1989

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Citation Information
Glenn G. Saunders, Reflections on Sixty Years of Water Law Practice (Natural Res. Law Ctr., Univ. of Colo. Sch. of Law 1989).
GLENN G. SAUNDERS, REFLECTIONS ON SIXTY YEARS OF WATER LAW PRACTICE (Natural Res. Law Ctr., Univ. of Colo. Sch. of Law 1989).

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Reflections on Sixty Years of Water Law Practice

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NRLC Occasional Paper
1989
I have a long history in the water business—longer than I ever expected it to be in my first encounter in 1918. During World War I we were very short of any responsible help. I was a responsible boy, and a near neighbor of the Chief Engineer of the Denver Union Water Company. His chauffeur (only a few people tried to drive these newfangled contraptions) lived just back of us, so that I had an opportunity from time to time to drive in the water company's Stevens-Duryea open car to various points of the Denver Union Water Company system. Consequently, in the summer of 1918 I was employed to watch the float gauges on the clear water basins at the Capitol Hill Pump Station in Denver, which supplied water to everything east of the South Platte River.

The reason these gauges had to be watched so closely was that there were many wood-stave conduits in the Denver Union Water Company system, which were the principal supply of filtered water, and if one of them broke, it needed to be known immediately. If one of these gauges started to fall rapidly, it meant that a conduit had broken. At that time there was no telemetric enunciator to locate the break. So it was important that the gauges be watched constantly, and if they fell, a notification sent immediately to the central office of the Denver Union Water Company. I terminated this job on August 1, 1918, when the City
and County of Denver took over the water plant from the Denver
Water Company after a long series of hearings by a referee
(Chinn) in the United States District Court as to the valuation
which must be paid for the plant by the City.

I had also been familiar with the arguments pro and con as
to whether or not Denver, as a municipal corporation, should own
the private enterprise which was the Denver Union Water Company.
My father was such a right-wing conservative that he did not
believe that government should do hardly anything other than run
a police department. Our next door neighbor, Ben Sweet, was a
member of the first board of water commissioners and a proponent
of public ownership, so that I had the benefit of backyard, over-
the-fence arguments about the merits of public ownership as
against the merits of private enterprise.

I returned from law school in 1929 at the commencement of
the Great Depression, which was to deepen in the years ahead. I
had absolutely no regard for the criminal law practice in which
my father was busily engaged. So I went to my old friend, the
Mayor Ben Stapleton, who had helped raise me during a period when
he was a widower and who had inculcated in me some of his own
very high ideals. He told me that the Denver Water Department
had a brilliant attorney, Malcolm Lindsey, as its special counsel
in water matters. The City Charter at that time made it the duty
of the City Attorney to render all legal service required by the
Board of Water Commissioners. He pointed out that the City
Attorney had so many irons in the fire that it was necessary to
have special water counsel and that he would like to have me get the benefit of tutelage by Malcolm Lindsey and devote a major part of my energies to helping create a water supply for Denver.

Stapleton had three basic community objectives: 1) an adequate water supply to be derived from the tributaries of the Colorado River, 2) a major ground transportation vehicular system, and 3) a major airport. Stapleton initiated the Valley Highway (now I-25) through a design created by engineers Crocker and Ryan, and he secured what is now known as Stapleton International Airport by having his friend, Brown Cannon (who ran a dairy called Windsor Farm Dairy), acquire the airport land quietly at dry-grazing-land farm prices.

Stapleton said that the City never pays enough money to make a decent living, and therefore if I went with the Water Board, I must maintain the right to have a private practice—even though he expected me to devote my major attention to creating a water supply for Denver.

Denver Water Board

I went with the Water Board and found its legal affairs, except for the protection of its water rights, to be in a shambles because Charles H. Haines, a very competent Assistant City Attorney who was assigned to the Water Department, had so much other city work he simply could not keep up with it. He welcomed me with open arms, came bouncing into my office at the Water Department and tossed a Board request for an eminent domain
proceeding on my desk, saying "You will find out all about eminent domain in the 6300's of the 1921 Compiled Laws." Since I was not yet admitted to practice law, he said, "Just sign my name to things and call me on the phone if you think you need any advice."

I found myself in the midst of a number of lawsuits immediately and found that the Lock Joint Pipe Company had six miles of pipe strewn out on public highways and no right-of-way to place the pipe. There was no negotiation team to acquire right-of-way, so I became the team, the lawyer, and the financial adviser.

