of Columbia in, under, and adjacent to the Potomac River, the Anacostia River or Eastern Branch, and Rock Creek, including the shores and submerged or partly submerged land, as well as the beds of said waterways, and also the upland immediately adjacent thereto, including made lands, flats, and marsh lands.

Senator MILLIKIN. Senator O'Mahoney, this is responsive to an indication of interest by the Chair, and I think by the Senator, in how far the Congress may go in instructing the Attorney General to bring any particular type of action.

Mr. SHAW. This act, which was adopted April 27, 1912, involves something in the nature of a suit to quiet title, and is directed to the Attorney General.

The second act was reported out by the Committee on Public Lands, of both Houses. It was adopted June 9, 1916, and it relates to what are commonly called the Oregon land frauds, I believe. It reads:

That the Attorney General of the United States be, and he is hereby, authorized and directed to institute and prosecute any and all suits in equity and actions at law against the Oregon and California Railroad Company, and

any other proper party which he may deem appropriate, to have determined the amount of moneys which have been received by the said railroad company or its predecessors from or on account of any of said granted lands, whether sold or unsold, patented or unpatented, and which should be charged against it as a part of the "full value" secured to the grantees under said granting acts as heretofore interpreted by the Supreme Court. In making this determination the Court shall take into consideration—

Note that this seems to be directed to the Court rather than to the Attorney General—

the Court shall take into consideration and give due and proper legal effect to all receipts of money from sales of land or timber, forfeited contracts, rent, timber depredations, and interest on contracts, or from any other source relating to said lands; also to the value of timber taken from said lands and used by said grantees or their successor or successors. In making this determination in the aforementioned suit or suits the court shall also determine, on the application of the Attorney General, the amount of the taxes on said lands paid by the United States, as provided in this act, and which should in law have been paid by the said Oregon and California Railroad Company, and the amount thus determined shall be treated as money received by said railroad company.

Congress in that act of 1916 was not bashful about its desire to have things litigated in a rather pinpoint fashion.

The next resolution is a joint resolution, recommended by the Committees on Public Lands of both Houses, and it was adopted February 8, 1924. This grew out of a disturbance called the Teapot Dome case. It was a joint resolution directing the President to institute and prosecute suits to cancel certain leases of oil lands and incidental contracts, and for other purposes, and reads:

Whereas it appears from evidence taken by the Committee on Public Lands and Surveys of the United States Senate that certain lease of Naval Reserve Numbered 3, in the State of Wyoming, bearing date April 7, 1922, made in form by the Government of the United States, through Albert B. Fall, Secretary of the Interior, and Edwin Denby, Secretary of the Navy, as lessor, to the Mammoth Oil Company, as lessee, and that certain contract between the Government of the United States and the Pan American Petroleum and Transport Company, dated April 25, 1922, signed by Edward C. Finney, Acting Secretary of the Interior, and Edwin Denby, Secretary of the Navy, relating, among other things, to the construction of oil tanks at Pearl Harbor, Territory of Hawaii, and that certain lease of Naval Reserve Numbered 1, in the State of California, bearing date December 11, 1922, made in form by the Government of the United States through Albert B. Fall, Secretary of the Interior, and Edwin Denby, Secretary of the Navy, as lessor, to the Pan American Petroleum Company, as lessee, were executed under circumstances indicating fraud and corruption; and

Whereas the said leases and contract were entered into without authority on the part of the officers purporting to act in the execution of the same for the United States and in violation of the laws of Congress; and

Whereas such leases and contract were made in defiance of the settled policy of the Government, adhered to through three successive administrations, to maintain in the ground a great reserve supply of oil adequate to the needs of the Navy in any emergency threatening the national security: Therefore be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the said leases and contract are against the public interest and that the lands embraced therein should be recovered and held for the purpose to which they were dedicated; *and resolved further*, That the President of the United States be, and he hereby is, authorized and directed immediately to cause suit to be instituted and prosecuted for the annulment and cancellation of the said leases and contract and all contracts incidental or supplemental thereto, to enjoin the further extraction of oil from the said reserves under said leases or from the territory covered by the same, to secure any further appropriate incidental relief, and to prosecute such other actions or proceedings, civil and criminal, as may be warranted by the facts in relation to the making of the said leases and contract.

And the President is further authorized and directed to appoint, by and with the advice and consent of the Senate, special counsel who shall have charge

and control of the prosecution of such litigation, anything in the statutes touching the powers of the Attorney General, of the Department of Justice to the contrary notwithstanding.

So that the Congress in that instance directed that particular actions to secure particular results in a particular form be instituted, and that the Attorney General should be entirely superseded and special counsel should be set up to act in the matter.

Senator MILLIKIN. Mr. Shaw, I am not sure that I am pointing to a distinction at all, or if there is a distinction whether it would be a controlling one, but in all of those cases the lands of the United States, or property of the United States, was directly involved. The Congress is peculiarly the custodian of the public domain, and the property of the United States, and it has direct constitutional authority to protect the property interests of the United States.

In the instant matter, I do not assume that it is contended that the United States owns the water of the Colorado River.

Mr. SHAW. That is a question.

Senator MILLIKIN. The United States does have property interest in the works which are constructed on that stream, and if the works were threatened in any way, perhaps it could be well argued that the United States would have jurisdiction to authorize action for their protection. I am not sure that I have pointed to the distinction at all, and I have no firm, fixed opinions on it.

Mr. SHAW. May I respond to the chairman's remarks, if you please?

The very thing that the chairman has indicated the United States does not claim was in fact the claim of the United States in the case of *Nebraska* v. *Wyoming*, and possibly other cases.

Senator MILLIKIN. I indicated that I doubt whether the States subscribe to that theory.

Mr. SHAW. I think that there might be a debate about that between the States and the United States. Nevertheless, that question does exist, and it was brought up in *Nebraska* v. *Wyoming* and limited there to the innavigable streams of the West.

Mr. Breitenstein pointed out to you that in that case, the United States claimed a segregation of its allotment for its reclamation projects in the North Platte Basin. He did not point out to you that the general claim was also made that the United States owns all of the water which is unappropriated in innavigable streams of the West.

Now, a question may exist just as likely, and I do not know that I can make a positive statement about it, that the United States, having reduced the waters of the Colorado River to possession in Hoover Dam, is the owner of the corpus of that water. So the question which the Chair raised is not entirely absent.

Senator MILLIKIN. Let us suppose that the Congress concluded that the United States does own the water, and let us conclude that some set of facts would be presented which would jeopardize that right. Then I think under the precedents of these resolutions, a similar resolution going to that question might be in order.

Let us assume that as to the possessory title, if you can call it that, of the waters while they are impounded behind these dams; let us assume that they were threatened in some way; and let us suppose that some damage to the dam itself were being threatened, there, on its possessory claim, if that is a correct description of it, perhaps you could authorize an action under precedents of this kind.

All I am trying to suggest is that here the United States had a direct interest which was in process of being threatened according to the allegations, and that interest was peculiarly under the jurisdiction of the Congress.

Mr. SHAW. I apprehend that the chairman's remarks are rather addressed to the question of policy. What I was attempting to direct by showing to was the question of power to control the Attorney General. I would like to refer to the question of policy a little later.

This Teapot Dome matter, as the gentleman of the committee will recall, did flare into court, with Senator Pomerene and Mr. Roberts as special counsel for the United States, and it resulted in both civil and criminal proceedings.

Senator MILLIKIN. My memory is, Mr. Shaw, and I do not know whether it was pursuant to this resolution or not, but we had a very famous land case which might have responded to this resolution on the Oregon land-fraud cases.

Mr. SHAW. Quite true; Senator Pomerene and Mr. Roberts, being appointed as special counsel, did commence both civil and criminal proceedings. The criminal cases for bribery came up through the Supreme Court of the District of Columbia, and to the Court of Appeals of the District of Columbia, in *United States* v. *Fall* (10 Fed. 2d, 648), and *United States* v. *Doheny* (10 Fed. 2d, 651).

The only point that was made relating to the resolution, which is quoted in this decision of the Circuit Court of Appeals for the District as the authority for the indictments, was as to whether two men, who were United States attorney for the District and a representative of the Attorney General, were properly in the grand-jury room at the time the indictment was under consideration and returned. The court remarks upon the peculiar language of the resolution which ousted the Attorney General from jurisdiction, and gave the control to the special counsel, and remarks that it does not consider that that resolution ousted the United States district attorney from any jurisdiction, and thereby narrowed the question to the one as to whether the one man representing the Attorney General was improperly in the grand-jury room.

The Court says, at page 650 of the report:

> These special provisions must prevail over the prior general statutes insofar as a repugnancy exists between them. We think, however, that the repugnancy extends no further than is necessary to deprive the Attorney General and other law officers of the Government of a charge and control over this class of litigation, such as might exist under the general statutes, and vest that authority in the special counsel.

Certiorari was denied in the Fall case by the Supreme Court in 281 United States 757.

The comment which I have to make upon this decision in the Fall case, which was followed by the decision in the Doheny case, is just this: If Frank Hogan and the other brilliant counsel who were appearing for Fall and Doheny could not find enough of a shadow of a constitutional question or a question of any other kind respecting the authority of Congress to direct these particular acts to be taken, not by the Attorney General but by someone else, then we apprehend that there was not any question which could be raised, because we know that those cases were very bitterly and very diligently and exhaustively fought out.

79997—48——30

Senator McFARLAND. Will you give us the citation of that case?

Mr. SHAW. I have done so. I will be glad to give it to you again, sir. It is 10 Federal (2d) 648—that is the case of *United States* v. *Fall;* and the other case, the *United States* v. *Doheny*, at page 651 of the same report.

Senator McFARLAND. Mr. Chairman, if I may make just this little brief comment, we do not question the authority of Congress to authorize the appointment of a special counsel in any case, and I may say this, that the mere enactment of statutes does not decide this question. The only way that we can have a decisive decision would be for the Attorney General to refuse to bring the cause of action. That is the contention that I make; that the Congress of the United States has passed numerous unconsitutional statutes, but once the Attorney General brings the cause of action which he already had authority to bring, and I would say in most every instance he would bring it, it could not be raised because he had authority to bring it anyway.

Mr. SHAW. May I say this, that our examination of this subject has been quite hasty. It is not a question that we had prepared ourselves on, because we did not realize that it was a question, and we do not say that what we are now presenting is conclusive on the subject, but we are arguing probabilities, and I would like to complete my statement on it.

Senator McFARLAND. Pardon me for interrupting, Mr. Shaw.

Mr. SHAW. That is entirely all right, Senator.

The next item relates to what I believe was the Elk Hills case. It was adopted February 21, 1924, a Senate joint resolution again, and also came out of the Committee on Public Lands of the Senate, and it reads:

Resolved by the Senate and the House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior be, and he hereby is, directed forthwith to institute proceedings to assert and establish the title of the United States to sections 16 and 36, township 30 south, range 23 east, Mount Diablo meridian, within the exterior limits of naval reserve numbered 1 in the State of California, and the President of the United States is hereby authorized and directed to employ special counsel to prosecute such proceedings and any suit or suits ancillary thereto or necessary or desirable to arrest the exhaustion of the oil within said sections 16 and 36 pending such proceedings.

That came out only 2 or 3 weeks after the former one.

The next one is an act, this one relating to northern Pacific lands, adopted in 1929, reported by the Joint Committee To Investigate Northern Pacific Island Grants.

Section 5 reads:

The Attorney General is hereby authorized and directed forthwith to institute and prosecute such unit, or suits, as may, in his judgment, be required to remove the cloud cast upon the title to lands belonging to the United States as a result of the claim of said companies, and to have all said controversies and disputes respecting the operation and effect of said grants, and actions taken under them, judicially determined, and a full accounting had between the United States and said companies, and a determination made of the extent, if any, to which the said companies, or either of them, may be entitled to have patented to them additional lands of the United States in satisfaction of said grants, and as to whether either of the said companies is lawfully entitled to all or any part of the lands within the indemnity limits for which patents have not issued, and the extent to which the United States may be entitled to recover lands wrongfully patented or certified. In the judicial proceedings contemplated by this Act there shall be presented, and the court or courts shall consider, make findings relating

to, and determine to what extent the terms, conditions, and covenants, express or implied, in said granting Acts have been performed by the United States, and by the Northern Pacific Railroad Company, or its successors, including the legal effect of the foreclosure of any and all mortgages which said Northern Pacific Railroad Company claims to have placed on said granted lands by virtue of authority conferred in the said resolution of May 31, 1870, and the extent to which said proceedings and foreclosures meet the requirements of said resolution with respect to the disposition of said granted lands, and relative to what lands, if any, have been wrongfully or erroneously patented or certified to said companies, or either of them, as the result of fraud, mistake of law or fact, or through legislative or administrative misapprehension as to the proper construction of said grants or Acts supplemental or relating thereto, or otherwise, and the United States and the Northern Pacific Railroad Compnay, or the Northern Pacific Railway Company, or any other proper person, shall be entitled to have heard and determined by the court all questions of law and fact, and all other claims and matters which may be germane to a full and complete adjudication of the respective rights of the United States and said companies, or their successors in interest under said Act of July 2, 1864, and said joint resolution of May 31, 1870, and in other Acts or resolutions supplemental thereto, and all other questions of law and fact presented to the joint congressional committee appointed under authority of the joint resolution of Congress of June 5, 1924 (Forty-third Statutes, p. 461), notwithstanding that such matters may not be specifically mentioned in this enactment.

This is not intended to be an exclusive or comprehensive list of the actions of Congress taken in respect to directing the Attorney General or someone else to bring a suit. The thing which is noticeable to us, and which we present for what weight it may have, is that there has been no challenge made of the constitutionality or propriety of actions taken by Congress in this connection.

Senator MILLIKIN. Mr. Shaw, to make perhaps a little clearer what was in my mind a moment ago, the Constitution vests sole authority in the President to initiate treaties. Now, I believe that in view of that fact, no one would contend that the Congress could pass a resolution directing the President to make a treaty. It can pass a resolution giving advice and pass a resolution giving recommendations, but in the type of case I have just mentioned, I believe that everyone would agree that a resolution of that kind would not only be invalid but it would be an impertinence.

The resolutions which you have mentioned there, I suggest again, have to do with a subject matter which is peculiarly within the control of Congress, and I doubt whether anyone would challenge the assertion that if a right of the United States with respect to any property interest that the United States might have on the Colorado River were in jeopardy, that there again, because of the interest of Congress in that matter, it might be possible to make a resolution directing the Attorney General to take a specific kind of action.

I am merely drawing a distinction between the two broad outlines, or the two broad extremes, of where you can and where you cannot, under my tentative thinking, mandate someone in the executive department to do something. If the subject is peculiarly one which the Constitution lodges in the executive department, I do not think for a moment that we could give a mandate to the executive department to do something. If it is something which is lodged peculiarly in the Congress by the Constitution, then, as in these cases here, I believe that there is precedent for giving a mandate to the Attorney General.

Mr. SHAW. I am in entire accord with the distinction which the chairman makes. The treaty-making authority is vested by the Constitution in the President, and the Congress has no business to, and

could not, give him any orders about that. The operation of the Department of Justice in bringing lawsuits is vested in the Department of Justice, not by the Constitution but by statute, as Senator O'Mahoney observed the other morning; and what the Congress has given the Congress can take away, I assume, or modify.

Then it becomes, as I thought of it a moment ago, a question relating to the policy rather than the power.

I desire to address myself now, if you please, to the question of justiciable controversy.

Mr. Breitenstein argued rather elaborately that under the decisions of the Supreme Court there must be, in order to institute a case in the Supreme Court, an existing injury or presently threatened injury of serious magnitude, and he gave you certain authorities which appeared rather rigid so far as the characterization of a threat goes.

From our point of view, the authorities which Mr. Breitenstein submitted to you were the law, but they are now the old law given us by the old Court, and we now have new law given us by a new Court. We rely upon this case of *Nebraska* v. *Wyoming* in 325 U. S. as stating the present law of the United States, and as holding that projected plans of a State to create irrigation enterprises were sufficient in the case of an overappropriated river to constitute a present threat, although there was no authorization of projects and although the projects referred to were not in existence.

You may recall that I quoted to you at some length portions of the opinion in the Nebraska case, and Mr. Breitenstein then read to you a portion of the opinion and stated to you that I had not read it to the committee. I had read to the committee what I considered relevant to the point which I had to make, and which I have just stated to the committee. Mr. Breitenstein included within the portion of the opinion which he said I had not read to the committee, a portion which I did read to the committee, which appears in my prepared statement on page 19, and which appears at page 224 of the reporter's transcript, and reads as follows:

> * * * The claim of Colorado to additional demands may not be disregarded. The fact that Colorado's proposed projects are not planned for the immediate future is not conclusive in view of the present overappropriation of natural flow. The additional demands on the river which those projects involve constitute a threat of further depletion.

I repeat that I did read that portion of the opinion to the committee, because I considered it to be the foundation for the decision which the Court then arrived at on the following page, and which I again call to the committee's attention as being a statement of what is now the law; and it does not refer, as I see it, so much to the existence of the Kendrick project as it does to the existence of these prospective Colorado projects. This is the Court's statement on page 610 of the opinion:

> What we have then is a situation where three States assert against a river whose dependable natural flow during the irrigation season has long been overappropriated, claims based not only on present uses but on projected additional uses as well. The various statistics with which the record abounds are inconclusive in showing the existence or extent of actual damage to Nebraska. But we know that deprivation of water in arid or semiarid regions cannot help but be injurious. That was the basis for the apportionment of water made by the Court in *Wyoming* v. *Colorado*, supra. There the only showing of injury or threat of injury was the inadequacy of the supply of water to meet all appropriative

rights. As much if not more is shown here. If this were an equity suit to enjoin threatened injury, the showing made by Nebraska might possibly be insufficient. But *Wyoming* v. *Colorado*, supra, indicates that where the claims to the water of a river exceed the supply a controversy exists appropriate for judicial determination. If there were a surplus of unappropriated water, different considerations would be applicable. Compare *Arizona* v. *California* (298 U. S. 558). But where there is not enough water in the river to satisfy the claims asserted against it the situation is not basically different from that where two or more persons claim the right to the same parcel of land. The present claimants being States, we think the clash of interests to be of that character and dignity which makes the controversy a justiciable one under our original jurisdiction.

The decision is stated at page 611:

Colorado's motion to dismiss is accordingly denied.

Now I should go back, perhaps, and state just what the contention of Colorado was:

* * * The argument is that the case is not of such serious magnitude and the damage is hot so fully and clearly proved as to warrant the intervention of this Court under our established practice (*Missouri* v. *Illinois*, 200 U. S. 496, 521; *Colorado* v. *Kansas*, 320 U. S. 383, 393–394). The argument is that the potential threat of injury, representing as it does only a possibility for the indefinite future, is no basis for a decree in an interstate suit since we cannot issue declaratory decrees.

With that I think that we may pass the statements which Mr. Breitenstein properly drew from the old decisions of the Court that it will not issue declaratory decrees and advisory decrees, and so on.

I should possibly also at this point attract your attention to the fact that while the Attorney General takes an entirely noncommittal view about this matter, saying good arguments can be made on both sides, and while counsel for some of the opponents of this resolution intimate that in their opinion there is now no justiciable controversy, the Department of the Interior has unequivocally, in two places in its report, stated that there is a present justiciable cause of controversy.

I would like to examine into the elements of the threat of injury, so far as this proposed case is concerned. What is a threat? In our view, the simplest kind of a threat is for one man to say to another, "I will shoot you whenever I can."

Now, Arizona says to California, "I will take your water if I can, whenever I can; if Congress will help me, under any circumstances I will take your water."

Senator MCFARLAND. Of course, if I may interrupt, we say that "we will take our water whenever we can and wherever we can."

Mr. SHAW. This is an exercise in semantics. Arizona says, "We respect our engagements and California does not," and we say that "We respect our contracts and Arizona does not." It is all a matter of finding the answer to the questions involved.

Senator MILLIKIN. The Chair will supply the necessary qualifications as you go along.

Mr. SHAW. Now, after making this declaration, Arizona has bills introduced in the Congress and sends counsel and witnesses to hearings, and its chief executive emits statements and letters, and its congressional delegation uses its utmost efforts for over a year to get the bills recommended by the Secretary of the Interior and adopted.

In this process, Arizona appropriates $200,000 to aid the Bureau of Reclamation in preparing an engineering report and plans. It appropriates further large amounts to carry on this contest before the

Congress. All of this follows the execution by the Secretary of the Interior of a contract with the State of Arizona which, in our opinion, overlaps the California contracts. The total of the contracts for main stream water in the lower basin definitely, as we see it, exceeds the quantity of water available, and the Secretary of the Interior has in his report specifically stated that is the fact. That has been stated in substance, as we interpret the report.

So, in our humble judgment, taking as the basis this overlapping of contracts, these cross demands upon the Secretary for water, the overt acts which the State of Arizona has taken to carry out its program, and the effect which would follow, there is ample evidence of threat of injury.

