STATEMENT OF JEAN S. BREITENSTEIN
COLORADO MEMBER OF UPPER COLORADO RIVER COMMISSION
AND ATTORNEY FOR COLORADO WATER CONSERVATION BOARD

My name is Jean S. Breitenstein and my address is 718 Symes Building, Denver, Colorado. I am the Colorado member of the Upper Colorado River Commission. For a number of years I have been the attorney for the Colorado Water Conservation Board, which is the official agency of the State of Colorado charged with the duty of promoting the conservation of the waters of the State of Colorado in order to secure the greatest utilization of such waters and the utmost prevention of floods. My task here is to present the official position of the State of Colorado, as determined by the Board, on the Colorado River Storage Project.

The wise and orderly development of the waters of the Upper Colorado River System is vitally needed to assure the continued welfare of the people of Colorado. The state is divided into two parts by the Continental Divide. On the East the limited water supplies are fully developed. On the West the drainage area of the Colorado River and its tributaries produce annually about 11,000,000 acre feet of water — more than 70% of the flow of the River at Lee Ferry. Under the applicable compacts, Colorado is allotted the beneficial consumptive use of about 4,000,000 acre feet annually. Of this quantity about 1,650,000 acre feet is presently being used or is committed for use. The future economy of Colorado will, in large measure, be fixed and determined by the manner in which the uncommitted Colorado water is put to use.

For many years the Colorado Water Conservation Board has given consideration to the problem. To supplement the studies and investigations of the Bureau of Reclamation and other Federal agencies, the Colorado Board has obtained and reviewed engineering reports of its own staff and of an independent engineering firm of national reputation. It has also secured expert economic studies. Its decisions have not been reached hurriedly. They represent the
exercise of informed judgment based upon a patient and painstaking study of all aspects of the Colorado situation.

On January 14, 1954, the Colorado Water Conservation Board adopted the following resolution to assert the policy of Colorado in regard to the Colorado River Storage Project:

WHEREAS, the Colorado Water Conservation Board has given consideration to the Report of the Secretary of the Interior, dated December 22, 1950, on the Colorado River Storage Project and Participating Projects, and to the Supplemental Report, dated December 10, 1953, of the Secretary of the Interior on the same subject, and

WHEREAS, the Board in an endeavor to ascertain the attitude of all interested areas and citizens of the State of Colorado in regard to the position which Colorado should take on such reports did at its February 17, 1953 meeting create the Colorado Conference Committee to study the use of Colorado River water in Colorado and particularly the proposed trans-mountain diversion by Denver from the Blue River, and

WHEREAS, the General Assembly made available to the Board an appropriation of $100,000 to finance such study and with the funds so made available the engineering firm of Leeds, Hill and Jewett was employed to make a study of the depletion of surface water supplies west of the Continental Divide and did also arrange for a report from the University of Colorado on the economic potential of Western Colorado, and

WHEREAS, such reports have been made and the Conference Committee has reported to the Board, and

WHEREAS, in a further effort to reconcile conflicting views as to the use of Colorado River water without the natural basin in Colorado the Board did on December 30, 1953, appoint a Mediation Committee which has this day reported that it could come to no agreement,

NOW, THEREFORE, BE IT RESOLVED by the Colorado Water Conservation Board, the official state agency which is charged by law with the duty and responsibility of promoting the conservation of the waters of the State of Colorado in order to secure the greatest utilization of such waters and the utmost prevention of floods that:

1. It is the position of the State of Colorado that all waters of the Colorado River system available for use in the State of Colorado under the various instruments constituting the law of the river shall be put to beneficial
consumptive use in Colorado as expeditiously as orderly economic development will permit.

2. Because of Lee Ferry delivery obligations imposed by the Colorado River Compact of 1922, substantial quantities of regulatory hold-over storage must be provided in the Upper Basin if that basin is to be able to put to beneficial consumptive use its allotted share of Colorado River water.

3. The Colorado River Storage Project will provide such necessary storage and is essential to the full economic development of the water resources of the Upper Basin.

4. The plan of the Colorado River Storage Project to finance the construction of the necessary hold-over reservoirs through the revenues derived from the sale of power generated at hydroelectric plants and to utilize a portion of such revenues to assist in the financing of so-called participating projects which meet certain fixed criteria is approved.