Fortunately, the Water Board had an exceedingly competent manager by the name of Hiriam Hilts, formerly a business executive for Henry M. Porter, who endowed what is now the Porter Hospital. Hilts had left the hospital, after integrating the Porter gift into the hospital's business, to run the Water Department. With his help and my youthful energy, we soon had legal affairs in pretty good shape so that I could begin learning water law from Mr. Lindsey.

Lindsey and I made an excellent combination. He had never gone to law school, but had studied law while being a court reporter in Trinidad, so that his education was from the grass roots up. A very quiet man, he did not like the vigor of a head-to-head contest. This is what I enjoyed most about the practice of law: the adversary proceeding. Consequently, I learned water law from him, and he sat as a spectator while I
conducted litigation. I had nothing to unlearn about Colorado water law because the subject was not taught at the University of Michigan, where I had my law course, and thus was enabled to learn water law at the hands of the people who were practicing it: such people as Watt McKendrie of Pueblo, Bill Kelly of Greeley, and Frank Delaney of Glenwood Springs. These were followed by many other fine water lawyers who were either a part of our team or our adversaries.

At that time, members of the Board of Water Commissioners were the type of people you would find on the directorate of any important utility corporation, such as the Public Service Company, the telephone company, or the tramway. These men, except for A. P. Gumlick, had their own businesses to tend to and expected Water Board employees to take leadership in the development of the system. Gumlick and his wife were financially able to devote their energies to public service. I found myself in the position of working very closely with Mr. Gumlick—President of the Board, the manager, the engineering division, and the accounting division in planning the progress of creating an adequate water supply for what was obviously a growing major city of the United States, centrally located so that it would probably always be a hub in the North American Continent with a permanence such as we find in places like Rome or London. I was always impressed with the fact that we were building a water system for thousands of years in the future and that every move we made would be magnified either for better or for worse. This
impressed me with the necessity for doing the job right the first time so that it would not have to be corrected at great expense in the future.

Need for Water Development

In the 1930s, 1940s and 1950s when Denver was most vigorously developing its water supply system, the attitude of the public, the legislature and judiciary generally was the same as it had been since the middle of the 19th Century: Do everything you can to develop a civilized community in this near-desert country by developing our water resources for beneficial use. During the last decade (1980s) this attitude had been severely diluted by a current generation which enjoys the comfort of a now civilized environment. Forgetting that the civilization on which the good life exists in Colorado, with its skiing and other recreational advantages, depends on the careful management of our limited water resources, many people (often referred to as "environmentalists") have now come to the attitude that water should be wasted by leaving it in the streams for the fish and the stream fishermen, eliminating more reservoir construction (in spite of improved fishing) without any realization that the population of the United States is constantly increasing and that Denver's population and water needs will go on increasing for many years to come. The current political trend is to do everything possible to prevent any further development of water supplies and to limit any development to that done by public
agencies rather than allowing the private entrepreneur to invest his money and talent to meet the new needs of the growing community. This change is reflected in the changing water law scene.

The Prior Appropriation Doctrine

The 17 western states of the United States are generally semi-arid and all have adopted what is known as the appropriation doctrine with respect to the use of the streams. Under this doctrine, in order to encourage development of water for beneficial use to create a civilized community out of a relatively barren public domain, early miners and farmers and other settlers were encouraged to expend their energy (and what little money they had) to divert water from the natural streams and apply it to beneficial uses, such as growing crops, supplying towns and cities, and for manufacturing purposes.

To encourage the development of the country, new law was created by the customs of the people, later fortified by constitutional provisions, statutes (both state and federal) and court decisions, giving a prior right over later developers, to whoever was willing to spend the time and money necessary to put water to beneficial use. Thus, the settler was assured that his money and energy would not be wasted by assuring him the prior right, in times of water shortage, to use the amount of water he had put to beneficial use as against some later comer, perhaps located farther upstream than the original settler. This system, used
throughout the western United States, had proven successful in turning what was a barren wilderness into a productive and civilized portion of the nation.

Permit System

In permit states where a water right cannot be created except by permission of a person in government, the permit allows a specific time for completion of the necessary physical works to put the water to beneficial use. The government official issuing the permit determines what he considers to be an appropriate time within which to complete a project. Provision is made by statute for extending the time on a showing to the permitting government employee. The standards of judgment for determining necessary time are not clear so that, from a practical standpoint, the determination of the government person is considered by the courts to be correct unless clearly arbitrary or unreasonable.