I would like to address myself now to this idea that the authorization of the Central Arizona project is necessary as an element of threat. That has been intimated by Mr. Howell and Mr. Breitenstein, and Mr. Carson doubts it, I believe, according to my notes.

The Secretary of the Interior has no doubt about it. He says that there is a present controversy. But I want to point out the peculiar position in which Arizona would ask this Congress to put itself. It would ask this Congress to grant an authorization unknowing whether there is a water supply for the project or not——

Senator McFarland. Might I interrupt you just a moment? I may have misunderstood you. You did not mean that Mr. Carson doubted that in any event the authorization would be necessary, did you, to make a justiciable issue?

Mr. Shaw. Perhaps I misinterpreted his statement:

> I very much doubt, if and when the central Arizona project is authorized, that California can at that time state any justiciable controvesry against Arizona.

Senator McFarland. As I understand it, and Mr. Carson can correct me—we might as well straighten the record here—he doubts that even if it is authorized you could state a cause of action.

Mr. Shaw. I am glad to have the record clear.

My point is this: Arizona asks the Congress to say, "We do not know whether this project will have a water supply or not. We therefore authorize the construction of the project, and the appropriation of money to build it."

That is a rather unusual approach to such a problem, and if the committee please, it would leave the Congress in the odd position that, having authorized a project, it would presumably have regard for the Federal Treasury and not proceed to carry out the project, but put it in cold storage until the Supreme Court had acted, and to be in the position of saying, "We do authorize it, but we don't. We authorize it, having in the back of our minds the question of water supply, and believing that if there is a water supply the project should be authorized, but obviously if there is no water supply it should not be authorized," or if there is only a part of the water supply, available, say 300,000 acre-feet instead of 1,200,000 acre-feet, Congress obviously would want to reconsider whether it would spend $738,000,000 to build a project for that 300,000 acre-feet.

The whole thing would leave Congress in a very peculiar position. And finally, when the Supreme Court has acted, if our contentions are correct, or partially correct, it would leave Congress in a position of

saying, "Well, we have adopted an authorization act which turns out to have been a foolish act, and we now repeal it and start out upon a sound foundation to do what we consider now is proper within the premises."

It seems to us, if the committee please, that the element of authorization, as the Secretary of the Interior says, is unnecessary, and it would be a stultifying step for Congress to take. It would leave Congress and its Appropriations Committee in a very ambiguous position, unless there were reservations in the act itself that the act "shall not be effective until and unless the Supreme Court finds there is a water supply of 1,200,000 acre-feet for the project."

Then probably it would be claimed in the Supreme Court that we are back where we started from, that the act was no act whatever, it was purely conditional; that it had no real binding force or effectiveness, but it was a gesture.

We cannot take that element of authorization seriously, then, as necessary.

If I may turn to another matter, I have a comment on the necessity of joining the United States as a party.

There seems to be doubt on the part of some of the witnesses as to whether the United States would be a necessary party. Mr. Breitenstein indicates that all that would be necessary would be to bring a suit and join the Secretary of the Interior, who is running the river.

If our understanding is correct, the only time you can sue an executive officer of the United States, without in effect making the United States the real party in interest, is when that executive officer is proceeding in excess of his jurisdiction or under a void statute. Under those circumstances you can sue him because he is usurping authority. But you cannot sue the United States through its executive officers, and the executive officer can properly obtain a dismissal of the action upon the ground that the United States is the real party in interest.

At any rate, the Attorney General, who has had some little experience in this field, recognizes that the United States is a necessary party, and so does the Secretary of the Interior.

Coming back to the question of adopting this authorization act, attention is directed to the provision of the Fact Finders Act of December 5, 1924, which in section 4 (b) recites that—

No new project or new division of a project shall be approved for construction on estimates submitted therefor by the Secretary until information in detail shall be secured by him concerning the water supply.

We believe that that provision of the Fact Finders Act has never been repealed or amended, and it is still the law.

A comment as to the interest of the United States is brought up by the remark of Mr. Wehrli that no injury has been shown to be done the United States, that no one is damaging the property of the United States, and so on; that it does not have any claims against the States.

Passing this matter of the possible claim of the United States to the ownership of this water in Lake Mead, as was mentioned a few minutes ago, and which the States certainly do not concede, it seems to us that Mr. Wehrli misconceives the nature of a proceeding in the nature of an interpleader. That is not based upon the existence of injury; it is based upon the risk of loss to the plaintiff by reason of

cross demands upon him for property, or whatever, which he holds as a stakeholder.

In this instance the Secretary of the Interior's report makes it very plain that there are cross demands from Arizona and California which exceed, in the aggregate, the fund which he has to administer. So that the question, in that phase, is whether the United States shall relieve itself from an ambiguous condition created by the overlapping contracts. That is the true foundation for a proceeding of the kind of which we have spoken.

May I now address myself to some elements of the situation which relate to the policy which should be adopted by the Congress in this matter. This is as distinguished from strictly legal considerations.

The cry is made very vigorously and by many witnesses that this proceeding would result in delay which would be harmful to the basin. That is a serious matter and is the major matter which, as I see it, has been presented by the opponents. Particularly it is said that Arizona would be delayed by the suit, in the development of its projects.

It seems to be admitted by everybody except Mr. Carson that at least when the central Arizona project has been authorized, California can bring a suit; and when a suit has been brought, Mr. Wehrli and Judge Howell very frankly and properly say that under those circumstances, if the United States is a necessary party, the Congress should consent to have it joined as a party so that the controversy can be disposed of.

It appears to us that in the very near future, at least, whether today or tomorrow, it is inevitable that this quarrel become a litigated matter. It is not going to be possible for Arizona to proceed with the construction of its central Arizona project; the issues must be litigated and disposed of before that can happen. Why, then, should we wait another 6 months or another year, or whatever, until there is an authorization of the central Arizona project, and then go to court and find out, we will say, by objection from Arizona, that the United States is a necessary party and has not been sued, and then come back to Congress and say, "Let us have an act that will permit the United States to be sued"; and after battling out that measure, then some number of months or years in the future, go back to the Court in the second suit and say, "Let us have a decision."

It seems to us that we might as well face the situation realistically, and realize that the questions involved in this dispute ore of such magnitude and are so deep-seated that they are not going to "down." They are going to be brought to the proper forum and determined, and they might as well be proceeded with expeditiously instead of in a dilatory fashion.

I am not able to grasp with clarity the position of the upper basin States on this element of delay. As a generality, they say this litigation would lead to delay in the making of an upper basin compact. There has not been very much in the way of exposition of just how that would take place except by the expression of Mr. Howell, I believe, that an upper basin compact will be opposed by those who say that the rights of the States are undecided, and therefore why make a compact?

That is not very specific. Maybe there are those in the upper basin who would oppose any compact on any grounds that occurred to them.

But without a rather more definite showing of inability to make an upper basin compact, the contention is not very convincing.

As to the other element that is presented, that until the upper basin gets an apportionment of water by compact it will not get any project because the Secretary of the Interior so declared in his comprehensive report and otherwise, now, that is a very serious matter, and it deserves a frank expression of opinion, we believe.

The questions which we have suggested as being litigable do, in an indirect way, affect the rights and interests of the upper basin States, insofar as they care to take an interest in the existence or nonexistence of surplus which might be available to cover the Mexican burden. Their only interest, as we see it, in these three questions is as to how the three questions affect the existence or amount of surplus. That is of importance to them, if I may go a step further, insofar as it affects the ability or the necessity of the upper basin contributing, to the Mexican burden, one-half of any deficiency. That is the maximum limit under the compact.

That is, taking the treaty figure of one and a half million to Mexico, 750,000 acre-feet must come from the upper basin under the extremest conditions. The upper basin has a perpetual apportionment of 7½ million acre-feet of water by the compact, 750,000 acre-feet of which would conceivably be in jeopardy.

Perhaps we are thinking of this superficially, but it does appear that if that is the only element involved, the upper basin would be perfectly free to compact concerning, and distribute among its constituent States as much as 6¾ million acre-feet without infringing upon the 750,000 acre-feet of its apportionment which might be in jeopardy.

At any rate, with respect to any prospective development in the upper basin, it is quite apparent that a considerable quantity of water—just specifically what it is not need be named—can be compacted upon, apportioned, and set apart for individual States' use upon which projects can be predicated, authorized, and constructed. No one should say that the upper basin States would be completely hog-tied or hampered by the existence of this litigation. It is a relative matter.

I desire now, if the committee please, to present some preliminary comments on the Secretary of the Interior's report. These are preliminary comments by the State of California on the Department of Interior report:

California submits these general observations on the report of the Department of the Interior on Senate Joint Resolution 145.

Interior expressly agrees with California on the same three points as did Justice:

1. There is a controversy between California and Arizona

* * * four major problems would appear to be in dispute between California and Arizona.

2. The controversy involves the interpretation of the compact, Project Act, and so forth—

Whereas there are controversies of long standing, particularly among the States of the lower Colorado River Basin, over the meaning and effect of certain provisions of the Colorado River Compact, the Boulder Canyon Project Act—

and so forth.

3. The controversy cannot be litigated without the United States' consent to be a party to the suit.

* * * all of which clearly make it an indispensable party to any general litigation involving water rights in the Colorado.

In addition, Interior expressly agrees with California on the following points on which Justice is silent, or noncommittal:

4. Cross demands upon the Secretary for the same water now exist in favor of existing and authorized projects.

The water which California projects, Federal or other, now in existence or under construction, will require when they are in full operation is a great deal more than the amount which that State is entitled to use if all of Arizona's contentions are taken to be true. Similarly, the water which Arizona projects now in existence, under construction, or authorized will require when they are fully developed is much more than the supply available to that State if all of California's contentions are taken to be true.

5. There is now a justiciable controversy.

The controversy, nevertheless, appears to be of the sort that would justify the Court's determining the rights of the parties and definitely adjudicating their respective interests in the waters available to the lower basin. It matches in every particular the requirements for a "case" or "controversy" in the constitutional sense of these words as those requirements were spelled out by the Supreme Court in *Aetna Life Insurance Company* v. *Haworth* (300 U. S. 227, 240 (1937)).

At a different point in the report, the Secretary refers specifically to this situation as presenting a justiciable controversy.

6. The United States has many interests (investment in many projects; protection of its people; protection of Indians; navigability; treaty with Mexico; definition of obligations under contracts).

7. The Secretary cannot complete a comprehensive plan nor safely recommend large projects for authorization.

That a comprehensive plan of development for the Colorado River Basin cannot be formulated at this time.

That further development of water resources of the Colorado River Basin, particularly large-scale development, is seriously handicapped, if not barred, by a lack of determination of the rights of the individual States to utilize the waters of the Colorado River system.

8. The controversies should be settled.

It is indeed desirable that these controversies be settled.

9. In general, Interior recognizes the existence of the basic facts which require a determination of rights and present no tangible or definite alternative to a suit. Most of the amendments it suggests relate to technicalities of procedure in the suit.

Amendments suggested by Interior:

1. Companion bill authorizing construction of projects which meet certain standards. This proposal is so sketchy and uncertain that California cannot express an opinion until a draft of bill is submitted.

2. Companion bill authorizing central Arizona project. As Interior agrees, this is unnecessary. So far as Congress is concerned, it is stultifying.

3. Revision of recitals of Senate Joint Resolution 145. There is no objection in principle to such revision as would strengthen the recitals. It is not the view of proponents that the allegations of jurisdictional facts in a bill in the Supreme Court would be limited to the recitals of the resolution. I think that that is obvious, Mr. Chairman. Spe-

cific mention of navigation in the second paragraph of recitals might be appropriate in view of the decision in *Arizona* v. *California* (283 U. S. 423). Close study will be given to the language drafted by Interior.

4. United States as defendant instead of complainant. In view of the diverse and pressing interests of the United States detailed in the Interior report, it seems more appropriate that the United States should commence the suit, control the time factors, and put all the States in the same position as parties. The views of Interior on this point are not convincing.

The foregoing comments as to amendments apply, in part, to the report of Justice.

We do not want more than to make a suggestion to the Chair that if Arizona would care to summarize in concise form its views upon this report——

Senator MILLIKIN. Well, that would be up to Arizona.

Mr. SHAW. Very well.

Senator MILLIKIN. I would not think of suggesting how either side should run its case.

Senator MCFARLAND. We have, as far as the opponents of this resolution, allotted the time to the Colorado River Basin States Committee, and whatever comments they will have that may be made will be made by the committee as such, instead of just Arizona.

Mr. SHAW. If I may conclude in just a couple of minutes, Mr. Chairman, we think that the committee has by now acquired a comprehension of a very deep-seated and serious controversy, and that very large quantities of water are involved, and the question which it implies and incorporates is the question as to the growth and future prosperity of the lower basin.

There has not been any serious question of the magnitude of the controversy. As to the technical matter of a justiciable cause of action, we feel entirely willing to take our chances; we think that that is a matter which the Court will have to determine. If we are wrong, it will only take a few months for it to be determined, because in three successive cases with Arizona, we have found that the Supreme Court took 8 months, 3 months, and 5 months, to file its opinion after the bill was filed.

We feel that the United States is in a position which rather imperatively requires that it take some action to terminate the stalemate, the uncertainty as to rights, which must be determined before the water supplies of these projects can be, with any confidence, predicted.

As to the matter of evidence in a lawsuit such as this, what we are really concerned with is the determination of principles, of legal rules. If we have those rules, Mr. Chairman, the engineers can figure out the arithmetic of the situation from that point on without any further difficulty.

In our view, it is not necessary for engineering evidence of any substantial character to be presented. The thing that is necessary is to determine upon what premises we are to chart our future.

We do not wish to exhaust the committee. We have attempted to go forward promptly, and we simply urge in conclusion that the committee give its consideration to the matter, and we will abide by the result.

We have some additional resolutions which should be placed in the record.

(These resolutions have been placed in the files of the committee.)

STATEMENT OF REX HARDY, ASSISTANT CITY ATTORNEY OF LOS ANGELES, CALIF.

Mr. HARDY. I have here a statement of Congressman Norris Poulson, who regrets that he cannot be here this morning, and asks that I present the statement. It is in accord with the previous statements by other California Congressmen.

Senator MILLIKIN. It will be included in the record at this point.

STATEMENT OF HON. NORRIS POULSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA (PRESENTED BY REX HARDY)

Mr. HARDY. Congressman Poulson's statement reads as follows:

Mr. Chairman, I regret that I am unable to appear before the Senate Committee on Irrigation and Reclamation while this important legislation—Senate Joint Resolution 145—is being considered. However, I should like to state for the record my unqualified support of the resolution.

It is most unfortunate when neighboring States are unable themselves to adjust their differences. Yet I believe it is apparent that in the case of California and Arizona this situation exists. After more than a quarter of a century of futile conferences, I am convinced that a new remedy must be found. That remedy, in my estimation, may only be found in the United States Supreme Court.

It is most difficult to believe that further conferences or negotiations will produce results beneficial to either State. If there is any ground in this conflict that has not been gone over repeatedly by negotiators, I do not know what it is.

This is a matter of interpretation of contracts, and it is hardly to be expected that either California or Arizona will retreat willingly from the present established positions. Yet, such a controversy cannot be permitted to endure. The entire economy of these States is seriously burdened by the present conditions. A settlement must be reached, or progress and development must suffer.

In States where all business and agriculture depend on an assured supply of water in reservoirs, all planning must necessarily be done with an eye on the years to come. One generation builds not only for itself but for the generations to come. Under the present conditions that cannot be done in either California or Arizona. I strongly urge a favorable report on Senate Joint Resolution 145.

Mr. HARDY. I have a resolution from the San Diego County Water Authority, likewise of similar import to those heretofore presented.

Senator MILLIKIN. It will be included in the record at this point.

(The resolution is as follows:)

RESOLUTION NO. 91. A RESOLUTION MEMORIALIZING THE CONGRESS OF THE UNITED STATES TO PASS NECESSARY LEGISLATION REFERRING TO THE UNITED STATES SUPREME COURT THE CONTROVERSY BETWEEN THE STATES OF ARIZONA AND CALIFORNIA OVER THE DIVERSION OF COLORADO RIVER WATER

Whereas the San Diego County Water Authority was organized as a State agency, of the State of California, for the sole purpose of providing for the distribution of waters from the lower Colorado River throughout San Diego County, Calif.; and in reliance upon what were considered to be firm and definite amounts of water allocated to the San Diego City and County from the lower Colorado River Basin, assumed, with the approval of the inhabitants within its area, including the city of San Diego, five other incorporated cities, two irrigation districts, and a public utility district, in San Diego County, a heavy burden of expense and indebtedness, for the capital investment necessary to transport the

water to San Diego County and distribute it therein, in excess of $35,000,000; and

Whereas the water now diverted from the southern basin of the Colorado River and transported and distributed through the works so financed, constitutes a primary and required supply upon which the area in San Diego County embraced within the authority is dependent; and

Whereas this water, the investment for the purpose of making its use available, and the very existence of the area now using is and relying upon its future use is seriously endangered by a proposed new Colorado River water diversion project in Arizona not heretofore considered in connection with the allocation of waters of the river, which project if authorized and constructed would substantially curtail the amount of water upon which the area served by the San Diego County Water Authority depends, and the amount of water which such area is now supplying to beneficial use in the ultimate degree: Now, therefore, be it

Resolved by the Board of Directors of the San Diego County Water Authority, That said authority, on behalf of its taxpayers and the landowners and residents dependent upon the water, urge the speedy passage by the Congress of the United States of Senate Joint Resolution 145 and House Joint Resolution 226, which would authorize a fair, complete, and final adjustment of the respective rights of the States of Arizona and California in the waters of the Colorado River by a reference of the contoversy between the States to the United States Supreme Court for final settlement; and be it further

Resolved, That a copy of this resolution be sent to each Representative and Senator in the Congress from California and to the chairman of the Public Lands Committee and the Judiciary Committee in the House of Representatives, and the Public Lands Committee, in the Senate.

FRED A. HEILBRON,
Chairman of the Board of Directors,
San Diego County Water Authority.

Attest:
[SEAL]

DELAVAN J. DICKSON,
Secretary of the Board of Directors,
San Diego County Water Authority.

I hereby certify that the foregoing resolution was presented to the board of directors of the San Diego County Water Authority at the regular meeting of said board held on the 8th day of April 1948, and was passed, approved, and adopted by the said board of directors by unanimous vote.

ELEANOR LONGFELLOW,
Executive Secretary of the Board of Directors,
San Diego County Water Authority.

Mr. HARDY. I have also a resolution from the City Council of the City of San Diego, likewise of similar import.

Senator MILLIKIN. It will be included in the record at this point.

(The resolution is as follows:)

RESOLUTION No. 88891

Whereas southern California, and particularly the San Diego metropolitan area, is a semiarid region requiring supplemental water supplies imported from great distances for domestic and industrial use; and

Whereas the San Diego area is rapidly increasing in population, requiring an ever-increasing use of water; and

Whereas within the San Diego area is located one of the most important military and naval centers of the United States, which institutions depend upon, demand, and use large quantities of water from the San Diego available supply, including Colorado River water; and

Whereas the city of San Diego, together with 20 other cities in the metropolitan water district of southern California, has assumed an obligation of more than $200,000,000 resulting from the construction of an aqueduct system which supplies Colorado River water for use in said San Diego area, such construction having been authorized by and made in accordance with contracts with the Federal Government; and

Whereas this vital water supply is now threatened and jeopardized by a proposed new development which will require the diversion of large quantities of

water from the Colorado River for use in the State of Arizona: Now, therefore, be it

Resolved by the Council of the City of San Diego, as follows:

This council respectfully urges and requests the Congress of the United States to speedily adopt Senate Joint Resolution 145 and House Joint Resolution 226, which will authorize proceedings to be brought in the Supreme Court of the United States for the fair and final adjudication of the rights of the States of California and Arizona in and to the waters of the Colorado River; be it further

Resolved, That this council opposes any new developments which will result in further diversion of water from the Colorado River in the lower basin until such Supreme Court determines the respective rights of each State; and be it further

Resolved, That a certified copy of this resolution be sent to each Representative and Senator in the Congress from California, and to the Chairmen of the Public Lands and Judiciary Committees in the House of Representatives and of the Public Lands Committee in the Senate.

Senator MILLIKIN. Do the proponents rest?

Mr. SHAW. Yes.

Senator MILLIKIN. Let us recess until 2:15.

(Whereupon, at 12:40 p. m., the hearing was recessed until 2:15 p. m., of the same day.)

AFTERNOON SESSION

(The committee reconvened at 2:15 p. m., upon the expiration of the recess.)

Senator MILLIKIN. The hearing will come to order, please.

Are the opponents of the resolution prepared to go forward?

