

# *The Colorado River Question*

Shall Natural Resources Create Local  
or Enlarge Distant Development?

Published by the  
COLORADO RIVER COMMISSION OF ARIZONA  
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# DRAINAGE AREA COLORADO RIVER BASIN RELATIVE AREAS IN THE SEVEN STATES

Upper Basin shown by horizontal lines  
Lower Basin shown by diagonal lines  
California shown black



## THE WATER QUESTION

The four Upper Basin States demand 50% of the water.

Nevada demands 2%.

Arizona and California will accept these demands.

California demands about two-thirds of the 48% remaining, or 30%, leaving 18% for Arizona.

Arizona offers to divide the 48% equally with California.

(These figures are exclusive of water used at present from the Virgin, the Gila and in Mexico.)

The Arizona area in the basin is seventeen times that of California.

California alone has four times as much water in her own rivers as there is in the entire Colorado river basin.

## THE POWER PROBLEM

California demands that Arizona and Nevada exempt or reduce state and county taxation on hydro-electric properties so California can get power cheaper, and can use Arizona and Nevada power to subsidize California irrigation canals and city water works.

The other six states of the Colorado River basin demand that hydro-electric properties be taxed like other property.

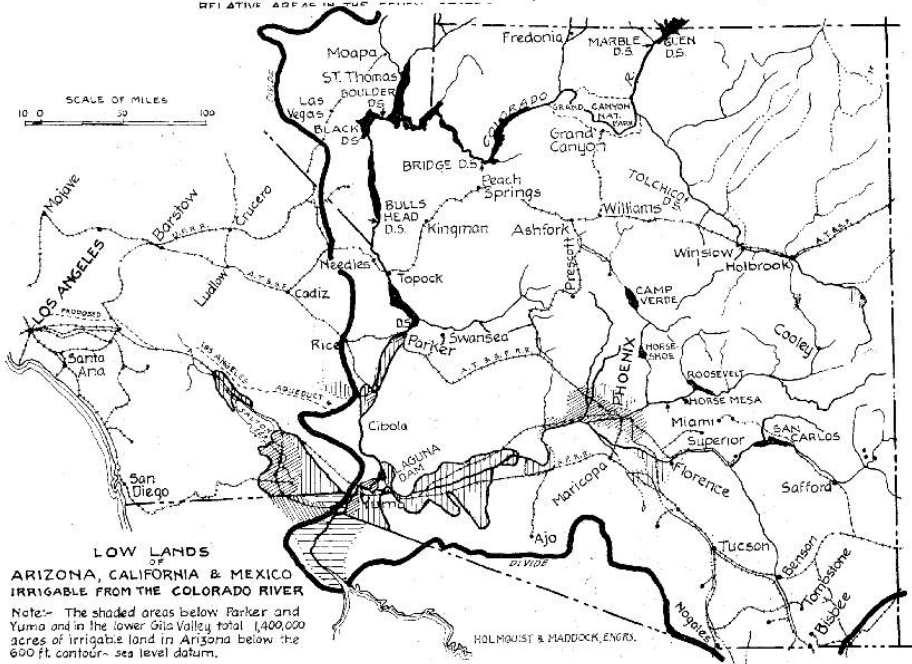
California in other streams has three times as much potential water power as Arizona possesses in the Colorado and its tributaries.

## THE DAM DISPUTE

The proposed Boulder Canyon dam at an elevation of 650 feet above sea level is high enough to irrigate by gravity land in California and Mexico.

It is not high enough up the river to irrigate by gravity any land in Colorado, Nevada, New Mexico, Wyoming and Utah or to provide regulation storage for Arizona power projects.

# DRAINAGE AREA COLORADO RIVER BASIN



### HOW THE 50-50 WATER DIVISION PROPOSED BY ARIZONA WOULD WORK OUT

Available for Lower Basin per U. S. G. S.....	9,385,000 acre feet
For Nevada.....	300,000
*For Mexico.....	500,000
	<hr/>
	800,000
	<hr/>
	800,000 acre feet

To be divided equally between Arizona and California 8,585,000 acre feet

\*\*Arizona 1,400,000 acres @ 3.07 feet per acre..... 4,292,500 acre feet

California 4,292,500 acre feet

600,000 acre feet for Los Angeles\*\*\*

3,692,500 acre feet @ 4 feet per acre=923,000 acres

Imperial Valley.....	370,000 acres now irrigated
Yuma Project (portion in Calif.)	15,000 acres now irrigated
Palo Verde.....	36,000 acres now irrigated