5. In connection with the Glen Canyon reservoir Colorado directs attention to the fact that this reservoir, which is located but a short distance above Lee Ferry, will yield substantial benefits to the Lower Basin, one of the most important of which is the detention of silt and the resulting prolongation in the useful life of Lake Mead. The official representatives of Colorado should strive to obtain some recognition by the Lower Basin of these benefits and, if possible, a sharing by the Lower Basin of such matters as reservoir losses.

6. The Echo Park unit is a desirable feature which has the full support of Colorado.

7. Authorizing legislation should contain appropriate provisions for the recapture for use within the Upper Basin of power generated by the Colorado River Storage Project when and if any of such power is sold or transmitted for use within the Lower Basin.

8. Specific provision should be made in authorizing legislation to assure that no rights vest in the use of water for power generation in units of the project which will prevent or handicap the beneficial consumptive use upstream of the waters of the Colorado River System to which any Upper Basin State is entitled.

9. Colorado has no objections to the report of the Secretary of the Interior on participating projects except that Colorado urges that further study be given to the LaPlata and San Miguel Projects, which are urgently needed, in order to develop, if possible, a feasible plan therefor and except as hereinafter noted.
10. The Report and the Supplemental Report of the Secretary of the Interior practically ignores any development of Colorado River System water in Colorado. For this reason, Colorado cannot accept the report and supplemental report as now submitted. As conditions precedent to Colorado approval of the report, provisions must be made therein, or in the authorizing legislation, which will assure the following water development in Colorado:

(a) The Cross Mountain unit must be included within the initial authorization for construction as a part of the first phase of the project.

(b) There is no doubt that further consumptive use of water in Colorado is directly dependent upon high upstream storage. To provide therefor there must be included in the initial authorization approximately 3,000,000 acre-feet of total new storage on the Colorado River and its tributaries above Grand Junction, Colorado, a substantial portion of which shall be located on the upper reaches of the Gunnison River. The known reservoir sites which might accomplish this objective are Curecanti on the Gunnison and DeBeque on the Colorado River. Additional investigations may disclose other sites. There is little doubt but that the stated amount of storage will be needed. The Secretary of the Interior is urged to expedite the investigation and study of projects which will furnish the requested storage.

11. Denver, the capital city of Colorado, desires to divert water from the Blue River, a tributary of the Colorado River, for use for municipal and industrial purposes in the metropolitan Denver area. The rights of Denver to take and divert such water are alleged to be in conflict with rights for the use of water stored in Green Mountain Reservoir and taken through the Green Mountain power plant for the generation of power. Green Mountain Dam, Reservoir and Power Plant constitutes a unit of the Colorado-Big Thompson Project of the United States Bureau of Reclamation. The controversy over the relative rights of Denver and the Green Mountain Project are in litigation in a lawsuit now pending in the Supreme Court of the State of Colorado and in another lawsuit now pending in the United States District Court for the District of Colorado. It would be improper for this Board to attempt to invade the process of the courts or to influence the pending litigation. The Board has no intention of doing either. The feasibility of the proposed Denver-Blue River diversion depends, among other things, on the outcome of this litigation, or on some alternative thereto which satisfactorily protects the Colorado-Big Thompson Project.
Upon the condition that the legal availability of a reasonable quantity of water for the Denver-Blue River diversion be established, either by litigation or some other arrangement, and the condition that such project be otherwise feasible, the Board approved the Denver-Blue River Project for inclusion as a participating project in the authorization of the Colorado River Storage Project or for such other Federal legislative or administrative action as may be requested by Denver.

12. The Board recommends that Denver and the Representatives of the West Slope in Colorado make every effort to arrive at a harmonious solution of the unfortunate transmountain diversion controversy which for years has created dissension in Colorado. The Board pledges that it and its staff will be ready to assist in the amicable settlement of this prolonged conflict.

13. The Director of the Board and the Colorado member of the Upper Colorado River Commission are directed to do all things necessary and proper to effectuate this resolution.

14. Copies of this resolution shall be forthwith transmitted to the Governor of Colorado and to the members of the Colorado Congressional Delegation.