STATEMENT OF JEAN S. BREITENSTEIN, ATTORNEY, DENVER, COLO., REPRESENTING COLORADO WATER CONSERVATION BOARD

Mr. BREITENSTEIN. Mr. Chairman, one thing that has been disturbing to me, at least, during the course of this hearing has been the apparent resignation of California and Nevada to the inevitability of litigation.

Perhaps we, up in the mountains, have a little more buoyant attitude toward things, but we are always hopeful that the litigation which they think is inevitable might in some way or other be avoided. But if it cannot be, if it is going to come, while we regret it very much, I think the record of the State of Colorado shows that it never has run away from a fight on these water matters.

Mr. Shaw said that the only concern which the upper basin could have would involve 750,000 acre-feet of surplus water. I hope that Mr. Shaw is right and that if there is to be litigation the hazard to the upper basin States will be no greater than that. We fear otherwise. Our fears are based on language used in the resolution, the joint resolution, which is now before the committee.

We note that in the recital it is said that there are long-standing controversies among the States, and then it refers to the compact and the statutes and various contracts and other documents, and then says, "As to various engineering, economic, and other facts." If this litigation is to be confined to the construction of these documents, I see no reason whatsoever for the inclusion of that last phrase. And with that phrase in the resolution, it is beyond all understanding how it can be said that this matter can be determined from the pleadings of a case without the appointment of a master and the taking of testi-

mony. To me it is not reasonable at all to suppose that these States can ever get together on the facts which are covered by that phrase "various engineering, economic, and other facts."

And then we are also bothered by this: In the resolving part of the resolution, it says:

The United States Attorney General is directed to bring suit against the named States and such other parties as may be necessary in the nature of an interpleader.

And here is the next language:

And therein require the parties to assert and have determined their claims and rights to the use of waters of the Colorado River System available for use in the lower Colorado River Basin.

Now, if the intent is merely to interpret these documents, it would seem to me that some qualifying language would have been asserted there. And we fear that the broadness of this statement is deliberate; so that in that litigation claims may be advanced as to the validity and binding effect of the documents mentioned. We hope that our fears are without foundation and that Mr. Shaw is right in his assertion that the only hazard to us is the 750,000 acre-feet. But it seems to me that the language of this joint resolution bears out our fears and wonderment.

Mr. Shaw states that the rule as to what constitutes a justiciable controversy has been fixed by court decision in the North Platte case. Of course, there have been two changes in the personnel of that court since the North Platte case was decided.

I apologize to Mr. Shaw for saying that he had not read a portion of the excerpts which I read to the committee, but Mr. Shaw does not claim that the five or six sentences which appear immediately before that word "apportioned" were read by him. He did not read the part where it says that the Kendrick project is an existing threat, nor the part which said that out-of-priority diversions by Colorado and Wyoming would have an adverse effect downstream.

Let us consider this North Platte case just a little further. This morning Mr. Shaw read these two sentences. I hope I am quoting him correctly. I do not have the advantage of having any transcript:

The North Platte case opinion contains this language: "The argument is that the case is not of such serious magnitude and the damage is not so fully and clearly proved as to warrant the intervention of this court under our established practice" (citing *Missouri* v. *Illinois* and *Colorado* v. *Kansas;* and particularly noted is the citation of *Colorado* v. *Kansas*).

The next sentence is:

The argument is that the potential threat of injury, representing as it does only a possibility for the indefinite future, is no basis for a decree in an interstate suit, since we cannot issue declaratory decrees.

And here is the next sentence, which Mr. Shaw did not read:

We fully recognize those principles, but they do not stand in the way of an entry of a decree in this case.

And one of the cases cited as stating those principles is *Colorado* v. *Kansas.*

Colorado v. *Kansas* was decided by the same court that decided the North Platte case. If I may refer to that—and I am not going to read it all; the discussion is too long to burden the record with the

entire discussion on this matter—on page 391, of 329 United States, the Court said:

> In our former decision we ruled that Kansas was not entitled to a specific share of the waters as they flowed in the state of nature, and that it did not then appear that Colorado has appropriated more than her equitable share of the flow, and that if Kansas were later to be accorded relief she must show additional takings working serious injuries to her substantial interests.

And again on page 393:

> If the lower State is not entitled to have the stream flow as it is in nature regardless of need and use, if then the upper State is devoting the water to a beneficial use, the question to be decided, in the light of existing conditions in both States, is whether and to what extent her action injures the lower State and her citizens by depriving them of a like or equally valuable beneficial use.

And again on the same page:

> In such disputes as this, the Court is conscious of the great and serious caution with which it is necessary to approach the inquiry whenever a case is proved. Not every matter which would warrant resort to equity by one citizen against another would justify our interference with the action of a State, for the burden on the complaining State is greater than that generally required to be borne by private parties. Before the court will intervene, the case must be of a serious magnitude and fully and clearly proved. And in determining whether one State is using or threatening to use more than its equitable share of the benefits of a stream, all the factors which create equities in favor of one State or another must be weighed as of the date when the controversy is mooted.

And in the North Platte case, the Court cites with approval this former decision and says it recognizes the principles.

Senator MILLIKIN. What, then, in brief, were the alleged injuries in the North Platte case?

Mr. BREITENSTEIN. In the North Platte case? The alleged injuries were the fact that there were diversions in an upper State by junior ditches, when allegedly senior ditches in the lower State were deprived of water. Those were ditches and reservoirs. And that the Federal reservoir project known as the Kendrick project had been authorized for construction and was under construction. There were those two factors.

Senator MILLIKIN. Were the junior locations on the upper stream depriving the senior locations downstream of water which they wanted?

Mr. BREITENSTEIN. The upstream States deny that, Senator, but the Court found against us.

But those were the two factors, one a present injury, and the other a threat of injury in the North Platte case.

During my previous appearance here, I considered the question of whether or not this direction to the Attorney General was a proper constitutional interference by one branch of our Government with the other. And I assured the chairman that we would furnish a memorandum on that point. And we will do that.

This morning Mr. Shaw produced certain statutes relative to suits to be brought by the Attorney General.

Senator MILLIKIN. I think perhaps we ought to fix some kind of a time when these two memos will be in. What would suit your convenience?

Mr. BREITENSTEIN. I believe that we can do it within 10 days.

Senator MILLIKIN. Mr. Shaw?

Mr. SHAW. That is agreeable, Mr. Chairman.

Senator MILLIKIN. Let us do it, then in 10 days.

Mr. BREITENSTEIN. I am returning to Denver tonight, and I will do it promptly.

Mr. SHAW. May we have copy?

Mr. BREITENSTEIN. Surely.

I have only had a chance to very briefly review these statutes, these resolutions, which Mr. Shaw produced this morning; but in addition to the matter which the chairman suggested, that they refer to suits involving property of the United States, it seems to me that it is a fair statement that these statutes do not interfere with the discretion of the Attorney General. And as I recall my statement, again without the benefit of the transcript, it was that it seemed to me that a statute recommending action but not interfering with the discretion of the Attorney General might be proper. And that is one of the matters which I expect to cover in the memorandum.

But it seems to me that in these the discretion is not interfered with. For example, in the first statute of the group that was handed to me, volume 37, Statutes at Large, page 93, it reads:

> For the purpose of establishing and making clear the title of the United States, it shall be the duty of the Attorney General of the United States to institute, as soon as may be, or whenever in his judgment it is deemed proper * * *.

That leaves it up to the Attorney General.

And again, in volume 43, Statutes at Large, page 5, the one on Teapot Dome, I believe, the first resolving clause concludes with this language:

> And to prosecute such other actions or proceedings, civil and criminal, as may be warranted by the facts in relation to the making of said leases and contracts.

And it seems to me that that concluding phrase modifies what goes before it.

And in the next one, which I think is Elk Hills, volume 45, Statutes, page 15, near the conclusion of the resolving part:

> The President is authorized and directed to employ special counsel to prosecute such proceedings and any suit or suits ancillary thereto or necessary or desirable to arrest the exhaustion of the oil.

And the next one, volume 46, Statutes, page 41, at the beginning of the section numbered 5:

> The Attorney General is hereby authorized and directed forthwith to institute and prosecute such suit or suits as in his judgment may be required.

Again leaving it up to his discretion.

While we expect to make our position clear in the memorandum which we shall file, we feel that statutes such as these, which leave the discretion uninterferred with, do not constitute a precedent for a resolution such as this one, where a firm direction is given, the form which the action shall take is clearly stated, and the parties are named.

The Secretary of the Interior in his report, on pages 5 and 6 of the mimeographed copy which I have, voices an opinion as to the requirements for a case or controversy, in the constitutional sense. He cites the case of *Aetna Life Insurance Company* v. *Haworth* as a precedent, setting forth the views of the court on what constitutes the controversy. The Aetna Life case, Your Honor, is a declaratory-judgment case. The opinion begins thus:

> The question presented is whether the district court has jurisdiction of this suit under the Federal Declaratory Judgment Act.

Then it gives the reference to the act. The suit was one between private parties. We say that when you have a suit between two States,

different rules apply. I direct your attention to the fact that the excerpt which I read from the Arkansas River case refers to the fact that in suits between States—

not every matter which would warrant resource to equity by one citizen against another would justify our interference with the action of a State.

And then, in Connecticut against Massachusetts, there were similar statements. The Court said:

The burden on Connecticut to sustain the allegations on which it seeks to prevent Massachusetts from making the proposed diversions is much greater than that generally required to be borne by one seeking an injunction in a feud between private parties.

And, to refer just briefly to a case decided after the Aetna Life case, a case between States rather than private individuals, Massachusetts against Missouri, the Court said:

Nor does the nature of the suit, as one to obtain a declaratory judgment aid the complaint to support jurisdiction to give such relief. There must still be a controversy in the constitutional sense.

The Court also says in that case, Massachusetts against Missouri:

The proposed bill—

and this was one for a declaratory judgment—

of complaint does not present a justiciable controversy between the States. To constitute such a controversy, it must appear that the complaining State has suffered a wrong through the action of the other State, furnishing ground for judicial redress, or asserting a right against the other State which is susceptible of judicial enforcement according to the accepted principles of the common law or equity system of jurisprudence.

So we say there is a distinction between the rules laid down in the Aetna Life case and the rule applicable to cases involving States.

I would like also to point out, in connection with the letter from the Secretary of the Interior, that an assumption is suggested which does not fit the existing situation. The Secretary says, after reciting the controversy:

The knowledge that there is disagreement between Arizona and California about the answers to be given them, and recite that if the contentions of either State are accepted in full, and if full development of the upper basin within the limits fixed by the Colorado River compact is assumed, there is not available for use in the other States sufficient water.

Now, that assumption does not apply now. And while we are very hopeful of bringing about full development of the upper basin at the earliest possible date, it may be many, many years before that full development takes place, and by that time Los Angeles might be getting the water which it desires for municipal purposes by distilling sea water, for all that we know.

But our development cannot take place for a long period of years, and the assumptions suggested there cannot be made at this time.

To make just one other statement on this question of justiciable controversy: We feel, as I said before, that there is not any showing of injury; there is no injury which I can conceive of to any basin State at this time. And the conclusive evidence of that would seem to be that California is not using the water to which she is admittedly entitled.

Mr. Howard this morning talked about the beneficial consumptive use of water and the depletion theory which the upper basin States

have. The situation involving California and Colorado is, of course, entirely different. California produces none of the water of the stream. There are no tributaries entering the stream down there. And its use is not entirely but very, very substantially outside the basin of the river. In Colorado there are many tributaries. There have been uses up and down the tributaries. There are natural losses of water. There will be the salvage of water. So the conditions are entirely different.

One thing that seems clear to me is that before there can be any consideration of this controversy over beneficial consumptive use versus depletion, many engineering facts will have to be presented to the Court before there can be any fair determination of the question. The Upper Basin States Compact Commission has appointed an engineering committee, which, for more than a year, has been studying the problem in conjunction with two Federal agencies. Right now a field trip is in progress. We do not know what that engineering committee will report, but we do know that we are making a serious effort to determine the facts as to beneficial consumptive use and stream depletion in the upper basin. And we are quite confident that when the engineering committee reports we will have facts, and not magic, upon which to base our conclusions.

Mr. Malone referred to House Document 186, Seventieth Congress, second session, and the statement of Mr. Carpenter. For purpose of emphasis, in support of our contention that III (b) water is apportioned water, I would like to read one statement from the statement of Mr. Carpenter, appearing at page 38 of that document. Mr. Carpenter said:

> The unallocated surplus consists only of that portion of all of the water of the whole river system over and above the 16,000,000 allocated to the seven States, plus the international burden.

So it would seem clear that Mr. Carpenter in that statement considered that the 16,000,000—that is, the sum of III (a) and III (b)—were allocated or apportioned water.

In connection with Senator Malone's presentation, I think it clearly appears that although the Senator is not, perhaps, sure about the Nevada share of the water, all of the other basin States, with possible exception of California, concede that Nevada has a right to 300,000 acre-feet of water.

Mr. Ely, in his presentation, went into the question of the position taken by various Senators in the debate on the Boulder Canyon Project Act. The Boulder Canyon Project Act is the consent of Congress upon the performance of certain conditions to the Colorado River compact. The important thing to bear in mind there, it seems to me, is that the Colorado River compact is not a statute of the United States. The Colorado River compact is an agreement, a contract, between the States, made with the consent of Congress. And the important thing is what the legislators of the various States thought the compact meant when they voted upon it.

The debates here in Congress are of interest in appraising the approach of Congress to the matter, but they certainly are not binding upon the various States who are signatories to that contract or agreement between them. And the Senators and Congressmen, by their debates, certainly cannot construe that compact for the various States. Several of the States acted prior to those debates.

We feel that the compact, on the question of whether or not this III (b) water is apportioned water, is clear and unambiguous. It is not subject to interpretation. The words are plain. The words are certain. And they were considered in their plain and unambiguous sense by the members of the various legislatures of the States which ratified that compact.

I believe that is all I have to say, Mr. Chairman. We are opposed to the resolution, and we hope that eventually the serious problems in the Colorado River may be settled and that all the States will again cooperate to try to bring about the full development of this natural resource. Thank you.

Senator MILLIKIN. Thank you, Mr. Breitenstein.

STATEMENT OF CHARLES A. CARSON, CHIEF COUNSEL OF THE ARIZONA INTERSTATE STREAM COMMISSION AND SPECIAL ATTORNEY FOR ARIZONA ON COLORADO RIVER MATTERS, PHOENIX, ARIZ.

Mr. CARSON. Mr. Chairman, I do not want to take much time in rebuttal. Most of the matters that have been referred to by the proponents in rebuttal as to what we said had been covered by them in their original presentation, and likewise by us.

There are only a few matters that I do wish to call attention to.

Matters were here stated concerning the history of the river and this California contention. I want to refer the committee, without necessarily incorporating it in the record, to the testimony that I gave in the House hearing on H. R. 5434, contained in volume H, pages 367 to 445 and 517 to 533. All of that testimony is also incorporated in the Senate hearing before this committee on S. 1175, at pages 221 to 291.

The statements concerning the California position here made are, I think completely answered, so as to state the Arizona position, in this testimony and in the other testimony from the hearing on S. 1175, which I have already placed in the record.

In 1933 and 1934, Arizona sought a contract with the United States for water, which was very similar to the contract that was secured in 1944. At that time, California opposed that contract on the grounds that Arizona had not, at that time, ratified the Colorado River compact. And that statement was true. None of the contentions that they here made were there made at all.

In 1939, the Arizona Legislature offered to make the compact as set out in the Boulder Canyon Project Act; but only after the question of the availability of III (b) water to California had been presented to the Supreme Court of the United States in the case to perpetuate testimony of what had occurred at the original Santa Fe conference. That testimony is incorporated in the part of my testimony to which I have referred. And in its opinion in that case, the Supreme Court of the United States held that III (b) water is apportioned water (292 U. S. 341). I would like to read that now, just to emphasize the point I am trying to make. It is the sixth ground of their opinion.

Sixth. The considerations to which Arizona calls attention do not show that there is any ambiguity in article III (b) of the compact. Doubtless the anticipated physical sources of the waters which combine to make the total of 8,500,000 acre-feet are as Arizona contends, but neither III (a) nor (b) deal with the

waters on the basis of their source. (a) Apportions waters "from the Colorado River system," i. e., the Colorado River and its tributaries, and (b) permits an additional use "of such waters." The compact makes an apportionment only between the upper and lower basins, the apportionment among the States in each basin being left to later agreement. Arizona is one of the States of the lower basin, and any waters useful to her are by that fact useful to the lower basin. But the fact that they are solely useful to Arizona, or the fact that they have been appropriated by her, does not contradict the intent clearly expressed in paragraph (b) (nor the rational character thereof), to apportion the million acre-feet to the States of the lower basin and not specifically to Arizona alone. It may be that in apportioning among the States the 8,500,000 acre-feet allotted to the lower basin, Arizona's share of water from the main stream will be affected by the fact that certain of the waters assigned to the lower basin can be used only by her, but that is a matter entirely outside of the scope of the compact.

Mr. SHAW. Mr. Chairman, would you be willing to ask the witness to read the first sentence of the paragraph preceding the one he read, and the footnote at the bottom of the page?

Senator MILLIKIN. Go ahead, Mr. Carson.

Mr. CARSON. The sixth ground is the one I am calling attention to, because it is clear that the Supreme Court called it apportioned water to the lower basin.

Mr. SHAW. May I ask that the witness read the first sentence of the paragraph preceding the one he read.

Senator MILLIKIN. If he does not care to, you can go into that later.

Mr. CARSON. I am trying to emphasize the one holding of the Court that that was apportioned water.

Now, when you read this California Limitation Act, as set out in the Boulder Canyon Project Act, it is clear that California can use, of the water of the river, only 4,400,000 acre-feet of that apportioned by paragraph (a) of article III, and not to exceed one-half of the surplus waters unapportioned by said compact. So III (b) water being apportioned, California is clearly excluded from any III (b) water. And the Court, in denying that bill to perpetuate testimony, did so on the ground it could never become material.

Senator MILLIKIN. Will you let me read No. 6 in that opinion? [Pause.]

All right. Go ahead, Mr. Carson.

Mr. CARSON. Mr. Howard this morning, in referring to the limitation act as set out in section 4 (a) of the Boulder Canyon Project Act, I think emphasized the wrong word, which I would like to give you my understanding of—just the language that is particularly involved here now:

> That the aggregate consumptive use, diversions less returns to the river, of water of and from the Colorado River * * * *for* use in the State of California.

It does not say "used in California." It says "for use in the State of California."

Now, they argue that we are construing that consumptive use and the measurement of consumptive use in a different way in these two paragraphs of 4 (a). I submit to you that diversions less returns to the river means net depletion and can mean nothing else except net depletion. So in our view we are applying to ourselves the same rule that is applied to California. And again to emphasize the word: "*for* use in the State of California."

Mr. Howard, in referring to the metropolitan contract, does not refer to, or call attention to, that portion in that paragraph referring

to storage in Hoover Dam, which I would again like to emphasize. It is in section VIII of article 17 of the All-American Canal contract, and it is also in the metropolitan contract in section VIII of the metropolitan contract.

So far as the rights of the allottees named above—

the California allottees—

are concerned, the metropolitan water district of southern California and/or the city of Los Angeles shall have the exclusive right to withdraw and divert into its aqueduct any water in Boulder Canyon Reservoir accumulated to the individual credit of said district and/or said city, not exceeding at any one time 4,750,000 acre-feet in the aggregate.

Now, there is a similar provision here for San Diego, not exceeding 250,000. So it makes, as Mr. Howard said, a right of storage for the combined obligation of 5,000,000 acre-feet. [Reading:]

accumulated to the individual credit of said district and/or said city by reason of reduced diversions by said district and/or said city; provided, that accumulations shall be subject to such conditions as to accumulation, detention, release, and withdrawal as the Secretary of the Interior may from time to time prescribe in his discretion, and his determination thereof shall be final. Provided further, that the United States of America reserves the right to make similar arrangements with users in other States without distinction in priority and to determine the correlative relations between said district and/or said city and such users resulting therefrom.

That relates to the question of evaporation losses, which, of course, can never arise until every State in the basin has used all of its water and all of the surplus has disappeared. But if and when that time ever comes, I submit that the evaporation losses will be borne proportionately and ratably. Because we have equal rights in the water, and the evaporation loss would merely result in a lesser supply than we think we have. And in that case, without distinction in priority, we would each be delivered proportionately.

Senator MILLIKIN. If an upstream State had no reservoirs contributing to its benefit, if that could be conceived, could it be argued that that State should bear a portion of the evaporation of lower State streams?

Mr. CARSON. I have heard that discussed, but I do not think there has been any conclusion reached on it. The only possible way that it could ever arise would be under the provision of the compact in article VIII, which I think does not apply here.

Senator MILLIKIN. That is an abstraction. We will not cover that here.

Mr. CARSON. I think each basin would have to bear its own evaporation losses.

