## COLORADO RIVER BASIN PROJECT ACT AS IT AFFECTS NEW MEXICO

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The Colorado River Basin Project Act became law on September 30, 1968. Full appreciation of the significance of this Act to New Mexico requires a brief review of the history of the "law of the river."

By the turn of the century, it had become evident that control of the Colorado River to prevent floods and to apply its waters to beneficial use was essential. This need was emphasized by the 1905 flood in which the Colorado River left its course to the Gulf of California and flowed into the Imperial Valley for 16 months to create havoc and the Salton Sea.

The works needed to control the Colorado River obviously could not be designed and constructed with the resources available to the people of the lower Colorado River valley and Southern California. Federal assistance was needed. The seven states of the Colorado River system -- Arizona, California and Nevada in the Lower Basin and Utah, Wyoming, Colorado and New Mexico in the Upper Basin -- all managed their water under the doctrine of prior appropriation in one form or another. Under that doctrine, the person who first controls the water of a stream and applies it to beneficial use has the better right to the use of the water. Thus, the states of the Upper Basin were reluctant to support construction of works which would put the Lower Basin states in a position to acquire a first right in the waters of the Colorado River before the Upper Basin states would have had an opportunity to establish a right to a reasonable share of the waters of the Colorado River system.

To make it possible for all of the Colorado River states to support the development needed, the seven states undertook the negotiation of the Colorado River Compact of 1922. Herbert Hoover, later to become President of the United States, was appointed to represent the federal government and served as chairman of the negotiating commission. The goal of the commission at the outset was to apportion to each of the basin states a share of the waters of the Colorado River system. This goal was never fully achieved.

Article III(a) of the 1922 agreement apportioned from the Colorado River system in perpetuity to the Upper Basin and to the Lower Basin, respectively, the exclusive beneficial consumptive use of 7.5 million acre feet of water per year. Article III(b) permits the Lower Basin to increase its beneficial consumptive use of the waters of the system by 1 million acre feet per year over and above the apportionment of Article III(a).

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Article III(c) of the compact provides that if the United States should ever recognize in Mexico a right to the use of any waters of the Colorado River system those rights would be supplied first from water surplus to the quantities allocated to the Upper Basin and to the Lower Basin. If that surplus proved insufficient to meet the Mexican rights recognized, then the burden of the deficiency is to be equally borne by the Upper Basin and the Lower Basin.

Paragraph III(d) of the compact 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 million acre feet in any period of 10 consecutive years. Lee Ferry is a point about 30 miles downstream from the Utah-Arizona state line.

The compact agreed to by the commissioners for each of the seven Colorado River states and the federal government could not become effective until ratified by the legislature of each of the states and consented to by the Congress of the United States.

By 1928, Arizona had not ratified the Colorado River Compact and the agreement was not yet effective. The negotiators' initial goal of apportioning a certain amount to each of the states had not been achieved in the agreement and Arizona was concerned that if works to control and use the waters of the Colorado River were built, California would establish rights to a disproportionate share of the allocation that would be made to the Lower Basin by the 1922 compact.

To overcome the impasse, the Congress enacted the Boulder Canyon Project Act. This law authorized the construction and operation of the Hoover Dam and Reservoir project and authorized the Secretary of the Interior to contract the delivery of water from Lake Mead for consumptive uses totalling 7.5 million acre feet annually -- 4.4 million acre feet to California; 2.8 million acre feet to Arizona and 0.3 million acre feet to Nevada. The act also authorized the Secretary to contract any surplus water one-half to California and one-half to Arizona.

The interests of the other states were protected by a provision giving the consent of the Congress to the 1922 compact on the condition that six of the seven Colorado River states ratified the compact and the California legislature enacted a law limiting the beneficial consumptive use of Colorado River water in California to 4.4 million acre feet annually plus one-half of any surplus. The authority to proceed with the construction of Hoover Dam was conditioned upon the compact becoming effective under the terms of the legislation. The California Limitation Act was adopted by the California legislature and the President of the United States proclaimed the Colorado River Compact effective in 1929. The construction of Hoover Dam was then undertaken.

The Arizona legislature finally did ratify the 1922 compact in 1944.

