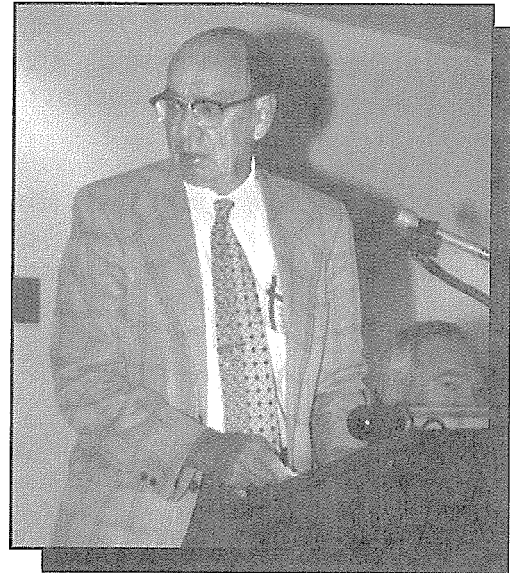


Phil Mutz grew up on a ranch in Eagle Nest, New Mexico. He earned a B.S. in civil engineering from the University of New Mexico and then spent two years in the U.S. Army. From 1946-1954, Phil was employed as a hydrologic engineer with the Bureau of Reclamation in Albuquerque and Monte Vista, Colorado. For the next two years, Phil worked for the Colorado Water Conservation Board focusing on water resources investigations of the San Luis Valley in relation to the requirements for the delivery of water under terms of the Rio Grande Compact. For the following 34 years, he worked for the New Mexico Interstate Stream Commission. Included in his various duties over the years was the operation and development of the Ute Dam and Reservoir Project. In 1990 Phil began providing consulting services to the New Mexico State Engineer Office and Interstate Stream Commission. In 1991 he was appointed by the Governor as New Mexico's Commissioner on both the Upper Colorado River and the Canadian River commissions.



RESERVOIR STORAGE DEVELOPMENT IN THE CANADIAN RIVER BASIN AND RELATED LITIGATION

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During the period 1890-1920, a number of small reservoirs and one large reservoir were built in the upper tributaries to the Canadian River in New Mexico. Most of these storage developments were undertaken by private entities and some were later expanded or rehabilitated by federal or local entities. Among the earliest of the storage developments was that undertaken by the trustees of the Maxwell Land Grant Company to provide water by diversion from Vermejo River for land irrigation in the vicinity of Maxwell.

Subsequently, the Vermejo Ditch was organized in 1903, acquired title to the water rights and developed several small reservoirs in the project area. This system was successfully owned and operated by vari-

ous land development and water user companies until formation of the Vermejo Conservancy District in 1952. The current Vermejo Project was authorized as a federal reclamation project by Congress in 1950 and construction began a couple of years later. The existing storage facility system was completed in 1955. The construction rehabilitation included only three of the existing structures and provides about 12,000 acre-feet of storage in Stubblefield Reservoir, 2,000 acre-feet of storage in Dam 2 and 4,800 acre-feet of storage in Dam 13. These facilities regulate water diverted from the Vermejo River and from Chico Rico Creek for delivery to about 7,400 acres of irrigated lands in the vicinity of Maxwell and also

provides large recreation and fish and wildlife benefits at the Maxwell National Wildlife Refuge.

Several small reservoirs also are located in the upper Vermejo River at Vermejo Park. These facilities were privately developed by owners of Vermejo Park Ranch.

The Vermejo River drainage includes about 28 square miles in Colorado which produces about 6,000 acre-feet of water per year, a substantial portion of the runoff in the Vermejo River System above Vermejo Park Ranch and above the Vermejo Project Diversion, which is downstream near Dawson. None of the waters of the Upper Vermejo River, or its tributaries have been developed for use in Colorado.

In 1977, Colorado filed an equitable apportionment action in the United States Supreme Court seeking to have the Court award Colorado 4,000 acre-feet of water from the Vermejo River System. The intention was to divert waters from Colorado tributaries for transport out of the Vermejo and Canadian River basins into the adjoining Purgatorie River Basin for use by the Colorado Fuel and Iron Company's coal mining operations on the Purgatorie. The State of New Mexico and the water users on the Vermejo River System in New Mexico vigorously resisted the action by Colorado on the theory that all the water supply of the Vermejo River System already had been put to beneficial use and the primary impact of a diversion by Colorado would be on the Vermejo Project.