Senator MILLIKIN. At some stage before you finish, Mr. Carson, if it can be done, I would like to have a summary presentation of Arizona's claim to III (b) water.

Mr. CARSON. To III (b) water?

Senator MILLIKIN. To III (b) water. If this is not a convenient time, we will defer it until it is convenient.

Mr. CARSON. All right. We will do that in connection with the other memorandum which you asked us to file, as to our view of the water supply and the rights of the various States in the lower basin.

Senator MILLIKIN. All right.

Mr. CARSON. We will probably try to do that within the 10 days that you have indicated on these other matters.

Senator McFARLAND. Mr. Chairman, if I might, I have another appointment for which I may have to leave before Mr. Carson finishes. I do not know that I will want to file anything in addition to what the Colorado River Basin States filed, but if I do, I would like to have that privilege.

Senator MILLIKIN. Everyone will have that privilege, but they should be cross-submitted.

Senator McFARLAND. I will try to get mine in along about that time. If I do not have time, I will just have to let it go; but I would like to have that privilege.

Senator MILLIKIN. I hope we do not have too many new matters developed by supplemental memos, and then a series of rebuttals and sur-rebuttals, ad infinitum, and I will just have to rely on the restraint of you gentlemen to keep that within reasonable boundaries.

Senator McFARLAND. No; Mr. Chairman, what I had in mind was on the matters which the chairman has indicated his interest in, and as a further development of the points of law which I have attempted to develop in my statement. That is what I particularly had in mind, maybe with a little comment on some other matters that have been touched upon here in the hearings. Nothing new.

Mr. CARSON. Now, I would like to turn for just a minute to the Nevada position, as outlined in the letter of Governor Pittman, and in the testimony of Senator Malone.

I think it must be clear now that all of us in the lower basin concede Nevada the right to use 300,000 acre-feet of the water apportioned to the lower basin.

Arizona has made a contract with the United States, in which that is expressly recognized, and the Arizona Legislature has ratified that contract. So there can be no question in anybody's mind that any State is disputing Nevada's claimed water right.

Then, in the brief which was filed on behalf of California and Nevada, and again in this letter——

Senator MILLIKIN. I think it should be said that the attitude of the other States would not necessarily determine what Nevada's rights are. I must say that I have always been under the impression that Nevada did have a right to 300,000 acre-feet. It may be that I got that impression by the general consensus of opinion, as has been expressed here. I must say that I was somewhat surprised at the possibility of a Nevada contention to the effect that that is not a completely settled firm matter.

Mr. CARSON. I would like to show you how I figured that it is.

Senator MILLIKIN. I would be interested in that.

Mr. CARSON. In addition to the Arizona contract, in which we specifically recognize Nevada's right, there is apportioned to the lower basin 8,500,000 acre-feet, including the water of III (b).

III (b) water, the 1,000,000 acre-feet, has been earmarked by the California Limitation Act and the Boulder Canyon Project Act, as approximately equal to the flow of the Gila River in Arizona. There remains main-stream water deliverable at Lee Ferry by the upper basin in the quantity of 7,500,000 acre-feet.

California can get no water except that out of the main stream. California is forever limited by her limitation act, to 4,400,000 acre-feet. Added to the 300,000 for Nevada and the 2,800,000 of that for Arizona, you have the 7,500,000 acre-feet.

But Arizona, out of our share, recognizes the rights of the States of Utah and New Mexico, in the lower basin, to use whatever they can use. And in our calculations on the Central Arizona project, which is now before this committee, we have deducted from our share of the water all that the Bureau reports will ever be possible for that part of Utah and New Mexico to use, so Nevada's right is secure.

The parts of Utah and New Mexico that are in the lower basin can only use water from tributary streams; but still we deduct that from our calculations.

Senator MILLIKIN. I was thinking, Mr. Carson, not in terms of use, but in terms of right. What you have said makes an argument for the 300,000 acre-feet of use. I am not so sure that it makes an argument for contractual right of 300,000 acre-feet.

Mr. CARSON. Well, let me go back to that again a minute. Just consider now the main stream water, 7,500,000 acre-feet of apportioned water.

California is limited to 4,400,000.

Senator MILLIKIN. Yes.

Mr. CARSON. That leaves 3,100,000. We say, Arizona says, that we recognize the right of Nevada to 300,000 of that 3,100,000. And we also recognize the right of the parts of Utah and New Mexico that are in the lower basin to use such part as they can.

So, then, it is secure, from a legal point of view, as to their rights.

Senator MILLIKIN. I do not want to labor this—and my thoughts are entirely tentative and unjelled—but I doubt very much whether I can establish a right in you, whether I can limit you to a right by recognizing that you have a right.

Arizona says that Utah and New Mexico are entitled to all they can use. Arizona recognizes the right of Nevada to 300,000 acre-feet. But does the recognition by Arizona of what Arizona claims is a right in Nevada foreclose Nevada from asserting some other right?

Mr. CARSON. They haven't.

Senator MILLIKIN. That is still aside from what I am getting at. It would be interesting to know what is the basis for Nevada's 300,000 acre-feet right, except these mathematical calculations, which you are referring to, which I suggest may not necessarily bind Nevada.

Mr. CARSON. Well, Nevada has a contract for this 300,000 acre-feet with the United States.

Senator MILLIKIN. That may not be conclusive; in the same sense that none of these contracts with the Secretary of the Interior may be conclusive. They are all subject to the compact.

Mr. CARSON. You mean that Nevada might assert a claim for more water?

Senator MILLIKIN. That is what I am wondering. It is inconceivable that she should claim for less. I had no question in my own mind about it until the Senator's testimony, but I am just wondering whether Nevada considers that she has a fixed and unalterable right to 300,000 acre-feet.

Mr. CARSON. I think that she does.

Senator MILLIKIN. I understand the significance of all of these flank approaches to the subject, but I still have not had anything put in here yet that goes directly and frontally to what is Nevada's right.

Mr. CARSON. Well, 7,500,000 acre-feet of main-stream water, of which California can use 4,400,000, and no more. That is limited and definite and fixed, is it not?

Senator MILLIKIN. Yes, sir.

Mr. CARSON. That leaves 3,100,000 acre feet of apportioned water of the main stream that can be used in the lower basin. And it cannot be used anywhere except in the lower basin.

Now, then, in the Arizona contract, where we contract for 2,800,000 acre-feet, we specifically put in the recognition of Nevada's 300,000 acre-feet.

Senator MILLIKIN. Yes; but what I am trying to suggest, even though there may be nothing to it at all, is, Arizona cannot recognize Nevada into Nevada's right, if she has one.

Mr. CARSON. I think we can; because this disposes completely of all the water apportioned to the lower basin from the main stream, and there is nobody else that could claim any.

Senator MILLIKIN. We have here, let us say, a pot of money, which necessarily must be distributed around this table. So I start to divide this pot of money. I say, "I recognize Mr. Carson's right to $300,000 of this $1,000,000 pot, and I recognize the right of Mr. Ely to X amount of this $1,000,000 pot."

But until I hear from Mr. Carson, until I hear from Mr. Ely, it is not quite sure that I have established any rights, except that I may have possession of the pot.

Mr. CARSON. Well, you have possession, and we have agreed that we can't claim it.

Mr. ELY. Mr. Chairman, may I interpose, sir?

If I get your point, there is no chain of title demonstrated for Nevada's 300,000 acre-feet?

Senator MILLIKIN. I do not want to make that statement, because, as I say, my thoughts have not jelled on it. But after the testimony from the junior Senator from Nevada, I had quite a few queries pop into my mind as to what is the basis of Nevada's right to 300,000 acre-feet. And I assert again that it may not be sufficient to say that Arizona has recognized her right to 300,000 acre-feet.

Mr. ELY. If I may break in again.

There is no chain of title for Arizona's 2,800,000 feet, either. That is the problem involved here.

Mr. CARSON. I think there is, Mr. Chairman.

Senator MILLIKIN. Let us assume, without deciding it, that there is a firm and fixed limitation on California; without deciding it, and merely for the sake of discussion.

That leaves you a residue of water to be divided among the States which you have mentioned.

Mr. CARSON. That is right.

Senator MILLIKIN. Now, what is the legal basis for dividing that residue of water?

Mr. CARSON. The Arizona contract for 2,800,000 and the Nevada contract for 300,000. Nevada has a contract for that 300,000. We have a contract for 2,800,000, less such parts as might be used in the portions of New Mexico and Utah that are in the lower basin.

Senator MILLIKIN. Does the basic law say, or can it be argued that the basic law says, in effect, that the conclusion of the contracts to which you are referring effects a firm allocation or apportionment or whatever word you want to use, of that residue of water?

Mr. CARSON. No, except the compact, as between the upper and lower basins, 7,500,000 feet of water to the lower basin; so that the upper basin has agreed to deliver that to Lees Ferry, for use in the lower basin.

It can be used nowhere else but in the lower basin. We have, by this California Limitation Act, and the Arizona compact, and the recognition of the rights of these other States contained in the lower basin compact, confirmed the right to Nevada of the use of 300,000 acre-feet of that apportioned water, and Nevada has claimed it and has a contract for it.

Senator MILLIKIN. I think I understand you. Proceed.

Mr. CARSON. Now, the other feature that was contained in the California-Nevada Brief, and also in Governor Pittman's letter, and Senator Malone's testimony with respect to their opposition to the central Arizona project, has to do with possible diversions of water above Hoover Dam, and they claim an interest in the power development at Hoover Dam.

But, Mr. Chairman, that is directly contrary to their own agreement, by which they are both bound, both California and Nevada, because the compact provides, in article IV (b):

> Subject to the provisions of this compact, water of the Colorado River may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent the use for such dominant purposes.

So therefore I submit, Mr. Chairman, that there is no merit in the Nevada position, as here stated; and certainly, under no conditions, could such statements ripen into any justiciable controversy, or any controversy cognizable in any court.

I do not believe that it would be possible for California now to state, against Arizona or any other State, any justiciable controversy nor for the Attorney General to state any justiciable controversy.

It is clear here, from all the evidence in this hearing, that no one is asserting a claim as against the United States; that the differences of opinion which have been expressed by California, with all of the other States, do not give rise now to any controversy cognizable in the Supreme Court.

However, if California thinks she can state a cause of action, now or at any time in the future, against Arizona, it would be in the ordinary course of such matters. We are all bound by the compact. No cause of action will arise under that compact until and unless one State does something which another State believes injures it, or threatens an immediate injury, under the terms of the compact, and if that question should ever arise, it would be a direct suit by one State against another State, to enjoin the performance of the act which they think might threaten their right of claim. It would never be—and could never properly be—the subject of this kind of shotgun resolution, to require everybody to come in and state their claims to water.

It must be related solely to a claimed right under the compact, and a threatened injury of a claimed right; in which event it will be confined to that State or party which the complaining State or party believes might injure it, and it would not involve the entire Colorado River Basin in the kind of a shotgun proposition of adjudicating all claims on the river, because the claims on the river are fixed by these documents, and unless somebody undertakes to invade a claimed right under these documents, there is no justiciable controversy.

If that time should ever arise, it would be a direct suit by one State against another.

You cannot churn this Colorado River compact and the California Limitation Act and the Boulder Act into a water adjudication suit, where you bring everybody in up and down the stream, because our rights are here fixed by compact and by the acts, and unless somebody proceeds in violation of a claimed right, under those documents, there is no cause of action.

The other matters that have been testified to here, I believe, are not of sufficient moment to take any more time. I would just like to conclude in this way:

We would like to get along with California, we in Arizona would. Certainly, however, any dispute we have with California should not embroil the whole basin.

Senator MILLIKIN. I would like to interrupt, Mr. Carson. Do New Mexico and Utah appear here in all capacities, as upper and lower basin States, or do they appear here exclusively as upper basin States?

Mr. CARSON. In both capacities. That brings me back to one thing that I forgot to say here:

The Colorado River Basin States Committee, which has filed this brief, and to which Mr. Shaw has referred, is composed of representatives at this time of the States of Arizona, Colorado, New Mexico, Utah, and Wyoming. It is open to the States of California and Nevada. Formerly they belonged to the predecessor committee, which we called the committees of '14 and '16. In the summer and fall of 1946, California withdrew, and was followed shortly by Nevada, and since then has refused to participate in the deliberations of this committee or in interstate cooperation among the Colorado River Basin States, but we have kept it open for them and have invited them back and would like to have them back.

Most of these matters which they refer to here were handled through the then committees of '14 and '16, and our contract for Arizona was negotiated and hammered out in that committee of '14 and 16. California violently opposed that contract. They are raising questions now that I think were not raised then.

Nevada at that time helped us in negotiation of our compact, and at the same time, through this committee, we all helped Nevada get her contract for 300,000 acre-feet. Then, when we got into the question of the Mexican treaty and its approval, California disagreed and was later followed by Nevada in the disagreement, but it was not until a year and a half after that that they withdrew from the Colorado Basin States Committee.

Now, this statement or thought that maybe Arizona was not a party to the compact is again new. I do not think there is any question of doubt that Arizona is a party to the compact. We have ratified it in good faith. We have our contract with the United States in good

faith, and we insist we are. But so far as California is concerned, it would be no advantage if she could say we were not, because the California Limitation Act does not depend upon whether or not Arizona is a party to the compact. We were not a party to the compact when this act was passed. The Congress required that California, by act of its legislature, "shall agree irrevocably and unconditionally with the United States, and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming"—so Congress intended that whether or not Arizona was a member of the compact, we would have the advantage of the California Limitation Act, which was passed for our express benefit.

So there would be no advantage to California in trying to claim that Arizona is not a party to the compact, and we have been accepted as such, and consider ourselves permanently bound, and we know that we are legally bound, and we have no intention of trying to avoid any obligation or duty under it, or to be deprived of any benefits under that, or the act.

Now, then, back to the Colorado River Basin States Committee.

In closing, we have filed this brief, which I think fairly and clearly presents the issue here presented.

I would like for it to be considered, and I believe that it will be found to be unanswerable.

Senator MILLIKIN. Did we not enter that in full in the record?

Mr. CARSON. Yes.

I do not care to comment specifically on the reports of the Department of Justice and the Department of the Interior. The committee can construe them as well as I can. But it is significant that they both, as I read them, report adversely to Senate Joint Resolution 145 and recommend that it not pass.

Mr. SHAW. Might I have 5 or 10 minutes to clear up and complete the record, Mr. Chairman? I will do it very briefly.

Senator MILLIKIN. Yes.

Mr. SHAW. Mr. Breitenstein called your attention to recitals of the resolution referring to——

Mr. CARSON. I think Mr. Wehrli, of Wyoming, wanted to say something, Mr. Chairman.

Senator MILLIKIN. Come forward, Mr. Wehrli, and make yourself comfortable.

STATEMENT OF W. J. WEHRLI, SPECIAL COUNSEL FOR THE STATE OF WYOMING, CASPER, WYO.

Mr. WEHRLI. Thank you.

Mr. Chairman, this question has been so exhaustively and thoroughly discussed since last Monday morning that trying to say anything now comes dangerously close to sawing sawdust.

I do, however, want to refer to the report that has been presented by the Secretary of the Interior and read one sentence from it.

The Secretary says:

> While I am thus convinced that the United States would have a large stake in the outcome of this proposed litigation, I am not prepared to say that the onus of instituting the suit should be cast, as the present language of Senate Joint Resolution 145 proposes, on the Attorney General.

The Secretary does not perceive any reason why the United States should have the burden of the commencement of the prosecution of this proposed litigation.

In that case, whatever may be decided or agreed ultimately as to the nature of the controversy with respect to whether or not it is one of those of which the Supreme Court will take jurisdiction, it obviously is a controversy with California.

We do not see why the Congress of the United States should be asked to be the instrumentality for the institution of this suit, which will draw into it all of these States. The effect of this suit, if it is commenced, probably will be a litigation of considerable consequence, and may consume and probably will consume a great deal of time, and will have an adverse effect upon the development in the upper basin, in which my State of Wyoming is located.

We say to the committee that the responsibility for instituting such a suit, if one is to be brought, should be placed squarely upon the State of California, which is the litigant having the complaint, and that the State of California should not be permitted to use the United States as an instrumentality in the initiation and prosecution of this case.

Arizona prosecuted three suits against California in the Supreme Court of the United States, without success. The United States did not participate in those suits. The Congress of the United States was not asked to intervene in the matter, and we think it only a matter of equity and fairness that if California now desires to litigate she ought to take the responsibility for such course of conduct.

We think the isues, if there are justiciable issues, can properly, and only properly, be made up in a suit that is commenced and prosecuted by California.

We also believe that the Congress should not, as I have said, be instrumental in, or lend its aid to, the commencement of this suit, which probably will have an adverse effect upon the upper basin States, and all of the States in the basin, as a matter of fact. We see no reason why the Congress should accept that responsibility.

I believe that that is all I have to say. I thank you, Mr. Chairman, for the opportunity.

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

STATEMENT OF ARVIN B. SHAW, JR., ASSISTANT ATTORNEY GENERAL OF THE STATE OF CALIFORNIA

Mr. SHAW. Mr. Chairman, Mr. Breitenstein referred particularly to the recitals of the resolution referring to various engineering, economic, and other facts.

To be perfectly honest about it, the drafters of this resolution were in a dilemma as to how far the recital should go. Apparently they made them too broad for Mr. Breitenstein's taste. It was felt that there might be, conceivably, facts which would be involved.

Mr. Breitenstein further remarked to you that there was no validity to the assumption that the upper basin would use its full apportionment of water, drawing from that the conclusion that there may be water flowing down the river for a long time to come.

Now, that is a suggestion which comes as a little surprise to us, because we have heard what the upper basin does intend to do with its full aportionment. But I want to point out its real effect.

It would mean, so long as there is unused upper basin water flowing down the river, no litigation could ever take place on the river, to determine rights. So long, therefore, the United States either cannot build new works on the lower river or, if it does so, it does so at its risk. So Congress, by that argument, is forced into the position of either putting an embargo on the lower river until it is determined whether the upper basin will use its water, or building works at a suggested cost, in the Central Arizona instance, of $738,000,000, in absolute ignorance for 1 year, 10 years, 30 years, or whatever length of time, as to whether that project has a water supply.

Mr. Breitenstein also remarked that the debates in Congress on the project act were interesting, but that they do not lend any weight or any light to the ascertainment of the intent of the framers of the compact, whose product was accepted by the legislatures of the States—and that is absolutely true, Mr. Chairman.

But, what we are considering, is a difficulty that arises out of interpretation of the project act, 6 years later than the compact. And as to those provisions of the project act, the debates in Congress certainly do give us a good deal of light of the subject.

It is important—and very important—to realize that the use of even the identical words, if the words happen to be identical, in the compact, and in the project act, do not mean that the ideas back of those words are identical, because the words were used by different parties, with 6 years' difference in time, and under different conditions and connotations.

Mr. Carson developed the idea that in the testimony in the second Arizona case, in 290 U. S., the Supreme Court of the United States held that the III (b) water was apportioned, and read to you paragraph 6 of the opinion.

I call the committee's attention to the sentence heading the paragraph immediately preceding paragraph 6, which reads:

There can be no claim that article III (b) is relevant in defining surplus waters under 4 (a) of the act—

meaning the project act—

for both Arizona and California apparently consider the waters under III (b) as apportioned.

I wish to complete the record, if the committee please, with this material in the brief in that case of the Metropolitan water district of southern California, the city of San Diego, and the county of San Diego, Calif., agencies.

This statement appears at page 9.

May I preface this by saying that the objectives of the bill in this case was the perpetuation of testimony, oral testimony, of persons who attended the compact conferences, for the purpose of showing that they meant something different by the language of article III (b) than article III (b) says. So in this brief of the metropolitan water district, and San Diego, there is the heading:

The real targets of Arizona's attack are the Boulder Canyon Project Act and the California Limitations Act.

Then, continuing:

A study of Arizona's brief brings out that the real nub of Arizona's complaint lies not in any language of the compact, which, according to her own allegations, clearly states what it was intended to state, but in the language of the Boulder Canyon Project Act and of the California Limitations Act, enacted respectively 6 and 7 years after signature of the compact. These acts, in identical language limit California to 4,400,000 acre-feet of the waters apportioned to the lower basin by paragraph (a) of article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact.

Article III (b) is not specifically mentioned in the two acts referred to. Arizona desires to lay a foundation for the contention that no part of the 1,000,000 acre-feet referred to in article III (b) is available for appropriation in California. We do not deem this an appropriate action or proceeding in which to determine the point thus suggested. The question before us now is whether oral testimony relating to conversations occurring in Santa Fe in 1922 could affect or be admitted in aid of the interpretation of the Boulder Canyon Project Act adopted in 1928 or the California Limitations Act, adopted in 1929. It appears from the bill that the claimed conversations were not known to any persons other than the witnesses named in the bill.

May I state, Mr. Chairman, that this seems to be the only reference in any of the briefs, on behalf of California in that case to anything relating to the proposition whether III (b) water is apportioned water.