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421,000 Total now irrigated

923,000 acres

421,000 acres

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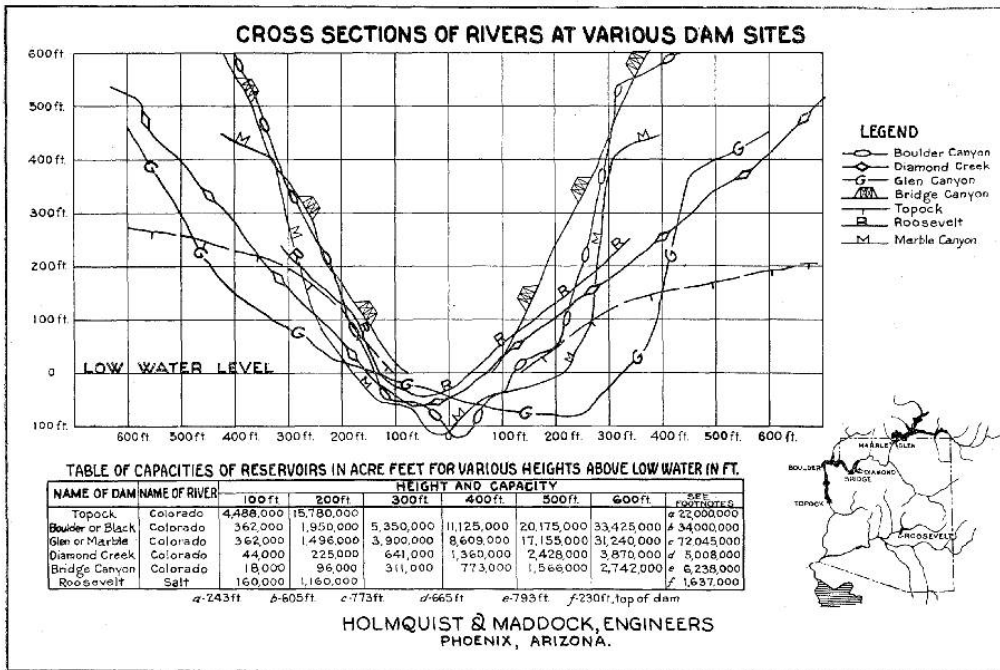
502,000 Additional Acreage for California future irrigation.

\*Present use in Mexico approximately 1,000,000 acre feet balance will be supplied by return flow.

\*\*California water duty 4 feet, and because of return flow Arizona duty 3 feet.

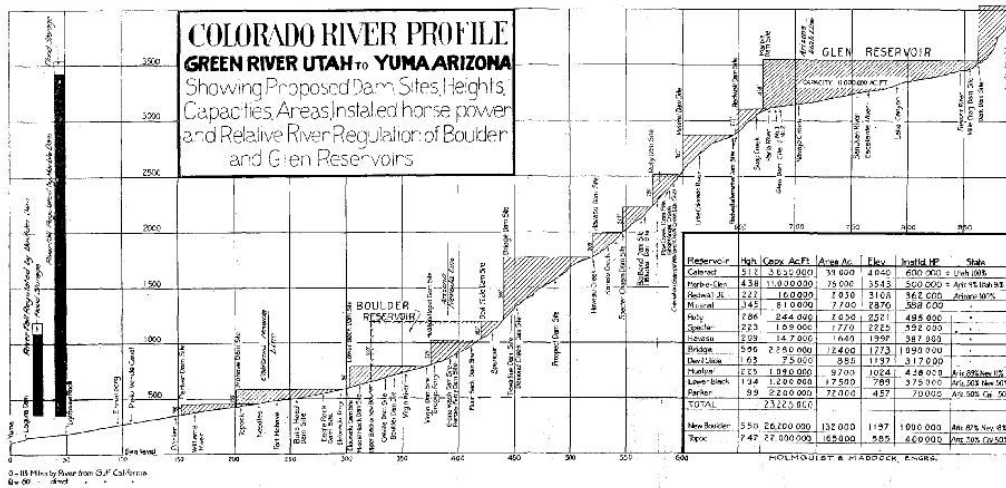
\*\*\*Los Angeles by using 600,000 acre feet plus her own streams will have sufficient water for ten million population.

\*\*\*Los Angeles can secure even more water by decreasing irrigable area in California.



