Is Storage Below the State of Colorado the Answer?

By Ed C. Johnson
United States Senator, Colorado
and
Governor-Elect of Colorado

Interested persons on the Eastern and Western Slopes of Colorado have expressed confidence in me, as Governor, to resolve the very controversial water problem that plagues both slopes. This is a tremendous responsibility and challenge but its vital nature demands my acceptance. Accordingly, I shall do my utmost to work out something which will benefit both slopes and injure neither.

However, before we begin the task of allocating Colorado's share of the water of the Colorado River System, we first must take stock of the quantity and the location of the water that is available to us. There are very serious misconceptions, widely held, in regard to the burdens placed on this state by the specific provisions of the Seven State Compact and the official interpretations with respect to them. These limitations should be understood clearly by all parties concerned, since they are basic to any plan to develop the Upper Colorado River Basin. It is with that purpose in mind that I have prepared this document. If my grave fears are groundless I want to be shown.

Either the Seven State Compact specifically denies to the Upper Basin the right to withhold water which it cannot use for agricultural and domestic purposes or it does not deny us such a right. Either it denies to the Upper Basin the right to withhold water to develop power or it does not deny us that right. Let us look at the document which has been ratified by the Legislatures of seven states for the answers to these pertinent questions.

Here is that irrevocable record:

Article II

(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

(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.

Pursuant to an Act of Congress, the Honorable Herbert Hoover, Secretary of Commerce of the United States, was appointed by the President to serve as Chairman of the Seven State Compact Commission as the Official Representative of the Government of the United States. He was the Chairman of the Colorado River Commission that drafted the Seven State Colorado River Compact. In answer to the question propounded by Congressman Hayden these points in the compact were interpreted
officially by Chairman Hoover on January 27, 1923, before any state had ratified the Compact. The questions are as follows:

**Question 14.** Can paragraph (d) of Article III be construed to mean that the States of the upper division may withhold all except 75,000,000 acre-feet of water within any period of 10 years and thus not only secure the amount to which they are entitled under the apportionment made in paragraph (a) but also the entire unapportioned surplus waters of the Colorado River?

**Answer.** No. Paragraph (a) of Article III apportions to the upper basin 7,500,000 acre-feet per annum. Paragraph (e) of Article III provides that the States of the upper division shall not withhold water that cannot be beneficially used. Paragraph (f) and (g) of this article specifically leave to further apportionment water now unapportioned. There is, therefore, no possibility of construing paragraph (d) of this article as suggested.

**Question 19.** Why is the impounding of water for power purposes made subservient to its use and consumption for agricultural and domestic purposes, as provided in paragraph (b) of Article IV?

**Answer.** (a) Because such subordination conforms to established law, either by constitution or statute, in most of the semiarid States. This provision frees the farmer from the danger of damage suits by power companies in the event of conflict between them.

(b) Because the cultivation of land naturally outranks in importance the generation of power, since it is the most important of human activities, the foundation upon which all other industries finally rest.

(c) Because there was a general agreement by all parties appearing before the commission, including those representing power interests, that such preference was proper.

**Question 20.** Will this subordination of the development of hydroelectric power to domestic and agricultural uses, combined with the apportionment of 7,500,000 acre-feet of water to the upper basin, utterly destroy an asset of the State of Arizona consisting of 3,000,000 horse power, which it is said could otherwise be developed within that State if the Colorado River continues to flow, undiminished in volume, across its northern boundary line and through the Grand Canyon?

**Answer.** The compact provides that no water is to be withheld above, that cannot be used for purposes of agriculture. The lower basin will therefore receive the entire flow of the river, less only the amount consumptively used in the upper States for agricultural purposes.

On December 15, 1922, Honorable Delph E. Carpenter, Commissioner for Colorado, reported to Governor Oliver H. Shoup his analysis of this compact which he helped to formulate. His comments and observations are especially pertinent. In this official report he said:

"Power claims will always be limited by the quantity of water necessary for domestic and agricultural purposes. The generation of power is made subservient to the preferred and dominant uses and shall not interfere with junior preferred uses in either basin."