We find no direct statement in the Arizona briefs on the subject, but we do find this: That the Arizona brief, on which Mr. Charles A. Carson, Jr., was of counsel, as I was of counsel on the California brief, repeatedly and carefully uses, with respect to III (b) the word "permitted" instead of "apportioned."

For example, on page 9:

The 1,000,000 acre-feet of water permitted to the lower basin by article III (b) of the Colorado River compact—

and similar statements appear on page 9, page 11, twice on page 11, and page 13, page 14, again on 14, 15, 16, twice on 17, 19, 25, and 26 of the Arizona brief, being, in all, 17 references of that sort—and no reference whatever as to any claim on the part of Arizona that the III (b) water was apportioned.

The conclusion is submitted to you that the Supreme Court in this sentence which I have read from its opinion, and which was immaterial to its decision, by a dictum and nothing else, mistook the effect of the California and Arizona briefs.

The Court does say, in a footnote to the sentence which I read from the opinion:

The Secretary of Interior in his brief seems to be of the opinion that waters under article III (b) might be surplus waters under 4 (a) of the Act—

and the Secretary of the Interior's brief does have a word to say on that subject, which I desire to place in the record, referring to section 4 (a) of the project act:

In the latter section there may be an ambiguity, it is not wholly clear whether the "excess or surplus waters unapportioned by said compact" and of which California's taking must not exceed one-half (sec. 4 (a), first paragraph) are surplus waters, after article III (a) alone or after article III (a) plus article III (b). The III (b) waters, as such, are nowhere directly referred to in the act.

Under the circumstances, we think it is wholly without foundation to say that the Court in this case held that the III (b) water was apportioned water.

I have two notes here now. Mr. Carson states very earnestly that there is no intention on Arizona's part to back out of the compact. I take that statement to be entirely sincere on his part and on Senator McFarland's part. Unfortunately, they are not going to be in control of the government of Arizona permanently, and we do not know what the State of Arizona may conclude to be to its advantage after the Supreme Court has acted in this controversy.

I call your attention, Mr. Chairman, to the allegation in the bill in the case of the *United States* v. *Arizona*, decided in 1934, in which the United States, in its bill of complaint, alleges:

> By the act of June 20, 1910 (ch. 310, 36 Stat. 557, 570), the Congress authorized the admission of Arizona as a State, providing therein, among other things:
> "Seventh. That there be and are reserved to the United States with full acquiescence of the State, all rights and powers for the carrying out of the provisions by the United States of the act of Congress entitled "An act appropriating the receipts from the sale and disposal of public lands in certain States and Territories to the construction of irrigation works for the reclamation of arid lands," approved June 17, 1902, and acts amendatory thereof or supplementary thereto, to the same extent as if said State had remained a Territory."

That was a reservation with respect to the effects of the rights of the United States to operate under the reclamation law.

In that case, Mr. Chairman, the State of Arizona, in its return to the bill, makes this allegation at page 24:

> Pursuant to the provisions of the enabling act, Arizona incorporated paragraph 7 of section 20 of that act—

which is the one I have referred to—

> in its constitution, as section 10 of article 20. However, on June 7, 1927, an amendment to the Arizona Constitution repealing that clause became effective.

It thus appears, Mr. Chairman, that in the enabling act the United States required the State to be subject to the reclamation withdrawals, and the State thereafter chose to repeal the clause of the Constituion of Arizona, as referred to.

That is a very surprising illustration of the fact that no public officer can control his successors, and it leads us to have a little bit of concern about this basic question of whether Arizona is a member of the compact or not.

Mrs. BUSH (Mrs. Nellie T. Bush, Colorado Basin States Committee, Parker, Ariz.). I wonder if Mr. Shaw questions Arizona's right to be a member of the Union? [Laughter.]

Mr. SHAW. Shall I give you an opinion?

Senator MILLIKIN. Is there any further business before us?

Mr. SHAW. Only one remark, if you please, Mr. Chairman.

Mr. Wehrli raised the question that the Congress of the United States should not impose upon these States a detriment consisting of the commencement of an action. It appears to us from the Secretary's reports on the comprehensive report on the Colorado River, that we are in this fix: That the situation with regard to the uncertainty of water rights is a condition in which we find ourselves, and not a thing which is imposed by anybody on anybody. The question is, What is the best, the fairest, and the quickest way to get out of the fix and to dispose of the matter?

Mr. Ely has one remark that he would like to add.

STATEMENT OF NORTHCUTT ELY, SPECIAL COUNSEL TO THE COLORADO RIVER BOARD OF CALIFORNIA, WASHINGTON, D. C.

Mr. ELY. Mr. Chairman, I was interested in your inquiry as to the character and support for the 300,000 acre-feet for Nevada, and I took the liberty of interposing at that point to say that it was a question of chain of title, and that the same problem arose with respect to Arizona's 2,800,000 acre-feet.

Arizona undertakes to demonstrate the availability of 2,800,000 acre-feet of III (a) water for herself and 300,000 acre-feet of III (a) water for Nevada, all of the main stream, by a process of subtraction.

She starts from the assumption, as Mr. Carson indicated, that there is available in the main stream 75,000,000 acre-feet of III (a) water; which, of course, is all of the III (a) water.

That presupposes that the 75,000,000 acre-feet of water delivered by the upper basin pursuant to its guaranty under article III (d) is identified with the 7,500,000 acre-feet per annum referred to in article III (a).

And so, by subtracting 4,400,000 acre-feet for California, under its Limitation Act, from the assumed 7,500,000 acre-feet of III (a) water supposed to be available in the main stream, they arrive at the residue, as you referred to it, of 3,100,000 acre-feet in the main stream.

Now, if it should happen that the quantity of III (a) water available in the main stream is less than 7,500,000 acre-feet, of course, the residue is less by identically the same amount.

In other words, if the usage on the Gila River should be classified as accountable under article III (a) of the compact, then, whether the Gila uses are valued at 2,400,000 acre-feet under our theory, or some lesser figure, under Arizona's, or even as low as 1,000,000 acre-feet, to take a simple figure for illustration, then there is not 7,500,000 acre-feet of III (a) water available in the main stream for anybody.

If the III (a) water on the Gila is 1,000,000, the residue of III (a) water available on the main stream is 6,500,000 acre-feet (again to take a figure easy to refer to), with the result that by subtracting 4,400,000 acre-feet from 6,500,000, and not 7,500,000, you arrive at a residue not of 3,100,000, but of 2,100,000.

In other words, the process of arithmetical subtraction through which Arizona goes to demonstrate the existence for herself of main stream III (a) water in the amount of 2,800,000 acre-feet, presupposes that the three lower-basin States are in agreement that there is 7,500,000 acre-feet of III (a) water to start with in the main stream, but we are not. There is no chain of title based on any agreement, et al., which leads to a residue of 2,800,000 acre-feet of III (a) water in the main stream for Arizona.

You will recall, I am sure, the statement of Judge Sloan, included in my opening, telling how the figure of 7,500,000 acre-feet of III (a) water was arrived at, and he says that it presupposes the requirements on the main stream to be 5,100,000, and upon the Gila, 2,350,000 acre-feet. I am inserting that here, for ready reference:

> The known future requirements of the lower basin from the Colorado River proper were estimated at 5,100,000 acre-feet. To this, when the total possible consumptive use of 2,350,000 acre-feet from the Gila and its tributaries are added, gives a total of 7,450,000 acre-feet. In addition to this, upon the insistence of Mr. Norviel, 1,000,000 acre-feet was added as a margin of safety, bringing the total allotment for the lower basin up to 8,500,000 acre-feet.

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In other words, by his arithmetic, the starting point on the main stream is not 7,500,000 acre-feet, but something on the order of 5,100,000 acre-feet.

Whether his figure is correct, or some other, if you start with any figure other than 7,500,000 acre-feet on the main stream, Arizona's arithmetic breaks completely down.

Now, of course, the uses on the Gila River, long perfected, must be accounted for under article III (a) of the compact, whether you value them at 2,400,000 as we do, or at 1,275,000 as Arizona does, or even at 1,000,000, the figure I picked for illustration, because article III (a) of the Colorado River compact says specifically, after referring to the apportionment in perpetuity for each basin "which shall include all water necessary for the supply of any rights which may now exist."

The uses on the Gila, whatever the value of them may have been, were long in existence prior to 1922. They are therefore classifiable under article III (a), not III (b). For ready reference may I insert here Mr. Acheson's remarks?

(The matter referred to is as follows:)

"CONSUMPTIVE USE" REFERENCES IN COLORADO RIVER LITIGATION TO (A) THE QUANTITY OF CONSUMPTIVE USES IN ARIZONA, (B) THE CLASSIFICATION OF USES ON THE GILA RIVER UNDER ARTICLE III (A) OF THE COLORADO RIVER COMPACT

A. AS TO THE QUANTITY OF CONSUMPTIVE USES IN ARIZONA

I

In *Arizona* v. *California* (283 U. S. 423), Arizona's bill of complaint (art. VII) alleged (p. 7):

"The total average flow of the Colorado River and its tributaries in the United States is 18,000,000 acre-feet of water annually. Of said total flow, 9,000,000 acre-feet were appropriated and put to beneficial use in the United States prior to June 25, 1929, and said appropriated water has ever since been and is now being used and consumed. Of said appropriated water, 2,500,000 acre-feet are diverted annually from the Colorado River above Lee Ferry and from tributaries entering said river above Lee Ferry, and are used and consumed in Utah, New Mexico, Colorado, and Wyoming, and 6,500,000 acre-feet are diverted annually from said river below Lee Ferry, and from tributaries entering said river below Lee Ferry, and are used and consumed in Arizona, California, Nevada, and New Mexico. Of the appropriated water so diverted below Lee Ferry, 3,500,000 acre-feet are annually diverted, used, and consumed in Arizona. *Of the appropriated water so diverted, used, and consumed in Arizona, 2,900,000 acre-feet are diverted from the Gila River and its tributaries.*" [Italics supplied.]

In *Arizona* v. *California* (283 U. S. 423), the Court's opinion said (p. 460):

"It is conceded that the continued use of the 3,500,000 acre-feet of water already appropriated in Arizona is not now threatened. And there is no allegation that at the present time the enjoyment of these rights is being interfered with in any way."

In *Arizona* v. *California* (298 U. S. 558), the opinion of the Court stated (p. 570):

"The defendant States contend, and Arizona does not deny, that the natural dependable flow of the river is already overappropriated, and it does not appear that without the storage of the impounded water any substantial amount of water would be available for appropriation."

II

In *Arizona* v. *California* (292 U. S. 341), Arizona's brief said (p. 11):

"* * * the framers of the Compact intended that the 1,000,000 acre-feet per annum *permitted* to the lower basin by article III (b) was not in the main stream at all, but was in the tributaries existing in the lower basin * * *."

B. AS TO WHETHER THE USES ON THE GILA RIVER, BEING "PERFECTED RIGHTS," ARE ACCOUNTABLE UNDER ARTICLE III (A) OF THE COLORADO RIVER COMPACT

I

In *Arizona* v. *California* (283 U. S. 423), Arizona's bill of complaint (art. VII) alleged (p. 7):

"Of the total flow of the Colorado River and its tributaries in the United States, 9,000,000 acre-feet were on June 25, 1929, ever since have been, and are now wholly unappropriated. All of said unappropriated water flows in Arizona and on the boundary thereof; all of it is needed and can be put to beneficial use in Arizona; and all of it is subject to appropriation under the laws of Arizona. Of said unappropriated water, 8,000,000 acre-feet are flowing in the main stream of the Colorado River, and 1,000,000 acre-feet in tributaries entering said river between Lee Ferry and Laguna Dam. *All of the water of the Gila River and its tributaries was appropriated and put to beneficial use in Arizona and New Mexico prior to June 25, 1929.* There was not on said date, nor has there since been, nor is there now, any unappropriated water in the Gila River or any of its tributaries." [Italics supplied.]

Article XIV of the bill of complaint alleged (p. 17):

"(3) Said compact defines the term 'Colorado River system' so as to include therein the Gila River and its tributaries, of which the total flow, aggregating 3,000,000 acre-feet of water annually, was appropriated and put to beneficial use prior to June 25, 1929. The State of New Mexico has but a slight interest, and the States of California, Nevada, Utah, Colorado, and Wyoming have no interest whatever in said water. Since said compact provides that the water apportioned thereby shall include all water necessary to supply existing rights, the effect of including the Gila River and its tributaries as a part of said system would be to reduce by 3,000,000 acre-feet annually the quantity of water now subject to appropriation in Arizona."

Arizona's brief stated (p. 16):

"In order that there might be no confusion as to the meaning of the term 'to appropriate water,' as used in the bill of complaint, it was defined therein as follows (bill, 8):

" 'To "appropriate" water means to take and divert a specified quantity thereof and put it to beneficial use in accordance with the laws of the State where such water is found, and, by so doing, to acquire, under said laws, a vested right to take and divert from the same source, and to use and consume, the same quantity of water annually forever, subject only to the rights of prior appropriators.'

"Used in this sense, the bill alleges (bill, 7–8) that prior to June 25, 1929, there had been appropriated in Arizona, 3,500,000 acre-feet of water from the Colorado River and its tributaries below Lee Ferry, of which 2,900,000 acre-feet had been appropriated from the Gila River."

The Court's opinion said (283 U. S. 423, 463, note 15):

"The allegation that the inclusion in the compact of the waters of the Gila River (all of which are said to have been appropriated in Arizona) operates to reduce the amount of water which may be taken by that State, can likewise be disregarded. Not being bound by the compact, Arizona has not assented to this inclusion of the Gila appropriations in the allotment to the lower basin; and there is no allegation that Wilbur or any of the defendant States are interfering with perfected rights to the waters of that river, which enters the Colorado 286 miles below Black Canyon."

As to the lack of identity between the 75,000,000 acre-feet under III (d) and the 7,500,000 acre-feet under roman III (a) I also refer to the brief of Mr. Acheson in the first Supreme Court case, in which he makes it very clear that the 7,500,000 acre-feet—

includes all beneficial consumptive use in perpetuity, which may be made from the whole river system, and is not merely an apportionment of such uses in main stream water flowing at Lee Ferry—

and—

the agreement not to deplete the flow at Lee Ferry below the specified amount does not mean and cannot under the plain words of the compact be construed to mean that the guaranteed flow is apportionate to the lower basin or may be appropriated there. As to this, at least, there can be no shadow of doubt.

And he is entirely correct about it. For ready reference the full text of his statement is:

REFERENCES IN COLORADO RIVER LITIGATION TO THE QUESTION OF WHETHER THERE IS ANY RELATIONSHIP BETWEEN THE 75,000,000 ACRE-FEET REFERRED TO IN ARTICLE III (D) OF THE COLORADO RIVER COMPACT AND THE 7,500,000 APPORTIONED TO THE LOWER BASIN IN ARTICLE III (A) OF THE COMPACT

In *Arizona* v. *California* (283 U. S. 423), Arizona's brief (p. 32) stated:

"The provision in paragraph (d) of article III that the upper basin States will not cause the flow of the river to be depleted below 75,000,000 acre-feet over 10-year periods has, as the Colorado brief, page 41, correctly states, no bearing on the amount of the apportionment to the lower basin. This 75,000,000 acre-feet is not apportioned to the lower basin. It may not be appropriated in the lower basin. Only so much of it may be appropriated as together with existing and future appropriations of water in or from tributaries entering the river below Lee Ferry will total 7,500,000 acre-feet per year. The 75,000,000 acre-feet includes all surplus waters which under paragraph (c) must first bear any Mexican burden, which may not be appropriated, and which are subject to apportionment after 1963. It is fundamental to an understanding of the compact that the annual beneficial consumptive use in perpetuity of 7,500,000 acre-feet of water apportioned by it to the lower basin includes all beneficial consumptive use in perpetuity which may be made from the whole river system, and is not merely an apportionment of such uses in main stream water flowing at Lee Ferry. The agreement not to deplete the flow at Lee Ferry below the specified amount does not mean, and cannot under the plain words of the compact be construed to mean, that the guaranteed flow is apportioned to the lower basin or may be appropriated there. As to this, at least, there can be no shadow of doubt."

The statement referred to by Arizona, in the brief of Colorado, New Mexico, and Nevada, was (p. 41):

"The balance of water supply between the two basins is preserved by a guaranty by the upper basin States that they will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of 10 consecutive years reckoned in continuing progressive series. This guaranty has no direct relation to the aggregate allocation of 8,500,000 acre-feet per annum to the lower basin which is to be supplied out of that part of the whole Colorado River system within the lower basin."

In short, Mr. Chairman, as we said at the beginning, Arizona must win upon all three of the issues we presented to you, namely, beneficial use versus depletion, classification of III (b) water, and the issue of reservoir losses, in order to demonstrate the availability of water for the central Arizona project.

Senator MILLIKIN. Are there any further comments?

Mr. BREITENSTEIN. Mr. Chairman, may I just make a brief statement in order to clear up the record? I think the record should clearly indicate that the upper basin States are not waiving any right to the 7½ million feet allowed to them annually under section III (a). The point is merely this: The Secretary of the Interior, in his letter, says, "If you assume full development, then you have certain things." In other words, to have a justiciable controversy, you have to make an assumption of full development in the upper basin.

Now, we are realistic enough to know that you have to build mainstream reservoirs and have to build some large projects before we can do that. So the statement of the Secretary boils down to the fact that you must base your lawsuit upon an assumption. So then you have a hypothetical case involving an academic issue.

Mr. HOWARD. May I ask Mr. Breitenstein a question?

Senator MILLIKIN. Yes.

Mr. HOWARD. Mr. Breitenstein, do you think that anyone in the lower basin could establish any firm right to any of your 7,500,000 that would justify a major project in the lower basin?

Mr. BREITENSTEIN. No, Mr. Howard; I do not.

Mr. CARSON. Well, Mr. Chairman, with respect to those kinds of remarks, we realize, in Arizona, that we must be able to show the Congress, under S. 1175, that there is an available supply for the central Arizona project. And we think we have that pretty well in the record. We think when the Bureau report finally comes here it will be established.

But, now, I have not wanted to argue the central Arizona project in this case. This is a matter of an adjudication suit, of a general adjudication suit, and, in my judgment, it cannot properly be done.

But I have no hesitancy in accepting for Arizona the burden for establishing to the satisfaction of the Congress that there is an available water supply for the central Arizona project. And I think Mr. Howard knows that we do not have to try to take any part of upper basin water to so establish it.

Senator MILLIKIN. Are there any further comments? Senator O'Mahoney?

Senator O'MAHONEY. Mr. Chairman, I regret exceedingly that meetings of other committees, the Appropriations Committee and the Joint Committee on the Economic Report, have prevented my attendance at all of the meetings here. I would, however, like to address one question to the California delegation, if I may. Perhaps it has already been covered in testimony that has been given. But I wondered if it would be agreeable to some spokesmen for California to state to the committee what adjudication it would hope to get from the Supreme Court if such a suit as is here directed were tried. What would you be shooting for?

Mr. SHAW. If I may answer the question, I believe the discussions which occurred in the Senator's absence made that clear. The problem is a determination of principles, of rules, of rules of action, of interpretations of laws, by which we can know how those laws apply to us and what they mean. With that, as we look upon it, the important hurdles are past. It is not necessary to define our rights in terms of precise acre-feet, acreages and so on. It is essential that we know what the rules are by which the game is to be played. Then we feel the engineers can readily do the arithmetic and find out from day to day and year to year what there is available for each of the States.

As a matter of fact we have felt that there has been no pronounced disagreement among the engineers in the basin as to what the available water supplies and the water requirements are. The questions are, Who gets the water? What rights are there? What claims must be observed?

Does that answer the question, sir?

Senator O'MAHONEY. Well, not as I had hoped it might be answered, I may say. I was wondering just what sort of a decree you would desire to obtain from the Court. Now, your answer is that you would not expect one to be spelled out in acre-feet or in exact terms, but in generalities. Perhaps one of our difficulties here is that we seem to be unable to understand what those who wrote the Colorado River Compact and the Boulder Canyon Project Act struggled mentally to make absolutely clear.

Mr. HOWARD. May I supplement Mr. Shaw's answer?

Looking at it from my standpoint, Senator, I had hoped to secure an answer to the question of whether or not California, by the Limitation Act, is excluded from any participation in the use of the water referred to in article III (b) of the compact. I had hoped to learn from the decision of the court whether the term "beneficial consumptive use" means diversions less returns to the river, measured at the site of the use, or whether that term is to be construed as meaning main-stream depletion, which has a good many ramifications that I will not take time to go into now.

I had also hoped to learn whether or not the limitation on California to the use of 4,400,000 acre-feet of III (a) water is a net limitation or is subject to further reduction by reason of evaporation losses on reservoirs of the main stream. If those three questions are answered, as we would like to have them answered, we can quiet our title to the water referred to in the California contracts. If, on the other hand, they answered as Arizona would have them answered, our contracts are subject to failure in a marked degree; to a point where we would have less water than we would have had from the unregulated stream.