Ravine Sections

Profile Colorado River



**PRINCIPLES WHICH THE COLORADO RIVER COMMISSION OF ARIZONA  
PROPOSED AT THE CONFERENCE OF GOVERNORS AT DENVER,  
AS A BASIS FOR A SETTLEMENT OF THE COLORADO RIVER  
CONTROVERSY**

Arizona has the following proposal to offer for your consideration as the basis for the preparing of a compact between Arizona, California, and Nevada which will be supplementary and subsidiary to the Colorado River compact adopted at Santa Fe:

Arizona will accept the Santa Fe compact, if and when supplemented by a subsidiary compact which will make definite and certain the protection of Arizona's interests as follows:

That before regulation of the Colorado River is undertaken Mexico be formally notified that the United States Government reserves for use in the United States all water made available by storage in the United States.

That any compact dividing the water of the Colorado River and its tributaries shall not impair the rights of the States under the respective water laws to control the appropriation of water within their boundaries.

That the waters of the streams tributary to the Colorado River below Lees Ferry and which are inadequate to develop the irrigable lands of their own valleys be reserved to the States in which they are located.

That so much of the water of the Colorado River as is physically available to the lower-basin States—but without prejudice to the rights of the upper-basin States—shall be legally available to and divided between Arizona, California, and Nevada, as follows:

(A) To Nevada, 300,000 acre-feet per annum.

(B) The remainder, after such deductions as may be made to care for Mexican lands allotted by treaty, shall be equally divided between Arizona and California.

That the right of the States to secure revenue from and to control the development of hydro-electric power within or upon their boundaries be recognized.

That encouragement will be given, subject to the above conditions, to either public or private development of the Colorado River at any site or sites harmonizing with a comprehensive plan for the maximum development of the river's irrigational and power resources.

That Arizona is prepared to enter in a compact at this time to settle all the questions enumerated herein, or Arizona will agree to forego a settlement of items 6 and 7 and make a compact dividing the water alone, providing it is specified in such compact that no power plants shall be installed in the lower-basin portion of the main Colorado River until the power question is settled by a power compact among the States.

**MEXICO**

One of the questions which makes a settlement of the Colorado River controversy difficult, is the menace of Mexico. American millionaires own over a million acres of land in Mexico which can be irrigated from the Colorado River. If the land is irrigated, A MILLION ACRES OF LAND WILL REMAIN DESERT IN ARIZONA.

The conference of the governors of the Colorado River Basin States at Denver, Colorado, adopted the following memorial:

To the Honorable Calvin Coolidge,  
President of the United States of America,

and  
The Honorable Frank B. Kellogg,  
Secretary of State:

WHEREAS, the prosperity and growth of the Colorado River states, namely, Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming, are dependent upon present and increasing use of the waters of the Colorado river for domestic, agricultural, industrial and other beneficial purposes, and the need of many regions of these states for additional water from that source, already is extremely acute and will become increasingly so, and

WHEREAS, said river is an international stream between the United States of America and the United States of Mexico with all of the water supplying the same coming from the United States of America, and the United States of Mexico is rapidly extending the irrigated area supplied from said river within her own boundaries, and great storage projects within the United States of America are in existence and in contemplation, and

WHEREAS, said United States of Mexico, although having no strictly legal right to a continuance of the river flow for beneficial purposes, nevertheless, may hereafter make some claim thereto, and

WHEREAS, under acts of Congress of May 13, 1924, and March 3, 1927, a commission of three has been appointed by the President to co-operate with representatives of the United States of Mexico in a study regarding the equitable use of the waters of the Colorado River and other international waters for the purpose of securing information on which to base a treaty relative to international uses.

NOW, THEREFORE, and to the end that no unfortunate misunderstanding may arise between the United States of America and the United States of Mexico, and that no false encouragement may be given to present or future developments along the Colorado river in the United States of Mexico, WE, THE GOVERNORS OF ALL SEVEN OF THE COLORADO RIVER STATES, WITH OUR INTERSTATE RIVER COMMISSIONERS AND ADVISORS IN CONFERENCE ASSEMBLED in the City of Denver on this 26th day of August, 1927, do hereby in great earnestness and concern make common petition that a note be dispatched to the government of the United States of Mexico calling attention of that government to the fact, that, neither it nor its citizens or alien investors, have any legal right as against the United States of America or its citizens to a continuance of the flow of the Colorado river for beneficial purposes and that the United States of Mexico can expect no such continuance except to the extent that as a matter of comity the two governments may declare hereafter by treaty and that especially under no circumstances can the United States of Mexico hope to use water made available through storage works constructed or to be constructed within the United States of America, or hope to found any right upon any use thereof. We believe too, so great are the water necessities of our states, that any adjustment made with the United States of Mexico concerning the Colorado river, should be based upon that river alone. We further earnestly suggest that a special commission be created by act of congress for the Colorado river alone, a majority of the commission to be appointed from citizens of the Colorado river states, or that by act of congress the present commission already referred to be enlarged to contain two additional members to come from the Colorado river states.