On March 20, 1923, Delph E. Carpenter in a joint letter to Colorado Senator M. E. Bashor and Colorado Representative Royal W. Calkins said among other things:

All power uses in both basins are made 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.

The interpretation of Honorable W.S. Norviel, Commissioner for Arizona, published January 15, 1923, contains this language:

"The third principle established by the compact was to fix a time when the remainder of the water unallotted and unused might be apportioned. The fourth principle fixes a preference in agricultural uses over power. The fifth principle, that the upper states shall not withhold water that cannot be reasonably applied for agricultural uses."
Senator Hayden, Arizona, propounded 19 questions to Honorable A.P. Davis, Director United States Reclamation Service, to which the Director made the following replies on January 30, 1923:

Question 10. Is it true that, if the Colorado River compact is adopted, all of the water that Arizona will ever get out of the main river will be enough to irrigate only 280,000 acres of land, of which 130,000 acres are now embraced in the Yuma project and 110,000 acres in the Parker project?

Answer. The Colorado River compact does not attempt to divide the water of the river between individual States. Except for rights already initiated by California and Nevada, there is nothing in the compact that will prevent the State of Arizona from taking from the river all the water that it can put to beneficial use.

Question 19. Any further comment that you may care to make relative to the approval of the Colorado River compact by the Arizona State Legislature will be appreciated.

Answer. The Colorado River compact provides that the lower basin shall be guaranteed an average of 7,500,000 acre-feet of water annually from the upper basin and all of the yield of the lower basin, and that any water not beneficially used for agricultural and domestic uses shall likewise be allowed to run down for use below.

It should be noted that these official interpretations were made before the compact was ratified by any State except Nevada and were not disputed by Colorado or any other State at the time it ratified the compact. Are we or are we not bound by them?

At the time the Seven State Compact was adopted and ratified, it was contemplated that a treaty would be negotiated later between the United States and Mexico which would allocate to Mexico certain quantities of water defined in acre-feet, out of the Colorado River System. Furthermore, it spelled out just how that burden should fall upon the Lower Basin and the Upper Basin. The compact specified that to the extent there is surplus water in the Colorado River System, such surplus water would be utilized and the balance of the burden would be shared equally by the Upper and Lower Basins.

Article III

(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.

Should the Upper Basin States build Storage Reservoirs at the Glen Canon and Echo Park sites as is now contemplated, will the water withheld thereby be surplus water since the Upper States cannot possibly use such water for agricultural or domestic purposes?
Senator Hayden asked Chairman of the Commission, Herbert Hoover, about this and was answered as follows:

**Question 15.** Does paragraph (d) of Article III in any way modify the obligation of the States of the upper division, as expressed in paragraph (c), to permit the surplus and unapportioned water of flow down in satisfaction of any right to water which may hereafter be accorded by treaty to Mexico? Within any year of a 10-year period, could the States of the upper division shift to the States of the lower division the entire burden of supplying such water to Mexico?

**Answer.**

(a) No. It is provided in the compact that the upper States shall add their share of any Mexican burden to the delivery to be made at Lee Ferry, whenever any Mexican rights shall be established by treaty. By paragraph (c) of Article III, such an amount of water is to be delivered in addition to the 75,000,000 acre-feet otherwise provided for.

(b) In the face of the specific provision of Article III (c) that the burden of any deficiency must be "equally borne," I can see no possibility of placing upon the lower division the entire burden. If the surplus is sufficient, there is no burden on anyone. If it is insufficient the plain language is that it must be equally shared, with the equally plain provision that the upper division must furnish its half.