Senator O'MAHONEY. Now, do you think, from the evidence, the testimony which has been submitted here at this hearing, that there is additional material that ought to be submitted and should be submitted to the court if the resolution were enacted, relating to this definition of beneficial consumptive use and depletion?

Mr. HOWARD. Do you mean factual material?

Senator O'MAHONEY. Yes. In other words, have we covered the subject at this hearing?

Mr. HOWARD. Of course, not as exhaustively as the subject would be presented to the court, but I think the ground has been covered here. If we were to present this to a court, it would be a much more extended hearing than a congressional committee has time for. But I think we have covered the substance of the field that we would cover in court.

Senator O'MAHONEY. It probably would be more extensive than the court would have time for, do you not think?

Mr. HOWARD. That is conceivably true, sir.

Senator O'MAHONEY. You would probably have a master appointed.

Mr. HOWARD. I believe firmly that if we get into court on this thing, and all parties cooperate, we could agree upon a statement of facts. I realize that some of the others differ on this. But if we were all trying to expedite a decision and arrive at a conclusion, it would seem possible to me to agree on the basic water supply figures.

As a matter of fact, there is no great disagreement among the parties as to the basic figures. We all go back to Bureau of Reclamation and United States Geological Survey figures. It is the way in which water is to be available to the several States, as a result of contractual interpretations.

Of course, I am assuming that no one is stalling, no one is trying to delay the matter, and we are cooperating to secure a judicial decision. I see no obstacle at all to a statement of facts that would obviate the necessity for extended testimony. Even if it would not be decided on the pleading, that is; and it might very well be.

Senator O'MAHONEY. With respect to the evaporation issue, how much detailed evidence would have to be submitted.

Mr. HOWARD. I think we could agree on a figure as to the amount of evaporation. Of course, that is something that has to be estimated, and it would vary with the varying conditions, the various elevations and exposed surfaces and other factors. But the Bureau of Reclamation has figures on that, and so far as I know our engineers do not quarrel with them. And I have not heard the engineers for the opposition quarrel with them.

Mr. SHAW. In our view it is utterly immaterial what the reservoir losses are. The question is, Who is bound to stand them?

If I may put it as simply as that, we do not care what the reservoir losses are at Boulder. Whose loss is it? That is the essential thing. And we feel that the three major questions we have presented are the questions on which water supply determinations can be made when you know the answers. If you do not know the answers, it is no use finding out the detailed facts. They do not help you any.

Senator O'MAHONEY. Mr. Breitenstein?

Mr. BREITENSTEIN. In the North Platte case we have the same basic data as he referred to: the Bureau of Reclamation and the United States Geological Survey. And yet the engineers for the four litigants there spent 4 years testifying to the master as to what was the meaning of that data. And it will be much worse in the Colorado River case than it was in the North Platte case.

Mr. SHAW. We do not think it would be involved at all.

Senator O'MAHONEY. I do not ask anybody's agreement as to this statement I am about to make, but I am frank to say that with respect to these complex water suits it has always seemed to me that it would be difficult to find a better forum in which to reach such a decision than the legislative forum, where the whole thing transpires in the open, in the public view. When you take a water case to court, it is a pure fiction, it seems to me, that the issues are being submitted to the judges. The issues are being submitted to the master whom the judges may happen to select. He may be a competent master. He may be an incompetent master. The complex issues then are resolved, largely in secret, after prolonged hearings, and when it is all over, I wonder whether the result has been in any degree better than that which could be obtained here in an open hearing before a congressional committee.

Mr. SHAW. I think the answer, Senator, is that the questions which we have just been discussing are judicial questions, and the one agency is competent to determine such questions and the other agency is not.

Senator O'MAHONEY. Well, of course, this is a legislative body; otherwise; a law-making body. Perhaps the law-making body is competent to fix the final law. And if it were capable of writing it in language which is not subject to misunderstanding, then we would have an ideal solution.

Mr. SHAW. The trouble is, of course, that the original documents were not written so that people could be certain what they meant, because they were the product of compromise, of negotiation over years and years, and everybody wanted to go home with a victory.

Senator O'MAHONEY. That suggests to my mind the additional question, Can you hope to settle this in terms of a victory upon the part of any interest that is involved?

Mr. SHAW. No. What we expect to ascertain from the Court is the truth.

Senator O'MAHONEY. Must it ultimately be settled by compromise? If you do not compromise, it would be compromised by the master, if it goes to court; or it will be compromised by the committee if it stays here.

Mr. SHAW. That may be a realistic view, Senator, but we still have some confidence that the courts proceed to hew to the line and determine legal questions as they are proposed, not as the Court thinks might be a middle ground of compromise.

Mr. ELY. Are we in agreement, if I may ask, that this is a judicial question; that we are dealing with vested rights?

Senator O'MAHONEY. That is a question which the committee will have to determine after considering the whole record. I do not desire to give an answer to that question this afternoon, Mr. Ely, having just prefaced my remarks with an apology for not having been able to listen to all of the testimony.

Mr. ELY. Without attempting to commit you, it seems to me, committing myself, that if we are dealing with a judicial question it is entirely improper and unworkable to attempt to resolve it in a political arena. And if I may speak candidly to gentlemen for whom I have the highest respect, not only because of their office but personally, can the members of this committee from the upper-basin States whose constituencies are committed to one side of this issue feel that they can act in an impartial judicial capacity?

Senator MILLIKIN. The Senate assumed so when it referred the business here.

Mr. ELY. I have great confidence that you can, but you are under a very difficult dual responsibility.

Senator MILLIKIN. A statement submitted by Mr. Sidney Kartus, of Phoenix, Ariz., and other miscellaneous material will be admitted to the record at this point.

STATEMENT OF SIDNEY KARTUS, OF PHOENIX, ARIZ.

Mr. Chairman and members of the subcommittee, my name is Sidney Kartus, of Phoenix, Ariz.

My purpose in submitting this statement is to bring to light such information as I believe will be helpful to this subcommittee in arriving at a just conclusion.

Senate Joint Resolution 145, which is the subject of this hearing, declares that development of projects for the use of water in the Lower Colorado River Basin is being hampered by long-standing controversies among the States of the basin as to the meaning and effect of the Colorado River compact the Boulder Canyon Project Act, the California Limitation Act (Stats. Cal. 1929, ch. 16), and various contracts executed by the Secretary of the Interior with States, public agencies, and others in the lower basin of the Colorado River, and other documents, and as to various engineering, economic, and other facts. It resolves that the United States Attorney General be directed to commence in the Supreme Court of the United States, against the States of Arizona, California, Nevada, New Mexico, and Utah, and other parties as necessary to a determination, a suit or action in the nature of an interpleader, and therein require the parties to assert and have determined their claims and rights to the use of waters of the Colorado River system available for use in the lower Colorado River Basin.

I would be ignorant, indeed, to say that the several States do not have the right to ask the Supreme Court to adjudicate differences that arise as to the rights of the States and their people to the use of waters of interstate streams. But that right does not extend to the instigation of suits which serve no good purpose and constitute dilatory action by those who have too long taken an undue advantage of their neighbors and who have already far more of the water than they are entitled to use. Such a suit is that proposed by Senate Joint Resolution 145.

It is fair to say that the past treatment of the people of Arizona by the great State of California, despite its overwhelming political power in relation to the State of Arizona, has been such that it can neither feel secure nor maintain a settled or amicable relationship with Arizona or within the basin of the Colorado

River. Far from improving this relationship, the Court action proposed by Senate Joint Resolution 145, if based on the compact, is one which could never protect Arizona or lead to a decree fair to parties who would be joined and conducive to maximum beneficial development of the entire river system for all the people in this arid and semiarid region who fundamentally subsist by and on the use of its waters.

It is true that California has thus far worked its will upon Arizona. But when it becomes obvious, as it now has to all, that her will does not stop short of the deliberate destruction of a sister State in violation of law and the right, then we may little wonder that California with all of its political power now finds itself calling for protection against those whom she has never been willing to see rightfully protected and who would do no harm to California's equitable rights.

As the organizer of the disastrous Santa Fe Colorado River compact California is now prepared to cast aside what she never should have put forward in the first place. That State has received virtually all of the benefits of the compact and none of its injuries. She is now perfectly willing to take everything she has got under the compact and can get outside of it. California with Senate Joint Resolution 145 now comes in for a suit when that State is the only State in the basin which has received far more water from the river than it can use. She seeks to make Arizona party to a suit which would be against Arizona's interests and would infringe upon water rights and filings of Arizona, particularly the Colter-Kartus water filings for the State and people of Arizona for which I am trustee and which will be described in more detail below.

At this point I desire to insert in the record the capacities in which I am making this statement. Following that I desire to make some detailed comments on Senate Joint Resolution 145.

I am a member in my second term of the Arizona House of Representatives, in which I represent Maricopa County Legislative District No. 6, including an agricultural area directly affected by this bill. I am a member of the house committee on agriculture and irrigation. I have been chairman of a special Colorado River committee of the house in the seventeenth and in the eighteenth, or current, legislature.

I was a member of the Colorado River Drainage Basin Committee of the President Franklin D. Roosevelt's National Resources Committee. I served as assistant secretary of the Arizona Colorado River Commission and in a water expert capacity for that body under the administration of Gov. R. C. Stanford, now chief justice of the Arizona State Supreme Court.

I am president of the State-wide, patriotic, nonprofit, nonpartisan Arizona Highline Reclamation Association, founded in 1923, which is the original organization formed for the purpose of diverting Colorado River waters from Bridge and Glen Canyon Dam sites by gravity canal or by the Verde tunnel into central Arizona to develop several million acres and electrical horsepower.

I also am trustee for the Colter filings for and on behalf of the State of Arizona and water users under said projects. These filings were made beginning September 20, 1923, and thereafter, by the late Fred T. Colter, and supplemental filings thereto have been made by myself as his successor after his death. These are the prior and superior reservoir storage filings on the waters and power of the Colorado River and its tributaries and include some 40 dam, canal, and reservoir sites in the river system. The key and major units are the Glen Canyon storage and diversion dam, the Bridge Canyon storage and diversion dam, the Arizona all-gravity highline canal, the Marble Gorge storage and diversion dam, and the Verde tunnel, with the dams between. All are to be developed as one unit with irrigation and power combined and irrigation superior, and the power revenues to pay for the irrigation, municipal, domestic, multiple uses of the water. The waters and power are attached to the land to develop 6,000,000 acres and 5,000,000 electrical horsepower, and the power revenue will more than overpay the entire cost. The project conforms to maximum reuse of waters within the river system beginning in the upper reaches as all conservation principles require.

Due diligence has been maintained to these water rights and filings which are vested in landholders thereunder. The preorganization Glen-Bridge-Verde-Highline reclamation district, founded in 1926, and comprising lands under this project, is being completed, and when perfected will issue tax-exempt municipal bonds to finance construction of these projects, and can make contracts with the Secretary of the Interior. I am president of this landholders' district organization. All of this is intended, if possible, in cooperation with the Interior Department. A list of said filings is attached to and made part of this statement.

Application to the Federal Public Works Administration for a $350,000,000 loan to construct these projects was made in 1933 and renewed in 1935 by Colter and

myself, who succeeded him also as president to the district and the association upon his death in 1944.

I have been duly authorized by the above organizations to make this statement which they have endorsed.

These organizations, landholders, members, and myself as such trustee and filee on waters of the Colorado River under the laws of Arizona are directly affected and threatened by Senate Joint Resolution 145, which seeks to involve the State of Arizona in an interstate water suit over these waters.

There have been four previous suits in the Supreme Court of the United States involving the State of Arizona, the State of California, and the United States or its officials with regard to the waters of this stream.

In the first suit, *Arizona* v. *California, et al.* (283 U. S. 423), decided May 18, 1931, the High Court ruled that Arizona was not bound by the Colorado River compact. The Arizona bill of complaint asserted that more than 2,000,000 acres of land in Arizona not then irrigated—and still not irrigated, we might add at this time—was susceptible of irrigation from the Colorado River.

The bill was dismissed without prejudice to an application for relief in case the water stored by Boulder Dam was used in such a way as to interfere with the enjoyment by Arizona or those claiming under it of any rights already perfected or with the right of Arizona to make additional legal appropriations and to enjoy the same (p. 464).

In the second unit, *Arizona* v. *California et al.* (292 U. S. 341), decided May 21, 1934, the High Court had a motion before it for leave to file bill to perpetuate testimony interpreting the Santa Fe compact. The points at issue were the same ones that have been vainly debated before this same subcommittee in the hearings on S. 1175 as to the meaning of the compact, by Mr. Charles A. Carson, Jr., for Arizona, and by others for California, and the Court refused to consider these contentions as material and dismissed the cause. Mr. Carson represented Arizona in that case in 1934 as a special assistant attorney general. His arguments failed to impress the Court which denied his motion. Had he prevailed it would have been but an empty victory since Arizona already uses more water than the small allotment under the compact for which he was contending then as he is now. What California would gain for herself or anyone else by trying this inconsequential case again through Senate Joint Resolution 145 does not appear to be understandable ,and marks this as purely a dilatory step which would not get at the heart of this dispute in the interest of a binding and just settlement between the two States. For California to attempt to delay authorization by the Congress of the desperately needed works to bring Colorado River water into central Arizona by a request for authorization of a suit that has been tried already and on a point of little significance is an act for which she cannot be commended and in which should meet a firm rejection by this subcommittee.

I oppose this resolution though on different grounds than will be advanced at this hearing by Mr. Carson, whose reluctance to face again a tribunal which has given scant comfort to his logic may be understandable if not a compliment to his ability as an attorney. I believe there are reasons more compelling and irresistible than his arguments and which might cause this subcommittee to think well before giving any encouragement to Senate Joint Resolution 145, which is far more unfair to the people of Arizona than Mr. Carson will be able to show in his testimony as counsel for the Inter-State Stream Commission of Arizona. That body is following a policy of supplemental water only for Arizona from the Colorado River, in complete disregard of our water rights and filings for a great expansion of our irrigation as well. It will be demonstrated in this statement that, of the three complaints filed by Arizona in this matter, the first and the third complaints set forth that great new areas of land can be irrigated in Arizona from the Colorado River, but the second complaint, by Mr. Carson, sought to interpret the Santa Fe compact. His whole thesis of the protection of Arizona's rights is based on the compact, and places Arizona at a disadvantage by ignoring Arizona's water rights and filings and depending solely on what Congress may do with Senate Joint Resolution 145.

The third suit, *United States* v. *Arizona* (295 U. S. 174), was decided April 29, 1935, in favor of Arizona. The United States sought to enjoin the State of Arizona from interfering with construction by the Federal Government of Parker Dam across the Colorado River. It failed and the complaint was dismissed. In the decision the Supreme Court made this important point: "Her [Arizona's] jurisdiction in respect of the appropriation, use, and distribution of an equitable share of the waters flowing therein [the Colorado River] is unaffected by the [Santa Fe] compact or Federal reclamation law."

This decision is highly important and crystal clear, and should be a deciding factor in your deliberations. It makes clear, among other things, that when Arizona or any other basin State elects to go out of the compact, that instrument would then cease to affect that particular State. Unlike binding obligations, interstate water compacts are valid only as long as they appear advantageous to the legislatures of States which have ratified them or can be upheld in the Supreme Court. The high court has already ruled that an interstate compact is not a Federal statute. Since it is outside the Federal realm, Federal enforcement is out of the question. In addition, the compact is impotent as against rights acquired prior to its ratification, such as the Colter-Kartus filings, and we are satisfied that it is unconstitutional under all other circumstances.

The fourth and last case, *Arizona v. California et al.* (298 U. S. 558), was decided May 25, 1936, by the Supreme Court. No new litigation has since been filed in this matter. In this last case Arizona prayed for a partition of the right to appropriate in future waters which it alleged, erroneously we should say at this point, were as yet not appropriated.

The petition to file this bill, like the previous two filed against California by Arizona, was denied. In its decision the court held: "Arizona by her proposed bill of complaint asserts no right arising from her own appropriation of waters of the Colorado River. No infringement of her rights acquired by appropriation is alleged, and no relief for their protection is prayed. While it is alleged that definite plans have been made for the irrigation of 1,000,000 acres of unirrigated land in Arizona and right to share in the water for that purpose is asserted, it does not appear that any initial step toward appropriation of water for such a project has been taken" (p. 566).

This suit was filed without basis of fact entering into it. For the initial step had been taken. It was taken, and in the manner required by law to initiate an appropriation of water, and all requirements of law have been met subsequently in keeping up these initiations and filings to date with due and reasonable diligence. That step was the Colter-Kartus filings by which the flood-waters of the Colorado River and its tributaries were appropriated beginning in 1923 and thereafter before the Arizona State water commissioner and the Federal Power Commission.

Although Arizona has lost time by these misguided actions of her attorneys, she has lost no rights because of their failure to bring a proper suit before the United States Supreme Court based on the State and western water law of prior appropriation and beneficial use.

Sensing no doubt that Arizona had lost this fourth case through inadequate pleading by her attorneys rather than through any lack of a just cause, the Court went out of its way, in denying the petition for filing the bill of complaint, to rule as follows: "Arizona will be free to assert such rights as she may have acquired, whether under the Boulder Canyon Project Act and California's undertaking to restrict her own use of water or otherwise, and to challenge, in any appropriate judicial proceeding, any act of the Secretary of the Interior or others, either States or individuals, injurious to it and in excess of their lawful authority" (p. 572).

Obviously, Arizona can be protected only by a suit in which her rights are asserted, which must be based on the appropriation and beneficial-use doctrine, and must plead all vested and inchoate initiations, filings, and rights of and for the State of Arizona and those claiming under it. The compact cannot preclude rights secured under the Colter-Kartus filings. The suit proposed by Senate Joint Resolution 145 would not make for the asserting of these rights, nor for a general adjudication suit quieting titles to the claims of Arizona and the other basin States, and any decision under it would be empty indeed if and when Arizona or any other State rescinds the compact. It calls merely for the same type of suit which the Court has thrice refused to accept, a procedure which redounded greatly to the advantage of California at the time. That State may enjoy the same privilege which the Court held open to Arizona in its decision in the fourth and last case, that of suing the Secretary of the Interior and any others, States or individuals, who together made the contracts which California desires to have the Court interpret through Senate Joint Resolution 145.

If California wishes to sue, she does not need Senate Joint Resolution 145, for permission. If she has no case, this bill is unnecessary, and if she has a case it is unnecessary. If she is injured the Court will hear her plea, and if she is not, Congress cannot make the Court do so. The truth is that California is not injured and has no real case but that she has done her utmost to injure

Arizona which does have a real case whenever it is presented properly by her own attorneys.

This subcommittee may take notice that the Supreme Court throughout its history has never taken any stand contrary to the above. To cite some of the most recent in a long line of such decisions covering a period of many years:

The court held in the *Nebraska* v. *Wyoming* decision on water rights in the interstate Platte River, handed down April 1, 1935 (295 U. S. 40), that the Secretary of the Interior regarding any such right is subject to the State like any other individual, in this language:

"The bill alleges, and we know as a matter of law that the Secretary and his agents, acting by authority of the Reclamation Act and supplementary legislation must obtain permits and priorities from the State of Wyoming in the same manner as a private appropriator or an irrigation district formed under the State law. His rights can rise no higher than those of Wyoming, and an adjudication of the defendant's rights will necessarily bind him. Wyoming will stand in judgment for him as for any other appropriator in that State."

The United States Supreme Court again ruled as follows in *Nebraska* v. *Wyoming* (325 U. S. 629), handed down June 11, 1945, "the United States asserts that it should be given a separate allocation of water * * * the special master concluded that the position of the United States is that of an appropriator under the laws of Wyoming and that its interests are represented in that connection by Wyoming. That was in line with the ruling of this Court when Wyoming moved to dismiss this very case * * * (*Nebraska* v. *Wyoming*, 295 U. S. 40, 43). The writ said" (here the court repeated the citation immediately preceding this one). In the same case the High Court said (325 U. S. 608): "the dry cycle which has continued over a decade has precipitated a clash of interests which between sovereign powers could be traditionally settled only by diplomacy or war. The original jurisdiction of this Court is one of the alternative methods, provided by the framers of our Constitution." Also (325 U. S. 614): "We have then a directive from Congress to the Secretary of the Interior to proceed in conformity with State laws in appropriating water for irrigation purposes."

This directive from Congress to the Secretary of the Interior, whose contracts with the States and others for use of Colorado River water Senate Joint Resolution 145 seeks to interpret, conforms to the Constitution.