Although efforts continued, the Lower Basin states were never able to agree upon an apportionment of the allocation made to the Lower Basin by the Colorado River Compact. The Upper Basin states were more fortunate. The Upper Colorado River Basin Compact of 1948 allocated among the Upper Basin states the apportionment made to the Upper Basin by the 1922 compact. The Upper Basin compact alloted to Arizona the consumptive use of 50,000 acre feet of the 7.5 million acre feet apportioned to the Upper Basin. Of the remainder, Colorado is apportioned 51 3/4%, Wyoming 14%, Utah 23% and New Mexico 11 1/4%. New Mexico's 11 1/4% of 7.5 million less 50,000 computes out to 838,000 acre feet annually. But because Article III(d) of the 1922 compact enjoins the Upper Basin from causing the flow of the river at Lee Ferry to fall below 75 million acre feet in any period of 10 consecutive years and because recent records suggest that the flow of the river may not be as abundant as the 1922 negotiators thought, we estimate that New Mexico's share of the Upper Basin supply will amount to only about 770,000 acre feet annually.

By the mid-1940's the need for the Central Arizona Project was apparent. The municipal-industry economy in the Phoenix-Tucson area of Central Arizona was sky-rocketing. There was already a heavy overdraft on the ground water resources of the area for the lucrative irrigation economy. Water levels were declining, pump lifts were increasing and salt encroachment was deteriorating the quality of what had been fresh water.

The Central Arizona Project would bring an average of 1.2 million acre feet annually of Colorado River mainstream water from Lake Havasu to the Phoenix area through about 200 miles of aqueduct system.

In 1945, legislation was introduced to authorize the Central Arizona Project. This proposal initiated bitter controversy. Colorado River Aqueduct had been completed in 1941 to take mainstream water to Los Angeles, San Diego and other Southern California communities. California had completed works capable of using a total of about 5.4 million acre feet of water annually. The Mexican Treaty, by which the United States recognized Mexico's right to 1.5 million acre feet annually of Colorado River Water, was agreed to in 1944. Recent records of streamflow had made it clear that the production of the Colorado River system was not sufficient to serve contracts for 7.5 million acre feet annually of consumptive use from Lake Mead after the Upper Basin put its share of the river to use. Faced with these facts, California contended that her completed works had first call on the river and that there simply was not enough water to justify authorization and construction of the Central Arizona Project.

In 1951, the House Interior and Insular Affairs Committee reporting on the legislation to authorize the Central Arizona Project said

that further consideration of such legislation should be deferred until Arizona's right to the water had been adjudicated by the courts or established firmly by a compact between the states.

In 1952, Arizona filed in the Supreme Court of the United States a suit against the State of California seeking an adjudication of rights to the waters of the Colorado River.

In 1955, New Mexico was impleaded in the suit on a motion of the State of California. New Mexico resisted the California motion with partial success. We were made a party only in respect to our Lower Basin interests. These interests include the Little Colorado River system and the Gila River system which are lower basin Colorado River tributaries rising in New Mexico.

In 1955, the Congress was considering authorization of the great Colorado River Storage Project in the Upper Basin. Had we been required to defend and establish our Upper Basin rights in the suit, Congressional consideration of the Colorado River Storage Project Act almost certainly would have ended and we would not have Glen Canyon Dam and the other now completed works which were authorized in 1956.

In Arizona vs. California, et al., New Mexico contended for water from the Gila River system sufficient for all of our present uses. We also contended for additional amounts of water to permit the development of new uses in New Mexico. We attempted to show how, with good management of the Gila River system including a system of dams and reservoirs in New Mexico and Arizona, New Mexico could increase its consumptive use of water by 38,000 acre feet annually without decreasing the supply available to users in Arizona.

The Special Master appointed by the Supreme Court to hear the evidence in the case agreed that New Mexico should be decreed an amount of water sufficient for the uses then being made. He acknowledged that it had been demonstrated that there were shortages for those using water from the Gila River system and that the rights in Arizona generally are senior to the rights in New Mexico but none-theless recommended that an equitable apportionment of the waters of the stream system should not require New Mexico to reduce present uses. At the Special Master's strong suggestion, New Mexico and Arizona ultimately stipulated that the amount of water required for New Mexico's uses from the Gila River system, including the San Simon Basin, amounted to 31,000 acre feet annually and the Supreme Court adopted that stipulation in its decree.