As is its normal practice, the Supreme Court appointed a Special Master, Judge Ewing Kerr, from Cheyenne, Wyoming to receive evidence, conduct a trial and make recommendations to the Court. In his first report to the Court, Judge Kerr recommended that Colorado be allowed to divert 4,000 acre-feet per year. His recommendation was based on the grounds that New Mexico could compensate for some or all of the proposed Colorado diversion through reasonable conservation measures and that the injury, if any, to New Mexico would be outweighed by the benefits to Colorado from the diversion.

The average annual flow of the Vermejo River at Dawson just above the Vermejo Project diversion and downstream of uses by the Vermejo Park Ranch averages about 13,000 acre-feet a year. As recommended by Judge Kerr, the award of 4,000 acre-feet per year could have been very damaging to the water

supply available to the Vermejo Project. New Mexico filed exceptions to the Master's report. Following the oral argument before the Supreme Court on the Master's recommendations, the Court remanded the matter to Judge Kerr for additional specific findings.

Judge Kerr, in his second report to the Supreme Court, reaffirmed the award of 4,000 acre-feet. Again New Mexico filed exceptions. Following a second oral argument before the Supreme Court, the Court held that Colorado had not met its burden of proving by clear and convincing evidence that a diversion should be permitted. The Court sustained the exceptions of New Mexico and dismissed the case in June 1984.

In about 1890, reservoir storage was first developed on tributaries of the West Fork of Chico Rico Creek in Colorado to provide water for Raton and for the Santa Fe Railroad operation at Raton. Subsequent storage development provided a dam in New Mexico just downstream from the Colorado-New Mexico state line, which has subsequently been enlarged twice to provide a reservoir capacity in Lake Maloya of about 4,000 acre-feet. The reservoir extends into Colorado. The drainage area in Colorado tributaries above Lake Maloya Dam is about 21 square miles and water production is estimated to be about 3,600 acre-feet per year.

In 1964 the City of Raton and several New Mexico water users on Chico Rico Creek sued a Colorado water user in the Colorado Federal District Court alleging that the activities of the water user in Colorado were impacting the water supply available to Raton and other New Mexico users. This case was briefed, depositions were taken, and a briefing before the federal judge was conducted in Denver. The federal judge urged both sides to attempt to arrive at a stipulated decree rather than to continue to litigate. Fortunately, the parties were able to arrive at a stipulated agreement. In 1966 the federal court entered a decree which embodied the stipulation. The decree allocates the waters of Chico Rico Creek among the parties by limiting the storage and use of the rights of the Colorado water user and imposing certain constraints on use of water in Colorado depending upon the reservoir storage content of Lake Maloya.

The third largest reservoir on the Canadian River System is Eagle Nest Reservoir with a capacity of 79,000 acre-feet. The reservoir project was developed

by Charles and Frank Springer, completed in 1918, and is still owned and operated by descendants of the Springer's. The reservoir provides water to irrigate lands in the Cimarron-Springer area and provides municipal and industrial water to the town of Springer, the city of Raton and other smaller communities. The lake also provides major recreational opportunities—primarily through its attractive trout fishery.

No interstate litigation is related to Eagle Nest Reservoir. However, adjudication of the water rights of the Cimarron Stream System in State District Court was decreed in 1929. The adjudication came about because of the need to administer direct flow rights in the stream system and reservoir storage releases from Eagle Nest. Also, the Rayado River, tributary to the Cimarron River, was adjudicated as result of Miami Reservoir development, a smaller reservoir providing irrigation water supply in the Springer area. Both the Cimarron and Rayado decrees are administered by the Cimarron-Rayado Creek Watermaster who is appointed pursuant to the decrees of the court. The Cimarron-Rayado System is one of the few New Mexico systems administered by a court or state-appointed watermaster.

Conchas Reservoir is the largest reservoir on the Canadian River System in New Mexico and was constructed by the Corps of Engineers to provide flood control for downstream areas on the Canadian River extending into Oklahoma. The reservoir also provides an irrigation water supply to the Tucumcari Project. The total capacity of Conchas at spillway crest elevation is about 318,000 acre-feet of which about 68,000 is inactive storage below the invert elevation of the Conchas Canal. No litigation involving water rights or operation of the reservoir has occurred.

However, there is a very important New Mexico Supreme Court litigation that involved water stored in Conchas Reservoir. In that case, commonly known as the Red River Valley case, the Supreme Court of New Mexico found that the use of water for fish and wildlife stored in the reservoir was a beneficial use under New Mexico law. That was the first case law that established the use of water for fish and wildlife as a beneficial use. The case stemmed from a dispute with fishermen over access to the water stored in the reservoir.