Colorado System

Of all the western states, Colorado has the simplest water system. In every appropriation state but Colorado, whoever wants to develop water has to get permission from a politician, that is, a government employee, usually the state engineer, before he can proceed. Until he gets that permission, he has no date of appropriation. In Colorado, all the appropriator has to do is to form an intent to appropriate water and make that intent known to anyone who might be affected by it. No political influence or
governmental authority has been historically allowed to interfere with the growth of the state. As a result, Colorado had developed far beyond what could have been done had the people been inhibited by government bureaucracy.

A property right to divert water and apply it to beneficial use is created at the moment that the intent is formed and the manifestation of that intent to the general public occurs. This property right originally could be protected only by the uncertainty of a quiet title suit in court. But one of the first acts of the legislature after Colorado became a state was to provide a statewide system of adjudicating water rights so that the extent of any appropriator's right would be determined in an open, public court proceeding. The enforcement of these rights, as fixed by the courts, has been administered by the office of the state engineer.

**Conditional Water Rights**

The priority date of water rights is what gives them their value. It is often many years before the water appropriated by concurrence of intent and manifestation of the intent can actually be put to beneficial use so as to complete the water right. The justification for the very large expenditures of money in the expectation of making good on the early dates grows out of the Colorado water law concept, which has existed from the earliest days, of granting conditional water court decrees--now commonly called conditional water rights.
It took the people of Denver many years from the date of initiation of their transmountain water rights to construct the facilities necessary to carry the water to the people of the Denver area, where it was put to use. When these water rights were presented to the courts for adjudication, this time-honored procedure, now protected by statute, was used. In this procedure, the court recognized the property right to appropriate water as of the date the intent was formed and exhibited to the public, but the court’s decree is conditioned on that intent being followed up diligently by the construction of the necessary works and then by the actual application of the water to the intended beneficial use. These decrees recognized the validity of the water right but conditioned their final validity on the water right being perfected by the application of the water to beneficial use with due diligence by the construction of the facilities and the actual use of the water. From the earliest days, Colorado residents have benefitted from this procedure, and Denver’s situation is simply illustrative of the value of this conditional decree system.

The “Sheriff” Case

The first major water rights case in which I was involved became City and County of Denver v. Sheriff, 105 Colo. 193, 96 P.2d 836(1939). This case involved the appropriation of water by Denver to be transported through the pioneer bore of the Moffat Tunnel from the headwaters of the Fraser River in western
Colorado into the Platte River Basin in eastern Colorado. At that time there were clearly two states, Colorado I, where the capitol was located east of the Continental Divide, and Colorado II west of the Continental Divide. The judges, the lawyers, the legislators, and all local officials in Colorado II, so far as water law was concerned, had their own law for western Colorado and had never heard of the Colorado Constitution. Under this concept, the trial judge, Charles C. Herrick, in *Denver v. Sheriff* held that Denver could not transport any water out of the Colorado River Basin until it had exhausted its water resources in the Platte River Basin.

Meticulous and accurate as Malcolm Lindsey was, and faithful to the letter of the law, he was utterly shocked by this ruling, which was made from the bench at about 10:30 a.m. one morning, at which time the judge announced that the court would reconvene at one o'clock to hear any motions we might have to make. It was a fine day, so A. P. Gumlick, who was president of the Board of Water Commissioners and present at the proceedings, and I, after thinking through what had to be done in court after lunch, proceeded to enjoy the day while Mr. Lindsey went off by himself in a high state of disbelief to prepare a motion for a new trial.

When we got back to court at one o'clock, Lindsey was so upset that after two sentences, he turned the matter over to me. I thereupon dictated the basis for the decree I thought we ought to have. This basis subsequently became the decision of the Colorado Supreme Court, reversing the local court and instructing
the lower court that the constitution covered the entire state of Colorado, being Colorado II as well as Colorado I.

It should be noted that the views of western Colorado judges extended to transmountain diversions rather than their general competency or integrity. This same Judge Herrick, when sitting in a trial in Brighton, Colorado which involved the use of Italian interpreters, rather violently pounced verbally on a dishonest interpreter who was giving me trouble even though I was the same attorney who got him reversed by the Supreme Court in the Sheriff case. The interpreter did not realize that Judge Herrick had been raised in the coal mine country of western Colorado and spoke Italian as fluently as he did English, that being a country where Italian and non-Italian workers worked together and were all bilingual. The very much surprised interpreter correctly formulated questions and answers after Judge Herrick vigorously corrected him from the bench.