Delph Carpenter in his official report to Governor Shoup said:

"Any waters necessary to supply lands in the Republic of Mexico (hereafter to be determined by international treaty) shall be supplied from the surplus flow of the river. If the surplus is not sufficient, any deficiency shall be borne equally by the upper basin and the lower basin."

However Mr. Carpenter did not say, "Water held in the Upper Basin to generate power and which for physical reasons could not be used by the Upper Basin for agricultural or domestic purposes is surplus water to the Upper Basin."

The Upper and Lower Basins were each apportioned from the Colorado River System the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, and in addition the Lower Basin was given the permission to increase its beneficial consumptive use of an extra million acre-feet per annum of surplus water. However, the 7,500,000 acre-feet awarded to the Lower States had a very clear priority over the 7,500,000 acre-feet awarded to the Upper States. In reality, the compact gave the Lower States 7,500,000 acre-feet of water per annum and the Upper States that much water if there should be any water left in the River.

**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.

But here is the catch in this award:

(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.
The following quotes from the questions by Senator Hayden and answered on January 27, 1923, by Chairman of the Commission Herbert Hoover leave nothing to the imagination with respect to the extra one million acre-feet of surplus water awarded the Lower Basin. The extra million acre-feet is to be met out of surplus waters over and above the 7,500,000 acre-feet allocated annually to each of the two basins and it does not take priority over the Upper States award of 7,500,000 feet provided they use all of their 7,500,000 for agricultural and domestic purposes. But if the Upper Basin stores water for power purposes does a million acre-feet per annum go to satisfy the demand for an extra million acre-feet in paragraph (b) Article III?

Question 6. Are the 1,000,000 additional acre-feet of water apportioned to the lower basin in paragraph (b) of Article III supposed to be obtained from the Colorado River or solely from the tributaries of that stream within the State of Arizona?

Answer. The use of the words "such waters" in this paragraph clearly refers to waters from the Colorado River system, and the extra 1,000,000 acre-feet provided for can therefore be taken from the main river or from any of its tributaries.

Question 22. Does the Colorado River Compact apportion any water to the State of Arizona?

Answer. No, nor to any other State individually. The apportionment is to the groups.

It should be noted, and I repeat, that Secretary Hoover's official interpretations were made before the compact was ratified by any state; furthermore it was not disputed by any of them when they did ratify it.

On December 15, 1922, Colorado Commissioner Delph E. Carpenter in his official report to the Governor of Colorado, the Honorable Oliver H. Shoup, submitted several tables explaining the allocation of the water of the Colorado River System.

Table 4 reads as follows:

<table>
<thead>
<tr>
<th></th>
<th>Acre-feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Division Allocation, includes present consumption</td>
<td>7,500,000</td>
</tr>
<tr>
<td>Lower Division Allocation, includes present consumption</td>
<td>7,500,000</td>
</tr>
<tr>
<td>Lower Division permissible increase in water consumption</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Total allocated or permitted</td>
<td>16,000,000</td>
</tr>
<tr>
<td>Unallocated surplus (estimated)</td>
<td>4,500,000</td>
</tr>
<tr>
<td>Estimated average annual water supply</td>
<td>20,500,000</td>
</tr>
</tbody>
</table>

Mr. Carpenter also said in this report:

"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,xxxx."

On March 20, 1923, Colorado Commissioner Delph E. Carpenter in a joint letter to Colorado Senator M. E. Bashor and Colorado Representative Royal W. Calkins said, among other things:
Paragraph (b), Article III permits the lower basin to increase its annual beneficial consumptive use of water 1,000,000 acre-feet. The two paragraphs permit an aggregate annual beneficial consumptive use of 8,500,000 acre-feet, and no more. The words "per annum", as used in paragraph (b) are not synonymous with the word "annually." No cumulative increase is intended by that paragraph.

On February 10, 1923, Colorado Commissioner Delph E. Carpenter addressed a telegram to the Honorable Herbert Hoover, Chairman, Colorado River Commission and received a prompt reply. On February 13, 1923, he addressed a telegram to the Honorable R. T. McKisick, Deputy Attorney General, Sacramento, California, and that same day received a reply.