It is only by such precautionary measures, promptly taken, that our seven states with their millions of people can be given a basis of economic certainty, adequate protection, and a feeling of security pending the negotiation of an early treaty between the two governments.

And your memorialists will forever pray.

GEO. W. P. HUNT,  
Governor of Arizona.

C. C. YOUNG,  
Governor of California

WM. H. ADAMS,  
Governor of Colorado.

F. B. BALZAR,  
Governor of Nevada.

R. C. DILLON,  
Governor of New Mexico.

GEO. H. DERN,  
Governor of Utah.

FRANK C. EMERSON,  
Governor of Wyoming.

#### HYDRO-ELECTRIC POWER

It will be possible to develop approximately four million hydro-electric horsepower on the Colorado river below the Utah line, of which 80 percent will be developed in Arizona.

The California proposal as embodied in the Swing-Johnson Bill, proposes that the government shall develop power on the Colorado river, which will be transmitted to California, tax free. If the power is developed by any other agency than the federal government—and it can and will be if the federal government does not build the project—the States of Arizona and Nevada will derive revenue from taxation. If, as the law now stands, government property is not taxable—the Congress of the United States has full power to permit the taxation of hydro-electric projects.



The following resolution dealing with the subject of the rights of the states with reference to POWER, was adopted at Denver, Colorado:

**RESOLUTION OFFERED BY SENATOR KEY PITTMAN**

Adopted at Seven States' Conference on the Colorado River at Denver, October 4, 1927, by affirmative votes of Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming; California not voting.

WHEREAS, It is the settled law of this country that the ownership of and dominion and sovereignty over lands covered by navigable waters within the limits of the several states of the Union belong to the respective states within which they are found, when that can be done without substantial impairment of the interests of the public in the waters, and subject always to the paramount right of Congress to control the navigation so far as may be necessary for the regulation of commerce with foreign nations and among the states, and whereas;

It is the settled law of this country that subject to the settlement of controversies between them by interstate compact, or decision of the supreme court of the United States, and subject always to the paramount right of Congress to control the navigation of navigable streams so far as may be necessary for the regulations of commerce with foreign nations and among the states, the exclusive sovereignty over all of the waters within the limits of the several states belongs to the respective states within which they are found, and the sovereignty over waters constituting the boundary between two states is equal in each of such respective states, and whereas:

It is the sense of this conference that the exercise by the United States government of the delegated constitutional authority to control navigation for the regulation of interstate and foreign commerce does not confer upon such government the use of waters for any other purposes which are not plainly adapted to that end, and does not divest the states of their sovereignty over such waters for any other public purpose that will not interfere with navigation:

THEREFORE, BE IT RESOLVED, That it is the sense of this conference of governors and the duly authorized and appointed commissioners of the states of Arizona, California, Colorado, New Mexico, Nevada, Utah and Wyoming, constituting the Colorado River Basin states, assembled at Denver, Colorado, this 23rd day of September, 1927, that:

The rights of the states under such settled law shall be maintained.

The states have a legal right to demand and receive compensation for the use of their lands and waters except from the United States for the use of such lands and waters to regulate interstate and foreign commerce.

The state or states upon whose land a dam and reservoir is built by the United States government, or whose waters are used in connection with a dam built by the United States government to generate hydro-electric energy are entitled to the preferred right to acquire the hydro-electric energy so generated or to acquire the use of such dam and reservoir for the generation of hydro-electric energy, upon undertaking to pay to the United States government the charges that may be made for such hydro-electric energy or for the use of such dam and reservoir to amortize the government investment, together with interest thereon, or in lieu thereof agree upon any other method of compensation for the use of their waters.

**COMPROMISE DIVISION OF WATER WHICH ARIZONA AGREED TO  
ACCEPT AT THE DENVER CONFERENCE**

A conference of the Governors and other representatives of the seven states of the Colorado River Basin convened at Denver, Colorado, August 22, 1927. It was called by the Governors of the upper basin States—Utah, Colorado, New Mexico and Wyoming—for the purpose of making an effort to adjust the differences between the lower basin States of California, Nevada and Arizona, and to bring about the development of the Colorado river. Sessions were held from August 22 to September 1, and from September 19 to October 4.