This was presented to the Upper Colorado River Commission which on January 17, 1954, unanimously took the action expressed in the following resolution:

WHEREAS, the Upper Colorado River Commission at its February 26, 1953 meeting did unanimously adopt a motion which provided, in part, that at any time during the consideration of the Bill for the authorization of the Colorado River Storage Project by the Commission, the Congressional delegations from the Upper Colorado River Basin, or the Congress of the United States, the Commission will support such amendment to the bill or such independent bill or bills as may be recommended by the Colorado Water Conservation Board for the use in Colorado of water allotted to Colorado by the Upper Colorado River Basin Compact, such projects to meet the minimum criteria set out in Section 5 of the February 13, 1953 draft of bill for participating projects; and,

WHEREAS, the State of Colorado at this January 15, 1954 meeting did present to the Commission a statement of its position in regard to the Colorado River Storage Project and the bill proposed for the authorization thereof; and,

WHEREAS, in said policy statement the State of Colorado did recommend certain Colorado projects for inclusion within the Colorado River Storage Project and its authorizing legislation; and,
WHEREAS, Such Colorado projects will constitute additional projects to be included within the Colorado River Storage Project and its authorizing legislation:

NOW, THEREFORE, BE IT RESOLVED by the Upper Colorado River Commission that pursuant to the recommendations and requests of Colorado the draft of bill to authorize the Colorado River Storage Project shall be so revised and amended as to eliminate therefrom the reference to the Curecanti Project and so as to include the following:

1. The Cross Mountain unit, along with the Glen Canyon and Echo Park units, within the initial authorization for construction.

2. The authorization of approximately 3,000,000 acre-feet of total new storage on the Colorado River and its tributaries above Grand Junction, Colorado, a substantial portion of which shall be located on the upper reaches of the Gunnison River, provided that no appropriation for or construction of all or any part thereof shall be made or begun until the Secretary of the Interior shall have made a finding of feasibility thereon and the Congress shall have approved the same.

3. The Denver Blue River diversion as a participating project provided that before any moneys shall be appropriated for or applied thereto the Secretary of the Interior and the Congress shall have approved the Denver plan and the method of repayment proposed by Denver.

4. The Legal Committee is directed to prepare for consideration by the Commission suitable amendments to effectuate this resolution.

The foregoing resolutions speak for themselves. They are the official actions of the State and the Commission.

Qualified witnesses have presented to the Committee the underlying principles and theories of the Colorado River Storage Project. They have the approval of Colorado. No comment by me on them will add anything to this hearing.

Regulatory hold-over storage is necessary to equate the Lee Ferry flows so that the Upper Division states may use their full allotments of water. It is but good sense that as much of this storage as possible shall be located in the upper reaches of the Colorado River and its tributaries where the reservoirs
may not only serve to regulate the stream and generate power but also serve agricultural, municipal and industrial needs of the Upper Basin. The project units proposed for Colorado will have such multiple purposes. Perhaps more importantly they will provide a water supply for a region which, in a report of the Bituminous Coal Institute referring both to the coal deposits of Western Colorado and the oil shale deposits of Northwestern Colorado, has been described in the following manner:

"It is no wonder that the fuel authorities in their moments of crystal-gazing envision this region (Western Colorado) as the powerhouse -- and perhaps the industrial center -- of America's future."

The Cross Mountain dam, located on the Yampa River about 50 miles west of Craig, Colorado, will have a total initial capacity of 5,200,000 acre feet and will generate about 330,000,000 kilowatt hours of electrical energy annually at a cost which compares very favorably with the cost of energy produced at other project units. The benefit-cost ratio is favorable. It is a feasible and desirable project which, through coordinated operations, will benefit such down stream units as Echo Park and Glen Canyon. It will provide a water supply for the irrigation of lands in the Western part of Moffat County, Colorado and will impound substantial quantities of water for stream regulation.

Any substantial increase in the consumptive use of water in Colorado is directly dependent upon high upstream storage. In recognition of this undeniable fact, Colorado has requested that the Project and the authorizing legislation include in the initial authorization 3,000,000 acre feet of total new storage on the Colorado River and its tributaries above Grand Junction, Colorado, a substantial portion of which shall be located on the upper reaches of the Gunnison River.

The Bureau of Reclamation has under study two reservoir sites which might furnish the requested storage. One is the 940,000 acre feet Curecanti...
unit on the Gunnison River and the other the 2,200,000 acre feet DeBeque unit on the main stem of the Colorado River.