These exchanges of telegrams are pertinent to an understanding of this phase of the compact and are inserted here.

Telegram

CAPITOL BUILDING
Denver, Colo., February 10, 1923

HON. HERBERT HOOVER,
Chairman, Colorado River Commission,
Washington, D.C.:

Do you concur with me that the intent of the commission in framing the Colorado River Compact was as follows:
That paragraph (b) of Article III means that the lower basin may increase its annual beneficial consumptive use of water 1,000,000 acre-feet and no more?

DELPH E. CARPENTER
Washington, D.C., February 12, 1923

Delph E. Carpenter,
State Capitol, Denver, Colo.:

I concur with you, and shall so advise Congress in my report, that the intent of the Commission in framing the Colorado River Compact was as follows:
Paragraph (b) of Article III means that lower basin may acquire rights under the compact to annual beneficial consumptive use of water in excess of the apportionment in paragraph (a) of that article by 1,000,000 acre-feet and no more. There is nothing in the compact to prevent the States of either Basin using more water than the amount apportioned under paragraphs (a) and (b) of Article III, but such use would be subject to the further apportionment provided for in paragraph (c) of Article III and would vest no rights under the present compact.

HERBERT HOOVER
Denver, Colo., February 13, 1923.

R.T. McKISICK,
Deputy Attorney General, Sacramento, Calif.:

Do you concur with me that intent of Commission in framing Colorado River Compact was as follows:
That paragraph (b) of Article III means that the lower basin may increase its annual beneficial consumptive use of water 1,000,000 acre-feet and no more?

DELPH E. CARPENTER
Sacramento, Calif., February 13, 1923

HON. DELPH E. CARPENTER,
State Capitol, Denver, Colo.:

Am of opinion that paragraph (b) of Article III 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 III, and no more. When both paragraphs are read together no other construction tenable. "Per annum" not synonymous with "annually."

R.T. McKISICK
Sacramento, Calif., February 15, 1923
My interpretation of Article III and VIII well expressed in McKisick's wire of the thirteenth.

W. F. McClure
Seven State Compact Commissioner for California

Utah Commissioner, R. E. Caldwell in his report to the Utah Senate, among other things said:

The Lower Basin States, for the most part, when they divert their water, wholly consume it and they get no credit for use of return flow for it does not exist, and they are, therefore, limited to the diversion of 8,500,000 acre-feet and are held strictly to the requirement of "consumptive beneficial use" of such as they do divert.

In the report to the Governor of California by Honorable W. F. McClure, Commissioner for California, made January 8, 1923, appears this statement:

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 probably 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.

The Honorable Herbert Hoover, who, as I have said, was the chairman of the commission that drafted and approved by its unanimous vote the Seven State Compact, said:

"The Lower Basin will, therefore, receive the entire flow of the river, less only the amount consumptively used in the Upper States for agricultural purposes."

The Honorable A. P. Davis, Director of the Reclamation Bureau, on January 30, 1923, announced that:

"The Colorado River Compact provides that the Lower Basin shall be guaranteed an average of 7,500,000 acre-feet of water annually from the Upper Basin and all of the yield of the Lower Basin, and that any water not beneficially used for agricultural and domestic uses (in the Upper Basin) shall likewise be allowed to run down for use below."

This data proves conclusively that the extra 1,000,000 acre-feet of water per annum allocated to the Lower Basin is to be acquired from the surplus and otherwise unallocated water of the Colorado River System. The same is true of the 1,500,000 allocated annually by treaty to the United States of Mexico.