After hearing the presentations of their respective cases by representatives of the States of California, Nevada and Arizona, the upper basin Governors—Dern of Utah, Adams of Colorado, Dillon of New Mexico and Emerson of Wyoming—on August 25—submitted a water division proposal for the consideration of the states of the lower basin,

which seemed to them, in the light of the evidence which had been presented at the hearings, as fair and reasonable.

This proposal, in substance, was as follows:

1. Of the 7,500,000 acre feet annually which, under the terms of the Colorado River Compact, the upper states are required to permit to flow past Lee Ferry—

To California.....	4,137,500
To Nevada .....	300,000
To Arizona.....	3,062,500
	<hr/>
	7,500,000

Out of which California would take care of her present perfected rights, amounting to approximately 2,000,000 acre-feet; and Arizona would take care of her present perfected right, amounting to approximately 925,000 acre-feet, including 675,000 acre-feet for Indian land developed and undeveloped.

2. Each state to have such of the waters of its tributaries entering the river below Lee Ferry, as could be diverted from the tributaries before entering the main stream. The extra one million acre-feet allotted to the lower basin by the Colorado River compact to be considered as part of the tributary waters going to Arizona. Tributary waters entering the main stream above Laguna to be considered part of the main stream and divided equally between California and Arizona.

This was virtually a recognition of the justice of Arizona's claim for her tributary waters and a 50-50 division of the waters of the main stream, but, as a compromise measure, reduced the Arizona share from 3,600,000 acre-feet to 3,062,500 and gave the difference to California.

Arizona accepted the proposal in principle, while insisting upon the use of language which would remove all doubt as to her tributaries being relieved of the burden of supplying any water that might hereafter be allotted to Mexico, and upon the insertion of a clause giving to the states of California and Arizona the right to use, without prejudice to the upper states, the unallotted water in the main stream of the Colorado, and to divide such waters on a 50-50 basis.

California rejected the proposal in toto.

#### **An Amended Proposal**

Several drafts were subsequently made of the Governor's proposal, and a number of notes were exchanged between the Governors and the representatives of the lower basin states. On August 30 the Governors submitted their final proposal, making further concessions to California, in the following form:

#### **Suggested Basis of Division**

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:

1. 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 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.

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 water of the tributaries of the Colorado River emptying into the River below Lee 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 streams, provided, the

apportionment of the waters of such tributaries situated 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 water necessary for the supply of any rights which may now exist, including water for Indian lands in each of said States.

5. Arizona and California each may divert and use one-half of the unapportioned waters of the main Colorado River flowing below Lee Ferry, subject to future equitable apportionment between the said States after the year 1963, and on the 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.

#### Arizona Acceptance

Upon the reconvening of the conference, Arizona, on September 22, presented a reply, accepting the proposal of the Governors, conditioned upon modification of the language of Paragraphs 2 and 3, so as to remove their ambiguity. The following re-wording was proposed:

2. "The States of the Lower Basin respectively shall have the exclusive beneficial consumptive use of the tributaries within their boundaries before the same empty into the main stream, provided, the division of the waters of such tributaries situated 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".

3. "The 1,000,000 acre feet of water allocated to the States of the Lower Basin by paragraph (b) of Article III of the Colorado River Compact, shall be deemed to attach exclusively to the Arizona tributaries of the Colorado River, and to be included in the waters of such tributaries allocated to Arizona under the term, of paragraph (2) hereof, to be diverted from said tributaries before the same empty into the main stream. Any allocation of water made to the Republic of Mexico shall be supplied out of water unapportioned herein and if it shall be necessary at any time for the lower basin to supply any water to Mexico the same shall be supplied by California and Arizona out of the water allotted to them from the main Colorado River in equal amounts."

Arizona's acceptance was accompanied by the following statement:

We assert that Arizona has at all times been ready to assist California to secure drouth and flood protection, silt elimination and that the fifty-fifty proposition that we have offered is exceedingly generous in that, beside providing water for all the land California now has under irrigation, it will permit her to irrigate 500,000 additional acres and also provide ample domestic water for her coast cities when her own sources of supply are developed. We believe that our legislature took cognizance of these facts in asking for an equal division of the river water. We believe that both Arizona and California must sacrifice some of the lands which they could put under cultivation in order to arrive at an agreement. There is no reason of law, justice, or economic development which has been made which would warrant Arizona in making a sacrifice of 600,000 acre feet of water to California.