The Special Master recommended against permitting New Mexico to increase its consumptive use of water because there were already shortages for users in Arizona and because there was no assurance that the system of reservoirs that we proposed could or would be constructed. However, the Special Master did recommend that the decree be left open at its foot so that if circumstances changed

New Mexico would have the opportunity to ask the court to review its decree with respect to new uses in New Mexico. This recommendation was adopted by the court and ultimately proved important to our cause.

With respect to the Little Colorado River system, the Special Master found that there was no substantial conflict on the present use of the water of that system and recommended that the Supreme Court not undertake to apportion those waters between the states. The Court adopted that recommendation.

In the suit California contended for a first priority for works already completed with shortages to be taken by works which might be constructed later such as the Central Arizona Project. The Special Master in his report recommended that the available water supply be prorated among the states in accordance with the Boulder Dam Project Act -- i.e., 4.4 to California, 2.8 to Arizona and 0.3 to Nevada.

The Court did not accept this recommendation of the Special Master and ruled that the Secretary had the authority to distribute the shortages in accordance with his own good judgment and that in the alternative the Congress of the United States could direct the Secretary to distribute the shortages as he saw fit.

Arizona saw the Supreme Court decision as a great victory. Immediately after the decision was handed down in 1963, Arizona's Congressional delegation introduced legislation to authorize the Central Arizona Project. There followed five years of intense and often acrimonious negotiations among the 11 western states.

California insisted on first priority for its 4.4 million acre feet and contended that there was not enough water left for the Central Arizona Project.

The Upper Basin states were concerned that with a large federal investment in the Central Arizona Project the Congress would be reluctant to authorize the construction of water projects in the Upper Basin that would have the effect of reducing the supply for the Central Arizona Project. The Upper Basin states asked among other things that the legislation authorize studies of projects to import as much as 8.5 million acre feet annually from the Columbia River system to the Colorado. This suggestion gave rise to bitter opposition from the northwest states.

The bill as introduced would have authorized the Bridge and Marble Canyon Dam and Reservoir units in the Grand Canyon reach of the Colorado River. The purpose of these units was to have been the generation of power for Central Arizona Project pumping and power for sale to produce revenues to assist in the repayment of the project costs allocated to irrigation. This proposal brought on the opposition of the Sierra Club and other groups and individuals interested in preserving the Colorado River as nearly as possible in its natural condition.

The bill as introduced in 1963 would have authorized the Hooker Dam and Reservoir on the Gila River in New Mexico as a unit of the Central Arizona Project, but it contained no provision that would have permitted New Mexico to increase its consumptive use above the amount set forth in the Supreme Court decree. Had the Hooker unit been constructed under the terms of that bill, the reservoir evaporation alone would have put us in violation of the Supreme Court decree. New Mexico insisted on agreement by Arizona and the United States to an amendment of the Supreme Court decree or legislative provisions that would authorize increased uses in New Mexico.

Accommodation of these conflicting interests seemed impossible -- but it was done. The bill ultimately passed was S. 1004, introduced by Senator Carl Hayden of Arizona.

The act makes diversions for the Central Arizona Project subordinate to a first priority for California's 4.4 million acre feet.

The Bridge Canyon and Marble Canyon power units in the Grand Canyon were rejected and the Federal Power Commission is prohibited from licensing the construction of hydroelectric units in the reach of the river from Glen Canyon Dam to Hoover Dam. To furnish pumping energy for the Central Arizona Project, the Secretary of the Interior is authorized to participate in the construction of a thermalpower unit in partnership with public and private utilities.

To provide the assistance needed in the repayment of costs allocated to irrigation purposes a development fund is created. This fund draws principally on power revenues from the existing Hoover-Parker-Davis units after about 1985 when the cost of constructing these units will have been repaid and on the revenues that will become available from the Pacific Northwest-Pacific Southwest high-voltage transmission intertie.

The act recognizes the Mexican Treaty of 1944 as a federal obligation. If and when means are found to augment the supply of the Colorado River in an amount sufficient to meet the treaty obligation, the works will be constructed at federal expense and the cost will be nonreimbursable.