I am compelled to keep asking whether water stored in the Glen Canyon and Echo Park reservoirs will be surplus to the agricultural and domestic needs of the Upper Basin, and therefore must be delivered to the Lower Basin to satisfy the award of 1,500,000 when requested by the Lower Basin and more especially the water to Mexico and the 1,000,000 acre-feet to the Lower Basin.
Under the Seven State Compact the Upper States must deliver at Lee Ferry in each ten year period 75 million acre-feet to the Lower States before they can use one drop of water themselves beyond what they used before the Seven State Compact was ratified. In the current ten year period that will leave only 4,000,000 acre-feet per year for their total use. In the previous ten year period they would have had 4,900,000 acre-feet a year. In 1902 the Upper Basin States under this formula would have had no water at all.

The Reclamation Bureau estimates that the proposed Storage Reservoirs in the Upper Colorado Basin will cost the Upper Basin 880,000 acre-feet annually in evaporation. It will be charged to the Upper Basin as consumptive use. Colorado's portion of that loss would be 400,000 acre-feet.

Water does not run up hill, but does the theory of "replacement" protect the Upper Basin on the water stored in Glen Canyon? Will water stored in Glen Canyon cost us 400,000 acre-feet annually in evaporation? Does the Upper Colorado Basin Compact charge evaporation in Glen Canyon to Colorado as a consumptive use?

Colorado is close to the bottom of the barrel insofar as Colorado River water is concerned. Colorado has a record of lavish generosity to all of her neighbor States. Now at this late date it will be state suicide unless she looks after her own interests with courage and wisdom. She positively cannot afford the loss of 400,000 additional acre-feet to cover evaporation at Glen Canyon. She cannot afford to agree to a storage plan whose effect might be to create additional surplus water out of the Upper Basin's meager supply, which under the Seven State Compact is required then to go to the Lower Basin. Colorado must insist that the 42 reservoirs surveyed in the high country of Colorado be authorized simultaneously with the authorization of the Storage Plan and which will give Colorado an absolute right to the water which is developed, without having it designated surplus water.

The Hill report prepared pursuant to a contract with the Colorado Legislature indicates there is something over a million acre-feet of unappropriated water in the Colorado River System in Colorado. However, the Hill report did not charge Colorado with the burden of Colorado's portion of the priority commitment to Mexico, which under the Seven State Compact might be as much as 750,000 acre-feet. Had Mr. Hill recognized these burdens and the evaporation of the down river storage plans, which is to be charged to Colorado as "consumptive use" of 400,000 acre-feet, he
could not have shown very much unappropriated water for Colorado's use.

Colorado has entered into irrevocable compacts with all of the States to the East, West, North, and South. In each of these compacts Colorado has been generous to a fault. Now most of her water is lost forever, and yet her neighbors are asking her to surrender more and more of this most precious resource. The time has come when Colorado's dwindling supply must be guarded jealously and protected fully. That is a responsibility which I, as Governor of Colorado, must assume.

Who will say that the Glen Canyon Dam in the State of Arizona is an extraordinary dam from an engineering point of view? Glen Canyon is the sort of project that makes an engineer's mouth water, and the Reclamation Bureau is a Bureau of engineers. Who will say that this project will not be of incalculable value to the Lower Basin. Glen Canon, which will collect 100,000 acre-feet of silt a year, will extend the life of the Hoover Project 500 years.

There is only one route remaining for us to take. We must put our water to beneficial use in our own state if we are to gain any right to it. That is the plain language of the Seven State Compact. It states that requirement without equivocation. The Reclamation Bureau has explored 42 reservoir sites high up on the Colorado River System in Colorado. We cannot, we dare not settle for less than their authorization now. Congressional authorization does not mean immediate construction, but it will give to these proposed reservoir sites an official priority. Colorado contributes 72 per cent of the water of the Upper Colorado River Basin. Is it asking too much that we be allowed to use less than one-fourth of what we produce? If that is wrong, then I am wrong!

ED C. JOHNSON
U.S. Senator from Colorado and Governor-Elect of Colorado

Dec. 20, 1954

end