It must be evident that Arizona would be abundantly justified, as a matter of strict justice, in rejecting—in utterly and decisively casting aside—the proposal suggested, or any proposal failing to recognize her rights to at least an even division of the water available for the use of Arizona and California out of the main stream of the Colorado River.

That we do not do so is due to a desire, the earnestness and sincerity of which we trust will no more be questioned, for an amicable settlement of this controversy, and out of a deep sense of appreciation of the labors and friendly offices of the Governors of the States of the Upper Division. If, on the other hand, we still hesitate to accept, that hesitancy may be attributed to the fact that we have as yet no assurance that such a sacrifice on our part would result in a final settlement; no assurance of the protection of Arizona's tributaries against an undue share of the burden of supplying water to Mexico; no assurance of the recognition of Arizona's right to a fair revenue from the utilization of her hydro-electric power resources used to the further enrichment and greater glory of California. The insistence of

that State's representatives that Arizona must bear the brunt of the Mexican burden; their apparent unwillingness to proceed to a settlement of the power question; their evident purpose and the purpose of their State, with its vast resources, to press for the enactment of the Swing-Johnson Bill, which is so glaringly unjust to Arizona, fills us with foreboding.

"Nevertheless, in the face of these disquieting circumstances, despite these misgivings, if the vital matters to which reference has here been made can be resolved affirmatively—and it must clearly be understood that it is only upon the condition that they are resolved affirmatively—we will accept the first item of your proposal, relating to the allocation of water. This price will we pay that the Colorado River problems may be solved. We must suggest, however, that no further sacrifice be asked of us. In the event that these negotiations fail, and this conference terminates without an agreement being reached, this acceptance hereby is and shall be deemed to be withdrawn, as fully and completely as if it had never been made. Finally, we declare that this offer shall not be construed as representing Arizona's claims as to her rights in the Colorado River, and most emphatically we insist that at no other time or place, by any other tribunal, shall the proposal hereby accepted for the purpose at this time of bringing about a settlement of the Colorado River controversy, be employed as a basis of other negotiations."

In a lengthy statement of her position, California rejected the proposal.

#### SUMMARY OF ARIZONA REASONS FOR OPPOSING THE JOHNSON BOULDER DAM BILL

The bill ignores every arbitration recommendation made, after months of labor by the Conference of Governors and advisers of the seven basin states, held at Denver in the fall of 1927, including their proposed compromise division of the river water.

The bill denies the three requests of Arizona, viz: Protection against Mexico, an equal division of Colorado River water with California and that water power properties pay taxes like other property. (See opening statement of Arizona at Denver.)

The bill pretends to limit Mexican use of water; actually it does not, but limits use in the United States to 16,000,000 acre feet until 1963—which means forever. (Line 21, page 13, and Art. 3, Section a, b, f, Santa Fe Pact.)

The bill pretends to limit California to 4,600,000 acre feet; actually it authorizes her to take approximately 7,600,000 acre feet, or all the water allotted to the Lower Basin in the Santa Fe compact. (Line 15, page 6; line 6, page 7, 4,600,000 plus 3,000,000 acre feet of normal flow and evaporation.)

The bill pretends to give Arizona and Nevada a power revenue similar to the coal and oil leasing law of 37½% of the receipts; actually the bill's provision is upon the net instead of the gross receipts and inserted jokers preclude any net revenue. (Lines 11, 12, page 6; lines 16, 17, page 2. Receipts may be used for construction.)

The bill pretends to put the Imperial and Coachella Valley development under the Reclamation Law, similar to other projects; actually it exempts California land from any payment for either the construction or operation of storage reservoirs and delivery canals. (Lines 16, 17, page 2 make water service free.)

The bill proposes to improve navigation; actually it destroys it, as twenty locks—like those at Panama—would be required to lift vessels over Boulder dam. (Line 4, page 1.)

It withdraws from entry all federal land needed for canals, etc., but it gives a blanket franchise for transmission lines anywhere over government land. (Lines 15, 18, page 16 and lines 1, 5, page 11.)

It pretends to be an act to assist farm-makers; actually it is a bill to assist California farm and real estate promoters who are allowed to retain hundreds of millions of dollars of unearned increment produced by flood control, etc. (Lines 16, 17, page 2.)