Ute Dam and Reservoir was authorized by the New Mexico State Legislature in 1957 and 1959 by the initial appropriation of funds for the project. The initial stage of Ute Dam and Reservoir was completed in 1962 with total capacity at spillway crest elevation of about 110,000 acre-feet. Ute Reservoir was operated to maintain a minimum pool when inflow permitted 50,000 acre-feet for fish and wildlife and recreation purposes.

The Canadian River Compact between the states of New Mexico, Oklahoma and Texas was signed by representatives of the three states and a representative of the United States in December 1950. The compact subsequently was ratified by the respective state legislatures and approved by the Congress in 1952. The Canadian River Compact came about as a result of plans to construct Lake Meredith on the Canadian River near Sanford, Texas. At the time, New Mexico was concerned that construction of the large project could effect the future use of Canadian River water in this state. The Canadian River Compact is essentially a storage allocation compact that limits the amount of conservation storage that can be operated on the Canadian River and its tributaries in New Mexico and Texas, and imposes certain limitations on the operation of such storage facilities. Conservation storage is defined by the compact as: "...that portion of the capacity of reservoirs available for the storage of water for subsequent release for domestic, municipal, irrigation and industrial uses, or any of them, and it excludes any portion of the capacity of reservoirs allocated solely to flood control, power production and sediment control, or any of them." The compact allows New Mexico: 1) free and unrestricted use of all waters originating in the drainage basin of the Canadian River above Conchas Dam; 2) free and unrestricted use of all waters originating in the drainage basin of the Canadian River in New Mexico below Conchas Dam, provided that the amount of conservation storage in New Mexico available for impounding these waters which originate in the drainage basin of the Canadian River below Conchas Dam shall be limited to 200,000 acre-feet; and 3) the right of New Mexico to provide conservation storage in the drainage basin of the North Canadian River shall be limited to such water that at the time may be unappropriated under the laws of New Mexico and Oklahoma.

In 1975, 1978 and 1981 the New Mexico State Legislature authorized funding for additional construction to increase the size of Ute Reservoir. The Interstate Stream Commission contracted with the Bureau of Reclamation on a reimbursable basis to prepare plans and specifications and supervise additional construction at Ute Dam to increase the controlled storage capacity of the reservoir to about 272,000 acre-feet from the original total capacity of about 110,000 acre-feet. Reclamation prepared a feasibility report that proposed the most economical means of increasing the storage capacity of Ute Dam by construction of a labyrinth spillway within the existing spillway opening in the dam, and raising the height of the dam and dike embankments. Following approval of the proposal submitted by Reclamation, the construction specifications were prepared and construction was scheduled to begin in 1982.

New Mexico had advised the parties to the Canadian River Compact of its intention to increase the size of Ute Reservoir. Oklahoma and Texas expressed considerable reservation with New Mexico's plan contending that the Canadian River Compact limitation of 200,000 acre-feet of conservation storage in New Mexico did not authorize New Mexico to build reservoir capacity in excess of that amount. New Mexico replied that the total capacity of Ute Reservoir contemplated extra capacity to: 1) provide for sediment accumulation and 2) that the minimum pool maintained at 50,000 acre-feet did not constitute conservation storage because it was held for sediment control and recreation and not available for release for the purposes specified in the compact definition of "conservation storage." New Mexico also stated that pending accumulation of sufficient sediment to decrease the conservation storage capacity in Ute Reservoir to 200,000 acre-feet or less, the reservoir would operate so that the conservation storage maintained would not exceed 200,000 acre-feet by releasing storage accumulated in excess of the limitation of the Canadian River Compact.

New Mexico proceeded and awarded a construction contract in accordance with the design prepared by Reclamation. Construction of the Ute Dam Modification Project was completed in February 1984 and water storage was allowed to increase that year. The reservoir storage had been lowered appreciably prior to the initiation of construction in order to facilitate

the work. During the remainder of 1984, all of 1985 and the first half of 1986, runoff was well below the normal range. Unusually abundant precipitation in the Canadian River Basin in the fall and winter of 1986-1987 resulted in the filling of Conchas Reservoir, which began spilling in February 1987. The spill and release of water from Conchas Reservoir as well as inflow from the drainage basin of the Canadian River below Conchas Dam filled the enlarged Ute Reservoir for the first time and it began spilling in May 1987 and continued to spill until July of that year.