The Curecanti Dam is strategically located on the Gunnison River above an area which has great agricultural and industrial potentials. It will supply supplemental water to an irrigated area. Within the Gunnison River Basin there are about 68,000 acres of irrigable land (classes 1 and 2) which is not now irrigated. Much of this can be brought into cultivation with water made available by Curecanti. In the Gunnison Basin are vast deposits of high grade coal which may be the base for a substantial industrial development but only if a water supply is assured by the Curecanti unit. Curecanti would be a multiple purpose dam which would impound water to irrigate large areas of land, to provide good clear water for municipal and industrial uses, to regulate stream flows and to produce substantial quantities of electrical energy. It is a development which is greatly desired by the area in which it is located and which it will benefit greatly.

There is no section of the United States which has a greater industrial potential than the Rifle-Grand Junction area on the main stem of the Colorado River. Grand Junction is the business center for much of the uranium development on the Colorado Plateau which is the greatest producer of uranium ores in the United States. Perhaps of even greater importance is oil shale.

In this region there are located the richest and most extensive oil shale deposits in the United States. The Bureau of Mines estimates that these oil shale deposits cover an area of 2,500 square miles and will yield about 15 gallons of shale oil per ton of shale. About 1,000 square miles have been explored by core drilling and other tests. Experts state that the cost of gasoline made from crude oil obtained from new fields is actually more than the cost which would be incurred in the mining and refining of oil shale.
"Resources for Freedom" a report by the President's Materials Policy Commission, June, 1952, Vol. IV p. 175 forecasts that by the year 1975 there will be production of 1.4 million barrels of shale oil a day to supply the fuel needs of the United States. It is inevitable that other industries will follow any commercial shale oil development without much delay. The principal motivating factors will be abundant cheap fuel for power and by-products useable economically by the chemical and related industries.

The report of the engineering firm of Leeds, Hill and Jewett to the Colorado Water Conservation Board has this to say concerning the DeBeque Reservoir:

"Opportunity exists for the creation of a suitable reservoir by construction of a dam in DeBeque Canyon at the lower end of the valley in which the industrial development would presumably be centered. Diversion requirements of such industries could be satisfied by the withdrawal of water from the reservoir without regard to the inflow at the time. Return waters, except the very small proportion which might be unduly contaminated by chemical processes, could be returned to the same reservoir without waste downstream. All irrigation requirements in the Grand Junction area could be satisfied, without conflict with any other use, by the release of water from the reservoir, and the average quality of the irrigation water would be somewhat improved over that now available in the summer months.

"It is recognized that the cost of construction of such a storage project would be large, primarily because of the necessity of relocating the trunk highway and railroad which now follow the Colorado River. This cost, however, would be insignificant in comparison to the tremendous capital investment which must be made to industrialize the region and which will not be made until there is assurance of ample water."

The Bureau of Reclamation should expedite studies of the proposed Curecanti and DeBeque units. The completion of the investigation of these units will no doubt establish their feasibility. But whether the storage which Colorado requests is located at these sites or some alternate sites, there is real need for such storage. It must be furnished to provide for an economic development which will increase the wealth and preserve the strength of our nation.
Other agricultural and domestic needs of the Western Slope will be served by the Florida, Pine River Extension, Silt, Smith Fork and Paonia participating projects. These are desirable developments which satisfy the criteria established by the bill for participating projects. Time does not permit comments on each of these units. They are specifically described in the December 4, 1952 report of the Secretary of Interior on the Colorado River Project.

The Denver-Blue River diversion is an important and desirable feature of the Project under consideration. This diversion will augment an already existing, well managed, publicly owned water plant through which the City and County of Denver supplies its own inhabitants and the surrounding metropolitan area with domestic and industrial water. United States government personnel and their families constitute about 1/6 of the population served by the Denver water system. Denver, the capital of Colorado and the largest city in the Upper Basin states, is experiencing a growth which demands immediate acceleration of the development of the only remaining practical source of an additional water supply. That source is the Blue River, a tributary of the Colorado.

For the reasons stated, Colorado respectfully requests that this Committee, and the Congress, act favorably on the Colorado River Storage Project as modified by the amendments proposed by the Upper Colorado River Commission.