The bill's advocates pretend over 200 miles of canal are needed to "get out of Mexico", when only one-third of this amount is required. (Lines 13, page 2.)

The bill omits the Reclamation Law limit of 160 acres to each individual, thereby subsidizing large landholders and speculators which makes federal aid for irrigation development unjustified.

**The bill requires the construction of a canal 139 miles in length for the Coahuila valley, but omits the \$15,000,000 appropriation necessary to pay for this work. (Page 86 Sen. Document 142.)**

The bill pretends to give employment to ex-service men; actually it allows those in charge of construction and maintenance to hire whom they please. (Line 15, page 17.)

**It proposes homesteads for ex-service men; actually it builds canals to irrigate corporation-owned lands, including a railroad grant larger than the District of Columbia. (Line 13, page 2.)**

The bill pretends that the selling price of power must be equal to competitive prices; actually it postpones this requirement for fifteen years, to freeze out the present electric plants, stock and bond holders. (Lines 4 to 10, page 8.)

It pretends to limit electrical power contracts to a term of 50 years; actually it provides that the government must renew these contracts indefinitely, or pay for the transmission lines and local distributing system. (Lines 22, 25, page 8.)

The bill gives California the power resources of Arizona although California possesses in her own streams twice the water power resources of Arizona. (See report Federal Power Commission.)

**It proposes flood control to save life and property; actually it insures the irrigation of 3,000,000 acres in California and Mexico, to produce hay, cotton and vegetables for canning, etc., to add to surplus farm products. (Line 3, page 1.)**

It proposes domestic water for Southern California cities; actually it provides a national fund, for Los Angeles city water works, and to take Arizona water to irrigate the coastal plain, like Owens Valley water was taken 250 miles to irrigate the San Fernando valley. (Lines 9, 14, page 3.)

The bill pretends that construction of Boulder dam is permissible under the Arizona Enabling Act and a repealed section of Arizona Constitution, when the proposed dam site was withdrawn three years too late for these to apply, even if otherwise applicable. (Par. C, Sec. 8, page 16 and General Land Office Records.)

The bill unnecessarily conflicts with the Reclamation Law, the Federal Power Act and the Constitution of the United States, when real flood control and development can be secured under them.

It provides that works constructed in California, when paid for, shall be owned by the people of that state, but that works constructed in Arizona and Nevada shall forever be owned by the federal government. (Lines 21, 28, page 12 and line 12 page 11.)

**It proposes legislation to build one dam; actually 95% of the water in Arizona is placed in the control of other states through this act. (Par. b and c, Sec. 12.)**

The bill prohibits Arizona taxing a product to be exported to California, but it permits taxation by Nevada and California, states and counties, of the transmission lines and aqueducts, which will cross their lands just as similar ones are now taxed. (Lines 16-19, page 7.)

**The bill gives the Secretary of Interior authority to abrogate a contract between the Yuma and Imperial projects on the approval of the latter party only. (Line 6, page 18.)**

The bill compels Arizona irrigation pumping projects when purchasing power, to pay a one mill tax per K. W. hour to maintain the gravity ditches of California farming competitors. The mines and railroads of Arizona and Nevada must pay a similar tribute. (Lines 21-24, page 5.)

The bill assists California to increase her potential 18,000,000 acres of irrigated land and reduces Arizona's prospective agricultural development, which is less than one-fifth as much.

The bill provides a veto on congressional action for each of the other six states, but Arizona—whose population residing within the Colorado basin is equal to that of all the other states combined—is denied a voice in this legislation. California and Nevada, who each have about 10,000 people living in this river basin, or including Imperial valley about 70,000 persons interested under this bill, may say how the water for over 400,000 people in Arizona shall be disposed of. (Line 1, page 20 and U. S. Census.)

**There is not enough water in the Colorado River to develop all the good irrigable land. The states are now lawfully competing for water. The bill changes all present laws. It grants unlimited time for the development of the**



upper basin states. It authorizes a \$50,000,000 subsidy for irrigation ditches in California; it gives Nevada what she has asked for; it is considerate of Mexico. The only lands by political fiat dedicated to the desert forever are located in Arizona. By it Arizona is deprived of the control of her own meager rain fall as well as the water which comes down to her from the upper basin.—(Senate Hearings 1928.)

The bill takes Arizona hydro-electric power to provide the funds and force to capture her water; then her lands are withdrawn from entry to prohibit her competition. She may not use her own water on her own soil. If her own power resources are not confiscated or nationalized Arizona can tax them to irrigate her own land like California did her Durham and Delhi irrigation projects. (Senate Hearings 1928.)