At the annual meeting of the Canadian River Commission held in April 1987, the New Mexico Commissioner was presented a motion for a complaint and a brief filed in the U.S. Supreme Court in the case styled *State of Oklahoma and State of Texas v. State of New Mexico*. The complaint alleged that New Mexico was in violation of the Canadian River Compact by constructing conservation storage capacity in excess of 200,000 acre-feet allowed by the Canadian River Compact and requested that the Court enter a decree commanding New Mexico to take such steps and actions necessary to bring it into compliance with the terms of the compact. The Court subsequently granted the Oklahoma and Texas motion and appointed Jerome Muys, a Washington attorney, as Special Master to collect evidence, conduct the trial and report his recommendations to the Court.

Subsequent to the spill of Ute Reservoir in 1987, New Mexico prepared an accounting of water stored in the reservoir and submitted its report to Oklahoma and Texas. New Mexico contended that water spilled or released from Conchas Reservoir into the Canadian River did not constitute "water originating in the drainage basin of the Canadian River below Conchas Dam" and thus was not an accountable as part of the 200,000 acre-feet of conservation storage allowed New Mexico by Article IV (b) of the Canadian River Compact. Under the accounting New Mexico contended that because of the large amount of storage of Conchas Reservoir spills and releases, Ute Reservoir could be maintained full and still not exceed the 200,000 acre-feet limitation on conservation storage. Oklahoma and Texas did not agree with the accounting and filed a motion in U.S. Supreme Court to file a supplemental complaint, which the court granted. The supplemental complaint alleged that New

Mexico had impounded conservation storage in excess of the amount provided for in the compact.

No trial was conducted in the initial proceedings before the Special Master. Instead the Special Master responded to the parties' motions and circulated a draft report to all parties. Following receipt of comments, the Special Master submitted his report on the issues to the Court in October 1990. All states objected to the report. An oral argument was heard by the Court in April 1991. The Court issued its decision in June 1991 finding: 1) that the compact did not limit reservoir capacity but rather storage of water as New Mexico had argued; 2) water originating above Conchas Dam but spilling over or released from the dam was subjected to the Article IV (b) limitation of the Canadian River Compact; and 3) the sediment control pool issue in Ute Reservoir be remanded to the Special Master for further proceedings and resolution. New Mexico petitioned for a rehearing on the above Conchas water issue but was denied by the court.

A trial before the Special Master on the sediment control pool was held in 1992. The Special Master subsequently issued a draft report denying New Mexico's claim for exemption of the active capacity of the sediment pool without prejudice to New Mexico renewing its claim if later circumstances warranted.

The Special Master determined that dead storage, below the invert of the outlet works intake, is not "conservation storage." Also, the Special Master determined that water stored for recreation and fish and wildlife purposes was accountable as "conservation storage." The Special Master recommended that the parties negotiate as to damages, if any, that New Mexico owed to Texas and Oklahoma as a result of violating the Compact by exceeding the conservation storage limit.

An argument before the Special Master was held on his draft report and at the close of the argument, the Special Master again urged the parties to seriously consider settling their dispute. Subsequently the Special Master circulated a draft of his proposed report and decree. He found that New Mexico violated the Canadian River Compact limitation on conservation storage. Following a proposal by New Mexico, the parties requested a stay of proceedings to allow New Mexico to undertake a sediment survey of

Ute Reservoir and to seek to negotiate a settlement. In 1993 New Mexico submitted to Oklahoma and Texas a draft of a proposed stipulation of the parties concerning conservation storage in New Mexico in excess of the compact limitation and a proposed decree. The parties subsequently concurred in a stipulated judgement including a schedule for operating Ute Reservoir, which provided for a release of 25,000 acre-feet of conservation storage below the compact limit, maintaining the reservoir at the reduced level for four years and refill in four more years. The stipulation also provided that New Mexico would pay a total of \$400,000 to Oklahoma and Texas and New Mexico would be released from all claims. The stipulated judgement and decree were approved by the Special Master and, following a brief submitted by the United States Solicitor General on the invitation of the Court, the U.S. Supreme Court on December 14, 1993, adopted a slightly modified stipulated judgement and decree. None of the substantial provisions of the original stipulated judgement and decree were modified. The monetary settlement to Oklahoma and Texas was paid by New Mexico in January 1994, and releases of water stored in Ute Reservoir pursuant to the operating schedule contained in the stipulated judgement were initiated beginning in August 1993.

In summary, the lengthy litigation initiated in 1987 ended essentially in a draw, with New Mexico prevailing on the storage capacity issue, Oklahoma and Texas prevailing on the Article IV (b) storage limitation issue and the sediment control pool issue left for future resolution should conditions warrant. Such conditions could include the diversion of water from Ute Reservoir for purposes such as the Eastern New Mexico Water Supply Project.