The act prohibits the Secretary of the Interior from undertaking studies of projects to augment the supply of the Colorado River by importation from any source other than northern California for a period of 10 years. This provision mollified the northwest states by giving them ample time to determine their own ultimate requirements from the abundant water supplies available to them.

The act authorizes the construction of five Bureau of Reclamation projects in the Upper Basin. Four of these are in Colorado and one - the Animas LaPlata Project - is to be constructed in Colorado and New Mexico.

One project in Utah, the Uintah unit, was conditionally authorized. The Dixie Project in Utah was reauthorized at higher cost with the provision that it may share in the financial assistance available from the development fund.

Last but not least the act authorizes the construction of a dam and reservoir on the Gila River in New Mexico as a unit of the Central Arizona Project. Construction is authorized at the Hooker site or a suitable alternative site. The Secretary is authorized, when the Central Arizona Project aqueduct system has been completed, to contract with water users in New Mexico in amounts sufficient to permit 18,000 acre feet of consumptive use annually in excess of the limit set in the decree in Arizona vs. California. The effects of these additional uses in New Mexico on Gila River water users in the Phoenix area are to be offset by mainstream water imported to the Phoenix area by the Central Arizona Project. The Secretary is further authorized to contract with New Mexico users for additional amounts of water sufficient to permit another 30,000 acre feet annually of consumptive use when the water supply of the mainstream of the Colorado River has been augmented sufficiently to give Arizona 2.8 million acre feet annually plus the amounts needed for the exchange of mainstream water for Gila River water authorized by the act.

These new uses in New Mexico are subject to all existing rights from the Gila River system in New Mexico and Arizona and must be made without adverse effect on those existing rights. New uses can be made in New Mexico under these terms by constructing reservoir capacity in New Mexico and making the exchange of mainstream water for Gila River water in the Phoenix area.

It seems worthwhile to note in passing that the exchange arrangement authorized in the Colorado River Basin Project Act makes it unnecessary to ask the Supreme Court for an amendment of its decree to permit uses in New Mexico in excess of the limits set in the 1963 decision. However, the fact that the Supreme Court left its decree open at the foot so that New Mexico could seek a relaxation of the decree limits should a change in circumstances warrant was a key factor in establishing the equity of the provisions of the act permitting new uses in New Mexico.

The Sierra Club and the Wilderness Society bitterly opposed authorization of construction at the Hooker site for the reason that water would be backed into the Gila Wilderness Area. Constructed to a capacity of 265,000 acre feet, the reservoir at normal water surface would extend for 13 miles above the dam site; seven miles of this length would be in the Wilderness Area. The lake would cover 480 acres of the total of 438,000 acres in the Wilderness Area — that is, about 1/10th of 1% of the Wilderness Area would be under the lake. According to the Forest Service, there are about 500 visitor days of usage in the project area under present conditions. According to the Department of the Interior, there would be with the project 184,500 visitor days of usage annually.

It does not seem that construction at the Hooker site would have more than a negligible effect on wilderness values and could have a tremendously important effect on the welfare and economy of the people of southwestern New Mexico. Nonetheless, we acknowledged that feasibility grade studies of works in New Mexico had not been completed and that it would be reasonable in bringing the reconnaissance studies to feasibility grade to consider possible alternative sites, taking into account all factors, including construction costs, water supply and wilderness and recreation values, to achieve the best possible project. With this thought in mind, it was not difficult to agree to the compromise language that authorized construction at the Hooker site or a suitable alternative site.

The Upper Basin authorizations are also of great importance to New Mexico. The Animas-LaPlata Project will bring water from the Animas River in Colorado to the La Plata River Valley in Colorado and New Mexico. It will provide an irrigation water supply for 16,700 acres in New Mexico and will furnish 13,500 acre feet annually for municipal and industrial uses for Aztec, Farmington and other smaller communities in northwestern New Mexico. The total cost of this project is estimated at \$109 million; \$26 million of this amount is attributable to works to be constructed for the benefit of New Mexico. The project will deplete 34,100 acre feet annually of New Mexico's Upper Colorado River Basin allocation.

The total cost of the Central Arizona Project, including distribution and drainage facilities, is estimated at \$932 million. In the neighborhood of \$25 million of this amount will be needed for the construction of the Hooker unit in New Mexico. The total cost of the five Upper Basin projects authorized is estimated at \$392 million. Thus, the total authorized by the Colorado River Basin Project Act is about \$1.3 billion.