But what possible function can the Court have in such a suit as Senate Joint Resolution 145 proposes? Was that Court intended to be a sort of international tribunal to pass on controverted treaties between States which any State dissatisfied with its decision could circumvent simply by withdrawing from the treaty? Of what force and effect does the Supreme Court become under such circumstances? It is the intent of the Constitution that the decisions of that tribunal shall be the law of the land. It was never intended that its authority should be spurned or its time taken up by frivolous matters which would bring no permanent result except the disrepute of the Court and no just settlement of the issues in question.

This compact and contract structure by which a pseudo system of water rights has been set up as between States, public agencies, and others using Colorado River water and between them and the Secretary of the Interior, is one which no one claims to understand or feels any security in. It is the product of a retrogression in our national life. This compact and the contracts under it were formed at what were virtually diplomatic assemblages held under secret conditions with all of the typical realinements, espionage, betrayals, and lack of confidence and law which has characterized such gatherings since time began.

Historians agree that chaotic conditions such as these under the Articles of Confederation created the demand for the forming of a consolidated national government under our present Constitution. The Confederation in effect countenanced only such diplomatic assemblages, while the Constitution gave us a form of government, including a judiciary to decide controversies between the States. The High Court has consistently made equitable apportionment of waters of interstate streams based on the laws of the respective States, and its decisions have stood unquestioned and subject to reopening if remedy be needed or if changing natural conditions and population growth should require.

We may well ask what has induced those in control of political affairs in the States of the Colorado River Basin to abandon this proven course and to adopt one which has compounded confusion among them for 25 years. The compact was proposed to divide the use of the water and all it has accomplished is a division among the States as this resolution gives evidence. What other result

might be expected from a procedure whereby that is done secretly by treaty which cannot be done openly by law?

Since the harnessing of hydroelectric power became possible, a struggle has gone on in the West between those who would use that power to help in hewing prosperous States out of the wilderness, and, on the other hand, those who consider the power of western rivers solely as a source of private revenue. Both State and Federal laws give preference to irrigation, domestic, and municipal uses as superior to power, the revenues from which on reclamation projects customarily contribute to or entirely pay for the cost of constructing and operating these projects which greatly contribute to the support of the people. Without the projects there would be no civilization in areas affected, and without the power to assist in paying the cost it would be difficult or impossible for these projects to be built or to continue in existence. The Colter-Kartus filings conform to this principle. The greatest power assets of the West, of course, are located on the greatest rivers of the region, the interstate streams. The law could not be violated but a way was found to evade it. This was by leaving aside the law altogether, and substituting for it treaties between the States based on the compact clause of the Constitution. In the Balkanization of the Colorado River Basin States which has resulted from the Santa Fe compact or treaty and its subtreaties or contracts, development of reclamation has been held at a minimum, a condition favorable to the designs of the private power monopolies to obtain the river's power for their markets which are mainly outside of the river basin. This may increase their dividends, but it would take heavy toll of the resources of the Nation by preventing proper development of waters and lands of the Colorado River system. It is a policy which would result in minimum development of the river and destroy the State of Arizona.

This policy makes a practice of ignoring rights existing pursuant to law. It ignores, among others, the prior and superior Colter-Kartus filings which are the major projects to develop in the Colorado River system. The upper basin States can use all the water they can ever put to use within the river system, as the reflow from such usage will return to dams and lands below. But under the compact the river's power would go to monopolies for use mainly outside the basin, while most of its waters would go to the delta of the river in Mexico to lands controlled by American speculators or be transported out of the river system by California and the upper basin States. This would leave Arizona, which contains half of the drainage basin, all of the Grand Canyon, 92 percent of the power, and 80 percent of the irrigable land, the sole victim of a deadly fight being waged against her ostensibly by California only, but actually by the upper basin States and the power monopoly as well. It is a fight against the Constitution also, for it was never intended by the founding fathers that the States should govern themselves by treaties but that they should live by equity under law fair to all, or that our resources should be given to a foreign nation and wasted to satisfy the greed of a few, or that one State's resources should be nationalized while others should be allowed to retain theirs for themselves alone. Senate Joint Resolution 145 has no purpose except to continue this situation to the exclusion of any practical and fair solution of this interstate dispute by quick and constitutional methods.

It is true that this controversy must be eventually settled in the High Court as indicated by the *Nebraska* v. *Wyoming* decision cited above. But the type of suit proposed by Senate Joint Resolution 145 will not accomplish this end, nor is the authorization of a proper suit needed from Congress. Where there is damage, the Court will provide remedy as it has already ruled, and Congress cannot prevent this. Nor can Congress prevent California from bringing a suit if it desires to do so, provided the Court will accept it. California has not been damaged. Arizona has, though her own attorneys have never so alleged.

Passage of Senate Joint Resolution 145 would serve but one purpose—to delay the needed development of irrigation projects from the Colorado River anywhere except in the State of California. This is because every basin State needs authorization of projects within their borders and money provided by Congress while California has those facilities already provided that may now be expanded from outside sources if need be. And if the compact stands in the way, California knows she can cast it aside and look for such expansion under water law.

The sole purpose of this resolution is to delay. So far as California is concerned, the Santa Fe compact has served its usefulness. It never was of any benefit to Arizona. Those Arizona officials who labor under the impression that by holding California to the compact they can limit her use of Colorado River water are prone to overlook the fact that it gives Arizona no water at all, and

that this State already uses more water than the compact would allot to her in perpetuity, as was set forth by the Arizona attorney general in the first suit cited above, *Arizona* v. *California et al.* (283 U. S. 423), and also by Gov. R. C. Stanford, now chief justice of the Arizona State Supreme Court, in his statement at the Boulder Dam power conference before the Secretary of the Interior on April 16, 1937. If the compact is a limitation on California, it is a prohibition against Arizona. Whether it limits California or does not limit her, it could never be anything except a detriment to the State of Arizona. And its allotments are in perpetuity, which is contrary to the first principle of water law, established for thousands of years since the dawn of civilization, that water cannot be owned but must be put to highest beneficial use.

Now that California's works are built, much as Boulder Dam, Parker Dam, Imperial Dam, All-American Canal, Metropolitan Water District of Southern California aqueduct, and power lines, she is willing to get rid of the compact, at the same time blocking Arizona's development through Senate Joint Resolution 145. If California wants to be allowed every means, both fair and foul, to block Arizona, she is asking more than any State should expect from Congress. It will benefit Arizona far more than California to be rid of the compact, but Congress which has freely authorized these California works and appropriated money for their construction should remember that in common justice it should now do the same for Arizona rather than to pass Senate Joint Resolution 145 to entrap Arizona instead of helping her. What Arizona needs from Congress is authorization and funds to build works necessary to get Colorado River water into the central section of the State to rescue our economy and make possible the expansion of our agriculture, and for this Congress has ample authority. Such action by Congress will not preclude any appropriate judicial proceedings by California any more than it prevented such proceedings by Arizona against the Boulder Canyon Project Act. And if Congress did not wait for a Supreme Court decree then, nor authorize a suit to require one to settle the disputed water rights, neither is there any good reason for which it should do so now when Arizona's development instead of California's is at stake. The courts are always open to California and the hand of Congress should be open to Arizona and not against her as has been too much the case these many years.

It borders on impropriety to expect this subcommittee to pass upon matters for which the courts were expressly provided. But your body can take a course with complete propriety which is long overdue and will reflect credit upon you within the scope of the recommending function which you hold in respect to Congress as a whole. This course should be equally welcome to all the Colorado River Basin States which, I am sure, prefer harmony to discord, and development rather than delay. If this be viewed as a matter of national welfare, the emergency now facing Arizona is no less serious than that which California pleaded in obtaining congressional approval of Boulder Dam. The desperate water shortage in central Arizona can be and is being as destructive of property and livelihoods as floods in the Imperial Valley. This subcommittee has every right to recommend measures which will result in alleviating this emergency by the earliest possible authorization of the works to bring Colorado River water into central Arizona, and which at the same time will make possible a great new development in Arizona not in any way conflicting with the rights of other States. This the subcommittee can do as a matter of justice and practical benefit, and within its own purview, leaving California if it wills to turn to the courts where she may have her day with this proposed suit which will have as little place there as it does before Congress in regard to promoting a fair and equitable solution of the interstate water-rights controversy of the Colorado River.

Following is a list of combined water and power canal and dam site filings in Colorado River system, embracing their official number, date, capacity, electrical horsepower, height of dam, elevation of river at base of dam, filed on by Fred T. Colter, Arizona water trustee, for and on behalf of the State of Arizona and water users under said projects before Arizona water commissioner and Federal Power Commission beginning in 1923 and thereafter and initiated in 1916 for irrigation, domestic, municipal, manufacturing, mining, and power uses, including filings amendatory and supplemental thereto, which filings on some 40 sites provide and stipulate that the key and major projects are the Glen Bridge Verde high-line projects, which embraces all the dam sites above Boulder Dam to Utah line; and Arizona high-line irrigation and power canal and Verde tunnel, all to be

developed as one combined unit; and which filings also embrace and combine the power with maximum irrigation with irrigation prior and superior to irrigate 6,000,000 acres and develop 5,000,000 electrical horsepower with the storage and diversion above Boulder Dam to be at highest elevation for maximum lands thereunder, and to defend and develop all completed and future projects of the State of Arizona, including tributaries, and which the high-line irrigation and power canal or Verde tunnel high-line canal with the fall will develop over 1,000,000 horsepower on the 30 power drops thereon as it crosses said tributaries throughout Arizona, furnishing water and power for the lands and projects below said canal, allowing the privilege of those above the canal to use all the water above said canal on the tributaries, also furnishing cheap power at the door of every need throughout the State, and to guard against the unconstitutional Santa Fa-Colorado River compact and tri-State compact, which would have deeded Arizona's water to Mexico and would have desolated her and ruined proper development of entire Colorado River system if Arizona patriots, led by Fred T. Colter, had not defeated these compacts by which the United States Supreme Court has ruled Arizona is not bound nor her present and future water impaired thereby or by Boulder Canyon Project Act, Boulder Dam, or any act Congress may pass, and that Arizona can divert water above Boulder Dam and throughout Arizona.

No. 660 is Colter's water filing number before the Federal Power Commission.

Official number, name, and date of dam and canal sites and water filings	Capacity	Electrical horsepower to be developed	Height of dam	Elevation of dam
Glen Canyon, R-133 T. 40 N., R. 8 E., Sept. 20, 1923.	52,000,000 acre-feet	700,000	693	3,127
Spencer-Bridge, A-413 T. 28 N., R. 13 W. R-132, Sept. 20, 1923.	20,000 second-feet; 22,500,000 acre-feet.		800	1,180
Bridge Canyon, R-188 T. 27 and 28 N., R. 12 W., May 11, 1925.	10,000,000 acre-feet	1,100,000	785	1,207
Glen Canyon, R-228 T. 40 N., R. 8 E., Mar. 17, 1926.	50,501,260 acre-feet			
R-229 Redwall Canyon dam site, Mar. 17, 1926.	304,000 acre-feet	362,000	222	2,886
R-230 Mineral Canyon Reservoir, Mar. 17, 1926.	649,220 acre-feet	588,000	345	2,531
R-231 Ruby Canyon Reservoir, Mar. 17, 1926	202,480 acre-feet	495,000	286	2,235
R-311 Bill Williams, Sept. 25, 1926	1,600,000 acre-feet		600	900
R-232 Spector Chasm Reservoir, Mar. 17, 1926.	129,990 acre-feet	392,000	223	2,002
R-233 Havasu Reservoir, Mar. 17, 1926	363,000 acre-feet	387,000	209	1,783
R-234 Bridge Canyon Reservoir, Mar. 17, 1926.	10,804,000 acre-feet		566	1,207
R-235 Devil's Slide Reservoir, Mar. 17, 1926.	70,840 acre-feet	317,000	163	1,034
R-236 Flour Sacks Reservoir, Mar. 17, 1926	226,920 acre-feet	140,000	70	960
R-237 Pierces Ferry Reservoir, Mar. 17, 1926.	566,000 acre-feet	60,000	50	905
R-238 Grand Wash Reservoir, Mar. 17, 1926.	169,060 acre-feet	300,000	160	867
A-647 Bridge and Glen Canyon, Mar. 17, 1926.	23,000 acre-feet			
R-272 Marble Gorge Reservoir, June 10, 1927	50,000,000 acre-feet		675	2,838
A-726 Marble Gorge Reservoir, June 10, 1927	23,000 second-feet		675	2,838
R-344 T. 10 N. R. 19 W. A-1004 Empire Dam, July 29, 1929.	19,830,000 acre-feet, all flow			365
R-346 T. 10 N. R. 19 W., Parker Dam, July 29, 1929.	1,500,000 acre-feet			358
R-348 T. 6 S. R. 21 W., Senator Dam, July 29, 1931.	3,440,000 acre-feet			155
A-1262 T. 10 N. R. 19 W., Glen-Bridge-Marble Gorge high line and Verde tunnel, July 29, 1931.	55,000,000 acre-feet			

FILINGS ON COLORADO RIVER AND GILA RIVER

R-347 T. 5 S. R. 9 W., Sentinel Dam, July 29, 1929.	3,200,000 acre-feet			490
A-345 Gila Dome Dam, July 29, 1929	5,600,000 acre-feet			155
A-346 Parker Dam, Oct. 2, 1929	1,500,000 acre-feet			358
A-1022 underground water, Oct. 2, 1929	80,000 second-feet			
A-862 sec. 7 T. 10 N. R. 13 W.; Williams Dam, Glen-Bridge Dam and high-line canal, Sept. 25, 1928.	All of flow			960

Reservoir and canal sities and water filed on by Colter of Verde River, supplemental to the major sites on the Colorado River above Boulder Dam, through high-line canal and Verde tunnel to the lands thereunder, and subject to Verde River and Salt River Valley district's water rights

FILINGS MADE APR. 23, 1936—NO. A-1677

Name of dam site	Height of dam	Capacity in acre-feet	Elevation
Camp Verde	423	10,000,000	2,977
Malpais	197	70,000	2,720
Fossil	150	45,000	2,530
Pete's Cabin	190	94,000	2,320
Yavagila	140	48,000	2,280
Tangle Creek	152	87,000	2,095
Horseshoe	159	240,000	1,895
Cliff Dwellers	95		1,801
Bartlett	290	360,000	1,660
Camp Creek	73	(1)	1,525

[1] Diversion dam.

WATER FILINGS ON LITTLE COLORADO RIVER TO IRRIGATE 500,000 ACRES

Name of dam site and number	Stream	Height of dam	Area in acres	Capacity acre-feet
Forks A-1003	Little Colorado-Silver Creek	85	5,020	148,000
Woodruff A-1022	Little Colorado	100	3,160	108,000
La Roux	La Roux Wash	35	3,750	54,000
Tucker Flats	Side Stream	50	3,850	118,000
Apache	Chevelon Creek			90,000
				519,000

Dam sites and filings on Little Colorado River below Winslow to its mouth to irrigate 100,000 acres. Date of filing July 26, 1929, and official number is R-343. Name of dam sites are: Tolchico, Grand Falls, Black Falls, Coconino Hopi Trail, Lower Falls.

CHAPTER 34—ASSEMBLY JOINT RESOLUTION NO. 11—RELATIVE TO THE RIGHTS OF THE STATES OF ARIZONA, NEVADA, AND CALIFORNIA TO THE USE OF THE WATER OF THE COLORADO RIVER

Whereas more than 3,000,000 inhabitants of this State are dependent upon the Colorado River as a source of supplemental water supply for domestic purposes; and

Whereas the metropolitan areas of Southern California, including those within approximately 2,200 square miles of coastal plain and foothills extending from Los Angeles to Riverside and San Bernardino and those in San Diego and vicinity are dependent upon the Colorado River as a source of supplemental water supply for municipal and industrial purposes; and

Whereas over 1,000,000 acres of the lands of this State are solely dependent upon the Colorado River as a source of water supply for irrigation purposes; and

Whereas there is now pending in the United States Senate a bill (S. 1175) which, if enacted, would authorize the Central Arizona Project; and

Whereas there is insufficient water available in the Lower Basin of the Colorado River to supply the Central Arizona Project without depriving the people of California of their right to use that water and jeopardizing their investment in distribution facilities which amounts to more than $500,000,000; and

Whereas the States of California and Arizona have been unable to agree as to their respective rights to the use of the water of the Colorado River; and

Whereas five resolutions (H. J. R. 225, 226, 227, and 236 and S. J. R. 145) are now pending before the United States Congress which would, if adopted, authorize a suit in the United States Supreme Court to determine the respective rights of the States of Arizona, Nevada, and California to the use of the water of the Colorado River; and

Whereas the authorization of the Central Arizona Project prior to an adjudication of water rights would greatly intensify the dispute between the States of California and Arizona and result in the possible expenditure of hundreds of millions of dollars of public money to construct a project for which there would be an inadequate water supply; now, therefore, be it

Resolved by the Assembly and the Senate of the State of California jointly, That the United States Congress is respectfully memorialized and urged to adopt one of the resolutions authorizing a suit in the United States Supreme Court to adjudicate the respective rights of the States of Arizona, Nevada, and California to the use of the water of the Colorado River; and be it further

Resolved, That the United States Congress is respectfully memorialized and urged to suspend further consideration of the proposed Central Arizona Project pending the determination of the respective rights of the States of Arizona, Nevada, and California to the use of the water of the Colorado River; and be it further

Resolved, That the Chief Clerk of the Assembly is directed to transmit copies of this resolution to the President of the United States, the President pro tempore of the Senate of the United States, the Speaker of the House of Representatives of the United States, and to each Senator and Representative from California in the Congress of the United States.

Adopted in Assembly March 25, 1948.
Adopted in Senate March 26, 1948.

RESOLUTION

"Whereas controversy has existed between the States of California and Arizona for more than a quarter of a century over the waters of the Colorado River and no practicable means of settling this controversy exists, other than litigation; and

"Whereas it is believed that the conflict should, as promptly as possible, be terminated: Now, therefore, be it

"*Resolved by the Irrigation Districts Association of California, comprising 120 public agencies of the State of California engaged in water distribution*, That said association does hereby endorse Senate Joint Resolution 145 and House Joint Resolutions 226, 227, and 228, now pending before the Congress and urge all Members of Congress and Senators to support said resolutions, to the end that sound development of water projects in the lower Colorado River Basin may be expedited."

This is to certify that the above is a true and correct copy of resolution unanimously adopted by the Irrigation Districts Association of California, in convention assembled in Santa Cruz, Calif., April 16, and has not been rescinded or modified.

R. DUNBAR.
Executive Secretary, Irrigation Districts Association of California.

SAN FRANCISCO 3, CALIF.

79997—48——33

RESOLUTION ADOPTED BY TWENTY-NINTH ANNUAL NATIONAL CONVENTION OF THE AMERICAN LEGION HELD AUGUST 28–31, 1947

Resolved by the American Legion in National Convention assembled in New York, N .Y., on August 28–31, 1947, That public lands located in the public-lands States and Territories suitable for homesteading by World War II veterans be developed rapidly and expeditiously; and be it further

Resolved, That where any controversies exist which because of their nature delay the development of public lands which would be available for settlement by veterans that the Federal Government take such action as may be necessary to have such controversies speedily adjudicated by the courts of the United States.

RESOLUTION ADOPTED BY THE AMERICAN FEDERATION OF LABOR AT ITS NATIONAL CONVENTION HELD IN SAN FRANCISCO, CALIF., OCTOBER 1947

(Excerpt)

Whereas it is now common knowledge that the available volume of water in the Colorado River system is far from being sufficient to satisfy the claims and demands of each of said basin States, and controversies exist, and have existed for 25 years between said States, or some of them, as to the amount of water from said Colorado River system each is entitled to utilize, and such controversies tend to hamper the maintenance and development of civic, agricultural, and industrial life within the States of the lower basin particularly; and

Whereas so long as there remains undeveloped economically feasible hydroelectric potentialities on said river, the use of oil and other fuels for the purpose of generating electric power is unduly expensive, uneconomic, and destructive of national resources of our Nation: Therefore, be it

Resolved, That the sixty-sixth convention of the American Federation of Labor use its good offices to help get an early decision through the courts as to the pro rata share of water that each Colorado River Basin State should receive; and be it further

Resolved, That the sixty-sixth convention of the American Federation of Labor also use its good offices to further legislation that will aid in further development of the Colorado River system to the end that more water will be available to the Colorado River Basin States.

CALIFORNIA STATE GRANGE,
Sacramento, Calif., January 7, 1948.

Mr. WILLIAM LYONS,
c/o Metropolitan Water & Power Co.,
Los Angeles, Calif.

DEAR BILL: We are enclosing copy of resolution adopted by the National Grange convention.

When this question was before the national session we explained the reason for the resolution, and it was adopted with the understanding it applied to use of water from the Colorado River.

We hope this may be of some value to you.

Very respectfully yours,

GEORGE SEHLMEYER,
Master, California State Grange.