National taxpayers are to contribute their resources 100% for Mississippi flood control. None of this money is to be repaid, but all of the money spent on the flood control of the Colorado river must be repaid by Arizona, which owns 82% and Nevada which owns 18% of the fall which can develop power from this 550 foot dam.

Idaho and Montana are insisting that the Columbia project be delayed until they have a compact with the state of Washington. New York, Pennsylvania and New Jersey are insisting on their rights in the Delaware river. Maryland and Pennsylvania handled the Susquehanna at Conowingo. Maine, for years, prohibited hydro power exportation. Kentucky intends to tax Ohio river power plants. Nationalizing power is opposed by Alabama at Muscle Shoals, Tennessee at Cove Creek, West Virginia on Cheat river, Connecticut on the Connecticut river, etc.

The bill creates a reservoir eleven times as large as will be ultimately needed when upper storage is provided for the river's hydro-electric development; this means an unnecessary evaporation loss of 700,000 acre feet of water per year, or the early abandonment of the expensive investment in the Boulder dam and power plant. (Boulder reservoir area 132,000 acres. Evaporation=900,000 acre feet. The Virgin basin, one-quarter of the capacity of the Boulder reservoir, will early be cut off from the main reservoir by silt like the Salton sea was separated from the Gulf of California. It would be worthless for the storage of silt or water yet would evaporate water enough to irrigate 70,000 acres.)

The bill pre-determines the dam site by congressional action, in disregard of the adverse foundation conditions, before the numerous other sites have had their foundations examined. This latter preliminary work could have been done for approximately \$6,000 each or one-seventieth of one per cent. of the cost of the proposed Boulder dam.

The Boulder dam advocates claim it is endorsed by most engineers; actually Mulholland—builder of the St. Francis dam—and ex-Director of Reclamation Davis, long consulting engineer for Los Angeles, and their subordinates, are its principal supporters. Engineers of the United States Army—Geological Survey and Federal Power Commission, are on record against it.

Arizona has more good land than California irrigable from the Colorado, also it can be irrigated cheaper, but the bill constitutes federal, political interference and a financial subsidy for a favored California district which is competing for a limited supply of water. This district is farthest from the water supply, insuring the maximum loss of water in transit. It cannot re-use water, which means from 30 to 50 per cent. waste. It is below sea level, in an earthquake region which may again be invaded by the ocean. The storage reservoir at a low latitude and altitude insures excessive evaporation loss. The dam is located in a geological fault as was the St. Francis dam. (See 1928 Senate Hearings.)

If every power plant on all the tributaries of the Mississippi, Missouri, Ohio, Tennessee, Arkansas, etc., were exempt from state and county taxation, and if the federal government secured from these power plants sufficient revenue to construct and maintain all the levees on the lower Mississippi; if the power plants on the St. Lawrence were exempt from taxation in New York state, but required to furnish sufficient revenue to build a ship canal to carry commerce through Canada and away from New York City; if the power plants on every stream in eastern United States were exempt from state taxation, but compelled to pay for dredging harbors in other states; if power plants on United States land in the Sierra mountains of California, Oregon and Washington were exempt from state taxation, but compelled to finance federal roads in Arizona, Nevada, Utah and Montana; if coal, iron and copper mines, oil wells and railroads, wheat and cotton fields, etc., were all exempt from state taxation, in order that the citizens of other states might

get their products cheaper, then, and only then, the Boulder dam bill would be fair and justified, because we would have destroyed the states through lack of revenue and adopted national socialism.

Arizona in proposing a 50-50 division offers California water for domestic use for 5,000,000 more people in Los Angeles, water for the 421,000 acres now irrigated in California and also water to irrigate 503,000 new acres.

**In place of the Swing-Johnson bill Arizona suggests an agreement among the states, to be approved by the federal government, limiting water made available by storage for exclusive use on United States soil, providing that hydro-electric power be subject to taxation like other property and for an equal division of the water of the main river available for the states of Arizona and California.**

While of the opinion that a storage dam on the upper part of the river would be cheaper to construct, entail less evaporation loss, be four times as useful for power development, result in cheaper subsequent construction, be equally good for irrigation supply and provide more revenue for repayment of federal appropriation, Arizona, if secured in these three above requirements, could accept any dam the location of which was determined by engineering and economic selection.