It may be worthwhile for me to recapitulate at this point what has transpired with respect to our entitlement from the Gila River system since New Mexico was impleaded in Arizona vs. California, et al. in 1955. In that suit, New Mexico claimed the right to irrigate the 19,039 acres then estimated to be under irrigation using the waters of Gila River, San Francisco River and San Simon Creek. We claimed the right to deplete the flow of the Gila River system by 34,800 acre feet annually in the exercise of all existing rights. We also asked for an additional 38,000 acre feet of consumptive use annually for new developments in New Mexico. The Special Master after considering the evidence which included the permits, declarations and notices of intention on file in the office of the State Engineer and the depositions of New Mexico witnesses taken in extended sessions in Silver City and Reserve, recommended in his draft report that New Mexico be decreed the right to irrigate 13,747 acres and to deplete the flow of the stream system by 27,500 acre feet annually with no allowance for new uses. New Mexico vigorously protested this recommendation and the Special Master acknowledged that he might have been a little stingy in his treatment of New Mexico. He strongly suggested

that Arizona and New Mexico sit down at the conference table and attempt to stipulate the acreage and consumptive use that should be decreed to New Mexico. This was done and the stipulation adopted and ultimately incorporated in the final decree of the Supreme Court gave New Mexico 15,476 acres and a consumptive use of 31,000 acre feet annually for present use.

The test of how this stipulation fit the facts came in the recently completed adjudications of water rights in our state district court. We found that we were able to increase the irrigated acreage by 430 acres and the annual consumptive use by 2900 acre feet in the San Simon Basin without exceeding the limitations set in the Supreme Court decree. In 1966 the State Engineer issued new permits for the irrigation of 430 acres with ground water in the San Simon Basin.

Our district court adjudication showed that we could increase irrigation from the Gila River by about 600 acres and thus increase consumptive use by about 1,000 acre feet annually without exceeding the limits of the Supreme Court decree. Permits to effect this increase were issued earlier this month.

The result of the state district court adjudication of water rights on the San Francisco River showed that we cannot increase our uses from that river. The Supreme Court decree allows us to make a consumptive use averaging 3,187 acre feet annually from the San Francisco River. Tabulating the rights adjudicated by our district court and taking into account average annual shortages to the requirements of those rights and the acreage normally left fallow, we estimate the annual consumptive use by the adjudicated rights to be 3,300 acre feet annually. Thus, the amount decreed to us by the Supremem Court for the San Francisco River represents about 96 1/2% of what is needed for the rights found by our district court on that stream.

Although we resisted the provision with our best efforts, the Arizona-New Mexico stipulation limited the acreage that could be irrigated in each of four areas along the San Francisco River and there is some mismatch between the Supreme Court decree and the district court adjudication in this respect. The total irrigated acreage allowed us by the Supreme Court on the San Francisco River is 2,269 acres and the rights found by our district court total 2,393 acres. The Supreme Court decree limits us to the irrigation of 225 acres in the Luna area while the district court found 462 acres of irrigation water rights in that area. The limitations of the Supreme Court decree do not have the effect of depriving the owners of rights adjudicated to them by the district court. The more junior rights can be irrigated in any year in which a sufficient amount of the more senior rights are left fallow so that the total irrigated acreage does not exceed the Supreme Court limit. Furthermore, the irrigation rights outside the Supreme Court acreage limitation can be transferred in accordance with our state law to stock, domestic, municipal and industrial uses so that the right could be exercised without regard to the acreage limitation.

To summarize this recapitulation -- there is a good match between what the Supreme Court decreed to New Mexico and what is needed to satisfy the existing rights found by our own district court. The Supreme Court decree did not give us water for new uses from the Gila River system in New Mexico. But the Colorado River Basin Project Act gives us reasonable assurance of water for new consumptive uses amounting to 18,000 acre feet annually and reasonable hope for water for additional new consumptive uses amounting to 30,000 acre feet annually.

## CONCLUSION

The Colorado River Basin Project Act was an extremely important step forward in more than a half a century of dissension, negotiation and accommodation related to the waters of the Colorado River system. The Act contains authorizations of tremendous importance to New Mexico's water supply, economy and welfare.