INTER-STATE RIVER RIGHTS—RESOLUTION 68 BY SEHLMEYER

Whereas controversies have arisen between States as to the use of waters from a river system: Therefore, be it

Resolved, That the National Grange favors legislation to make it possible for the United States Supreme Court to adjudicate such water use.

Committee recommends adoption.

[State of Arizona, House of Representatives, Sixteenth Legislature, First Special Session]

CHAPTER 4

HOUSE BILL NO. 2

AN ACT Ratifying the contract between the United States and the State of Arizona for storage and delivery of water from Lake Mead, and declaring an emergency

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

SECTION 1. *Ratification.*—There is hereby unconditionally ratified, approved, and confirmed that certain contract for the storage and delivery of water from Lake Mead executed on behalf of the United States by the Honorable Harold L. Ickes, Secretary of the Interior, and on behalf of the State of Arizona by its Colorado River commission, bearing date the 9th day of February 1944, as follows:

UNITED STATES, DEPARTMENT OF THE INTERIOR, BUREAU OF RECLAMATION

BOULDER CANYON PROJECT ARIZONA-CALIFORNIA-NEVADA

CONTRACT FOR DELIVERY OF WATER

THIS CONTRACT made this 9th day of February 1944, pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplemental thereto, all of which acts are commonly known and referred to as the Reclamation Law, and particularly pursuant to the Act of Congress approved December 21, 1928 (45 Stat. 1057) designated the Boulder Canyon Project Act, and acts amendatory thereof or supplementary thereto, between THE UNITED STATES OF AMERICA, hereinafter referred to as "United States," acting for this purpose by Harold L. Ickes, Secretary of the Interior, hereinafter referred to as the "Secretary," and the STATE OF ARIZONA, hereinafter referred to as "Arizona," acting for this purpose by the Colorado River Commission of Arizona, pursuant to chapter 46 of the 1939 Session Laws of Arizona.

WITNESSETH THAT:

EXPLANATORY RECITALS

2. WHEREAS for the purpose of controlling floods, improving navigation, regulating the flow of the Colorado River, providing for storage, and for the delivery of stored waters for the reclamation of public lands and other beneficial uses exclusively within the United States, the Secretary acting under and in pursuance of the provisions of the Colorado River Compact and Boulder Canyon Project Act, and acts amendatory thereof or supplementary thereto, has constructed and is now operating and maintaining in the main stream of the Colorado River at Black Canyon that certain structure known as and designated Boulder Dam and incidental works, creating thereby a reservoir designated Lake Mead of a capacity of about thirty-two million (32,000,000) acre-feet; and

3. WHEREAS said Boulder Canyon Project Act provides that the Secretary under such general rules and regulations as he may prescribe may contract for the storage of water in the reservoir created by Boulder Dam, and for the delivery of such water at such points on the river as may be agreed upon, for irrigation and domestic uses, and provides further that no person shall have or be entitled to have the use for any purpose of the water stored, as aforesaid, except by contract made as stated in said Act; and

4. WHEREAS it is the desire of the parties to this contract to contract for the storage of water and the delivery thereof for irrigation of lands and domestic uses within Arizona; and

5. WHEREAS nothing in this contract shall be construed as affecting the obligations of the United States to Indian tribes:

6. NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto agree as follows, to wit:

DELIVERY OF WATER

7. (a) Subject to the availability thereof for use in Arizona under the provisions of the Colorado River Compact and the Boulder Canyon Project Act, the United States shall deliver and Arizona, or agencies or water users therein, will accept under this contract each calendar year from storage in Lake Mead, at a point or points of diversion on the Colorado River approved by the Secretary, so much water as may be necessary for the beneficial consumptive use for irrigation and domestic uses in Arizona of a maximum of 2,800,000 acre-feet.

(b) The United States also shall deliver from storage in Lake Mead for use in Arizona, at a point or points of diversion on the Colorado River approved by the Secretary, for the uses set forth in subsection (a) of this Article, one-half of any excess or surplus waters unapportioned by the Colorado River Compact to the extent such water is available for use in Arizona under said compact and said act, less such excess or surplus water unapportioned by said compact as may be used in Nevada, New Mexico, and Utah in accordance with the rights of said states as stated in subdivisions (f) and (g) of this Article.

(c) This contract is subject to the condition that Boulder Dam and Lake Mead shall be used: First, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses and satisfaction of perfected rights in pursuance of Article VIII of the Colorado River Compact; and, third, for power. This contract is made upon the express condition and with the express covenant that the United States and Arizona, and agencies and water users therein, shall observe and be subject to and controlled by said Colorado River Compact and the Boulder Canyon Project Act in the construction, management, and operation of Boulder Dam, Lake Mead, canals and other works, and the storage, diversion, delivery, and use of water for the generation of power, irrigation, and other uses.

(d) The obligation to deliver water at or below Boulder Dam shall be diminished to the extent that consumptive uses now or hereafter existing in Arizona above Lake Mead diminish the flow into Lake Mead, and such obligation shall be subject to such reduction on account of evaporation, reservoir and river losses, as may be required to render this contract in conformity with said compact and said act.

(e) This contract is for permanent service, subject to the conditions stated in subdivision (c) of this Article, but as to the one-half of the waters of the Colorado River system unapportioned by paragraphs (a), (b), and (c) of Article III of the Colorado River Compact, such water is subject to further equitable apportionment at any time after October 1, 1963, as provided in Article III (f) and Article III (g) of the Colorado River Compact.

(f) Arizona recognizes the right of the United States and the State of Nevada to contract for the delivery from storage in Lake Mead for annual beneficial consumptive use within Nevada for agricultural and domestic uses of 300,000 acre-feet of the water apportioned to the Lower Basin by the Colorado River Compact, and in addition thereto to make contract for like use of $\frac{1}{25}$ (one twenty-fifth) of any excess or surplus waters available in the Lower Basin and unapportioned by the Colorado River Compact, which waters are subject to further equitable apportionment after October 1, 1963, as provided in Article III (f) and Article III (g) of the Colorado River Compact.

(g) Arizona recognizes the rights of New Mexico and Utah to equitable shares of the water apportioned by the Colorado River Compact to the Lower Basin and also water unapportioned by such compact, and nothing contained in this contract shall prejudice such rights.

(h) Arizona recognizes the right of the United States and agencies of the State of California to contract for storage and delivery of water from Lake Mead for beneficial consumptive use in California, provided that the aggregate of all such deliveries and uses in California from the Colorado River shall not exceed the limitation of such uses in that State required by the provisions of the Boulder Canyon Project Act and agreed to by the State of California by an act of its Legislature (Chapter 16, Statutes of California of 1929) upon which limitation the State of Arizona expressly relies.

(i) Nothing in this contract shall preclude the parties hereto from contracting for storage and delivery above Lake Mead of water herein contracted for, when and if authorized by law.

(j) As far as reasonable diligence will permit, the water provided for in this contract shall be delivered as ordered and as reasonably required for domestic and irrigation uses within Arizona. The United States reserves the right to discontinue or temporarily reduce the amount of water to be delivered, for the

purpose of investigation and inspection, maintenance, repairs, replacements, or installation of equipment or machinery at Boulder Dam, or other dams heretofore or hereafter to be constructed, but so far as feasible will give reasonable notice in advance of such temporary discontinuance or reduction.

(k) The United States, its officers, agents, and employees shall not be liable for damages when for any reason whatsoever suspensions or reductions in the delivery of water occur.

(l) Deliveries of water hereunder shall be made for use within Arizona to such individuals, irrigation districts, corporations, or political subdivisions therein of Arizona as may contract therefor with the Secretary, and as may qualify under the Reclamation Law or other federal statutes or to lands of the United States within Arizona. All consumptive uses of water by users in Arizona, of water diverted from Lake Mead or from the main stream of the Colorado River below Boulder Dam, whether made under this contract or not, shall be deemed, when made, a discharge pro tanto of the obligation of this contract. Present perfected rights to the beneficial use of waters of the Colorado River system are unimpaired by this contract.

(m) Rights-of-way across public lands necessary or convenient for canals to facilitate the full utilization in Arizona of the water herein agreed to be delivered will be granted by the Secretary subject to applicable federal statutes.

POINTS OF DIVERSION: MEASUREMENTS OF WATER

8. The water to be delivered under this contract shall be measured at the points of diversion, or elsewhere as the Secretary may designate (with suitable adjustment for losses between said points of diversion and measurement), by measuring and controlling devices or automatic gauges approved by the Secretary, which devices, however, shall be furnished, installed, and maintained by Arizona, or the users of water therein in manner satisfactory to the Secretary; said measuring and controlling devices or automatic gauges shall be subject to the inspection of the United States, whose authorized representatives may at all times have access to them, and any deficiencies found shall be promptly corrected by the users thereof. The United States shall be under obligation to deliver water only at diversion points where measuring and controlling devices or automatic gauges are maintained, in accordance with this contract, but in the event diversions are made at points where such devices are not maintained, the Secretary shall estimate the quantity of such diversions and his determination thereof shall be final.

CHARGES FOR STORAGE AND DELIVERY OF WATER

9. No charge shall be made for the storage or delivery of water at diversion points as herein provided necessary to supply present perfected rights in Arizona. A charge of 50¢ per acre-foot shall be made for all water actually diverted directly from Lake Mead during the Boulder Dam cost repayment period, which said charge shall be paid by the users of such water, subject to reduction by the Secretary in the amount of the charge if it is concluded by him at any time during said cost-repayment period that such charge is too high. After expiration of the cost-repayment period, charges shall be on such basis as may hereafter be prescribed by Congress. Charges for the storage or delivery of water diverted at a point or points below Boulder Dam, for users, other than those specified above, shall be agreed upon between the Secretary and such users at the time of execution of contracts therefor, and shall be paid by such users; provided such charges shall, in no event, exceed 25¢ per acre-foot.

RESERVATIONS

10. Neither Article 7 nor any other provision of this contract, shall impair the right of Arizona and other States and the users of water therein to maintain, prosecute or defend any action respecting, and is without prejudice to, any of the respective contentions of said States and water users as to (1) the intent, effect, meaning and interpretation of said compact and said act; (2) what part, if any, of the water used or contracted for by any of them falls within Article III (a) of the Colorado River Compact; (3) what part, if any, is within Article III (b) thereof; (4) what part, if any, is excess or surplus waters unapportioned by said Compact; and (5) what limitations on use, right of use and relative priorities exist as to the waters of the Colorado River system; provided, however, that by these reservations there is no intent to disturb the apportion-

ment made by Article III (a) of the Colorado River Compact between the Upper Basin and the Lower Basin.

DISPUTES AND DISAGREEMENTS

11. Whenever a controversy arises out of this contract, and if the parties hereto then agree to submit the matter to arbitration, Arizona shall name one arbitrator and the Secretary shall name one arbitrator and the two arbitrators thus chosen shall meet within ten days after their selection and shall elect one other arbitrator within fifteen days after their first meeting, but in the event of their failure to name the third arbitrator within thirty days after their first meeting, such arbitrator not so selected shall be named by the Senior Judge of the United States Circuit Court of Appeals for the Tenth Circuit. The decision of any two of the three arbitrators thus chosen shall be a valid and binding award.

RULES AND REGULATIONS

12. The Secretary may prescribe and enforce rules and regulations governing the delivery and diversion of waters hereunder, but such rules and regulations shall be promulgated, modified, revised or extended from time to time only after notice to the State of Arizona and opportunity is given to it to be heard. Arizona agrees for itself, its agencies and water users that in the operation and maintenance of the works for diversion and use of the water to be delivered hereunder, all such rules and regulations will be fully adhered to.

AGREEMENT SUBJECT TO COLORADO RIVER COMPACT

13. This contract is made upon the express condition and with the express covenant that all rights of Arizona, its agencies and water users, to waters of the Colorado River and its tributaries, and the use of the same, shall be subject to and controlled by the Colorado River Compact signed at Santa Fe, New Mexico, November 24, 1922, pursuant to the Act of Congress approved August 19, 1921 (42 Stat. 171), as approved by the Boulder Canyon Project Act.

EFFECTIVE DATE OF CONTRACT

14. This contract shall be of no effect unless it is unconditionally ratified by an Act of the Legislature of Arizona, within three years from the date hereof, and further, unless within three years from the date hereof the Colorado River Compact is unconditionally ratified by Arizona. When both ratifications are effective, this contract shall be effective.

INTEREST IN CONTRACT NOT TRANSFERABLE

15. No interest in or under this contract, except as provided by Article 7 (1), shall be transferable by either party without the written consent of the other.

APPROPRIATION CLAUSE

16. The performance of this contract by the United States is contingent upon Congress making the necessary appropriations for expenditures for the completion and the operation and maintenance of any dams, power plants or other works necessary to the carrying out of this contract, or upon the necessary aloitments being made therefor by any authorized federal agency. No liability shall accrue against the United States, its officers, agents or employees by reason of the failure of Congress to make any such appropriations or of any federal agency to make such allotments.

MEMBER OF CONGRESS CLAUSE

17. No Member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to this contract if made with a corporation or company for its general benefit.

DEFINITIONS

18. Wherever terms used herein are defined in Article II of the Colorado River Compact or in Section 12 of the Boulder Canyon Project Act, such definitions shall apply in construing this contract.

19. IN WITNESS WHEREOF, the parties hereto have caused this contract to be executed the day and year first above written.

THE UNITED STATES OF AMERICA,
By (s) HAROLD L. ICKES, *Secretary of the Interior.*
STATE OF ARIZONA, acting by and through its COLORADO RIVER COMMISION,
By (s) HENRY S. WRIGHT, *Chairman.*
By (s) NELLIE T. BUSH, *Secretary.*

Approved this 11th day of February 1944.
(s) SIDNEY P. OSBORN,
Governor of the State of Arizona.

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.

Senator MILLIKIN. Are there any further matters to come before the committee?

Subject to getting the supplemental material in, and subject possibly to the further will of the committee itself, the hearing is closed. Thank you very much, gentlemen.

(Thereupon, at 4:30 p. m., the hearings were concluded.)

In response to a suggestion made by the chairman on page 430, the following supplemental statements were submitted:

WASHINGTON 5, D. C., *May 24, 1948.*

Re Senate Joint Resolution 145.

Hon. EUGENE D. MILLIKIN,
Chairman, Subcommittee on Irrigation and Reclamation,
Senate Committee on Interior and Insular Affairs,
Washington, D. C.

MY DEAR SENATOR MILLIKIN: The following is a statement re California's rights in waters of the Colorado River system, intended to meet your suggestion in hearings on above resolution. It has, of course, been hastily prepared and is, as you wished, brief. It may be taken as a general indication of California's views, but is not intended as an exhaustive nor definitive presentation.

DIGEST OF CALIFORNIA CLAIMS TO WATER OF THE COLORADO RIVER SYSTEM

1. Before any compact or legislation supervened, California had a right to an equitable share of the water of the Colorado River system (*Kansas* v. *Colorado* (206 U. S. 46)). This right was not delimited by compact or Supreme Court decision. The minimum of the equitable right was in point of fact the amount of the vested rights of its water users acquired by appropriation under State law (*Wyoming* v. *Colorado* (259 U. S. 419)). The maximum of the right was considerably in excess of the 5,362,000 acre-feet per annum now under contract.

2. Colorado River compact subjected California's claims and those of the other lower-basin States (assuming that Arizona is a party to the compact) to the limitation that they should not exceed the amount of water available to the lower basin.

3. Boulder Canyon Project Act (sec. 4 (a)) and California Limitation Act (Stats. Cal. 1929, ch. 16) subjected California's claim to the further limitation prescribed in the statutory compact thereby effected. California's right to an equitable share has been defined and delimited by the statutory compact and

California is entitled to take and use water up to the quantity specified in the statutory compact.

4. Arizona has by article 7 (h) of its contract with the Secretary of the Interior, dated February 9, 1944, expressly recognized the right of California to contract for the full amount of water specified in the statutory compact.

5. Subject to the statutory compact, the title of California public agencies to water rights in the Colorado River system depends upon either—

(*a*) Secretarial contracts made under section 5 of the Project Act; or

(*b*) Appropriations made under State law; or

(*c*) Both such contracts and appropriations; and

the California agencies hold both such contracts and appropriations for 5,362,000 acre-feet per annum for net beneficial consumptive use in California.

6. The California rights are legally absolute. However, they are contingent for full satisfaction upon the physical presence of water sufficient for that purpose, within the terms of the statutory compact.

Very truly yours,

ARVIN B. SHAW, Jr.,
Assistant Attorney General of California.

SENATE JOINT RESOLUTION 145—SUPPLEMENTARY STATEMENT ON BEHALF OF ARIZONA

In compliance with the request of the committee in the hearings, and on behalf of the State of Arizona, the following concise statement as to the respective rights of the States of Arizona, California, Utah, Nevada, and New Mexico to the use of the waters apportioned to the lower basin by the Colorado River compact, and the basis for Arizona's claim to III (b) waters, is filed by the undersigned. The rights of the States are of equal priority in the following statement:

APPORTIONED TO THE LOWER BASIN BY THE COLORADO RIVER COMPACT

Art. III (a)	acre-feet	7,500,000
Art. III (b)	do	1,000,000
Total	do	8,500,000

CALIFORNIA'S RIGHTS

* * * The maximum limit of California's right to apportioned water is (sec. 4 (a) of the Boulder Canyon Project Act) acre-feet per year 4,400,000

That leaves acre-feet 4,100,000

NEVADA'S RIGHTS

* * * Nevada has a contract with the United States for (par. 7 (f), Arizona's delivery contract with the United States, dated Feb. 9, 1944, and ratified by the Arizona Legislature, recognized that right, and California is precluded from claiming any part of it by the California Self-Limitation Act) acre-feet per year 300,000

That leaves acre-feet 3,800,000

NEW MEXICO'S RIGHTS

* * * Arizona recognizes the right of New Mexico to an equitable share of the water apportioned to the lower basin in a contract with the United States, which was ratified by the Arizona Legislature par. 7 (g) of the contract.

The Bureau of Reclamation estimates the total ultimate possible use of water in that portion of New Mexico which is in the lower basin at (comprehensive report on the Colorado River, Bureau of Reclamation, H. Doc. No. 419, pp. 156 and 182) acre-feet per year 29,000

UTAH'S RIGHTS

* * * Arizona recognizes the right of Utah to an equitable share of the water apportioned to the lower basin in a contract with the United States, which was ratified by the Arizona Legislature par. 7 (g) of that contract).

The Bureau of Reclamation estimates the total ultimate possible use of water to be (comprehensive report on the Colorado River, Bureau of Reclamation, H. Doc. No. 419, p. 161)_____acre-feet per year__ 101,000

That leaves_____acre-feet__ 3,670,000

ARIZONA'S RIGHTS

* * * Arizona is entitled to use the balance of the waters apportioned to the lower basin, to wit_____acre-feet per year__ 3,670,000

From sources as follows:

Balance of water apportioned to the lower basin by article III (a) and delivered at Lees Ferry by upper basin_____acre-feet__ 2,670,000

Apportioned by article III (b) (water of the Gila River)___do____ 1,000,000

BASIS FOR OUR VIEWS

Colorado River compact, article III (a), (b), (c), (d), and (f).

Boulder Canyon Project Act, section 4 (a), in its entirety.

Arizona v. *California* (292 U. S. 341); we call particular attention to the sixth ground of the opinion of the Court.

The million acre-feet mentioned in article III (b) of the Colorado River compact, being apportioned to the lower basin, the California Self-Limitation Act, enacted by the California Legislature in compliance with the Boulder Canyon Project Act, forever precludes California from using or claiming the right to use any III (b) water.

III (b) water is not delivered at Lees Ferry, but must be found in the Gila River.

Congress, in section 4 (a) of the Boulder Canyon Project Act, provided that Arizona should have the exclusive use of the Gila River, thereby identifying the Gila River with the million acre-feet of III (b) water, the estimated annual discharge of the Gila River, and excluded California from any claim thereon.

Neither Nevada, Arizona, Utah, nor New Mexico claim any part of the 4,400,000 acre-feet to which California is forever limited; nor does any other State claim any part of the 300,000 acre-feet for which Nevada has a contract with the United States. California cannot claim any water from any of the States in excess of the 4,400,000 acre-feet under its Self-Limitation Act. Nor can Arizona claim any part of the water of the other States under its contract with the United States. Arizona deducts all possible present and future uses in Utah and New Mexico in the above calculation, and Arizona is bound by her contract with the United States to recognize their rights. There is no dispute between either Utah or New Mexico and Arizona, or between Utah and New Mexico, or between Nevada and any of the said States, as to the total quantity of their respective claims in the water apportioned to the lower basin.

No permanent rights may be acquired to any surplus water which may be available until it is further apportioned among the seven States after 1963. Therefore, the above statement is confined to apportioned water.

Respectfully submitted,

CHARLES A. CARSON,
Chief Counsel, Arizona Interstate Stream Commission, and Special Attorney for the State of Arizona on Colorado River Matters.

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