Right to Reuse Imported Water

From the earliest days, the statutes and most of the decisions of the courts have provided that no water may be diverted, regardless of the date of decree, except for application to beneficial use. Water may not be wasted, lawfully. When a user is finished with his water, he must return any excess to the nearest watercourse for use by others.

This leads to the further proposition that when water is diverted from the Colorado River to the Platte River, the Platte
River user may make a succession of uses before he returns that water to the Platte River for use by others. Denver has taken advantage of this situation by appropriating its Colorado River water for complete utilization to the extent it can maintain dominion over such water. Under procedures carefully established as a part of creating Denver's Colorado River water rights, careful measurements were made and continuously kept up of the place of use, the amount of storage, and all details of the disposition of all Colorado River water diverted.

First-In First-Out Practice

Under these practices, when Denver diverts Colorado River water for storage in any of its reservoirs, it remains aware of how much of that water was stored at any particular time and draws that water out of storage which was first stored, although the water from different years is commingled in the same vessel. Since the mere storage of water does not constitute a beneficial use, this practice became important. Until stored water is actually used, any decree for that water must remain conditional. This means that Denver would have to go back to court every four years to show how it was continuing to maintain its diligence toward the application of the water appropriated to beneficial use. Denver maintains its records so as to show that the water first in was first out for use.

This practice becomes quite important when it is realized that a city hopes never to completely drain all of its
reservoirs. Denver is acutely aware of this because in 1934 the drought situation was so bad that in September, just before a major flood occurred, Denver had only a four day supply in storage. Coupled with the condition that there was almost no water in the streams for direct diversion, this was a near catastrophe.

Under the first-in first-out theory, Denver hopes to maintain substantial storage at all times so as not to jeopardize the welfare of hundreds of thousands of people being without water to fight fires or even to sustain life. Under the first-in first-out theory, a reservoir can be given an absolute decree once its full capacity has been used even though it had not been completely drained for beneficial use. By providing for complete treatment of Denver's sewage returns, provision can be made so that none of the transmountain water will be wasted and only what Denver cannot successfully use and reuse will ultimately be returned to the Platte River.

**Water Reuse**

The presently decreed water rights held by Denver are sufficient to serve five million people, assuming a successive use of diverted water through complete rehabilitation of once-used water. While this may offend the sensibilities of some people, it must be remembered that everybody on the Mississippi River is using reused water. New Orleans is regarded as having one of the safest and best water systems in the United States.
because it had learned to treat that Mississippi mud and turn it into beautiful, potable water. So the people downstream from Denver should not be concerned about reused water.

**Denver’s Colorado River Water Rights**

During the early period of development, the Denver Water Board employed a man by the name of George M. Bull as its investigative engineer to develop the needed new water resources. On July 4, 1921, he took a party into the field to make the survey upon which Denver’s transmountain water rights are basically dependent. Denver secured a date for its transmountain diversions for the Fraser and the Williams Fork Rivers on July 4, 1921, which it protected against Lee Ferry calls on the Colorado River water by the lower basin states (principally California and Arizona) by virtue of provisions it secured in the Upper Colorado River Compact.

Denver’s efforts to get the same date for its Blue River diversion failed, four to three, in the Colorado Supreme Court. *Denver v. Northern Colorado District*, 130 Colo. 375, 276 P.2d 992 (1954). The date granted was based on the fact that:

1. Denver had made no survey, on the ground, in the Blue River Basin in 1921 as it had in the Fraser and Williams Fork Basins;
2. it had changed its manner of diverting from a short, high tunnel from the west to east slope to a long tunnel plus a collection reservoir at Dillon; and
(3) lack of continuous effort until February 16, 1946, the date of approval of the final reservoir-tunnel plan, which plan has since been constructed and put in operation with that priority date.

The facilities were made more effective by a plan initiated November 7, 1956, to add the Roberts Tunnel Collection System facilities to bring more water to the Dillon Reservoir, thence into the Two Forks Reservoir on the Platte and thence to the Denver area. In all, Denver should readily be able to supply five million people with the water rights which were nailed down as a result of the Bull surveys and the adjudications which followed them.

A. P. Gumlick, who was financially independent, devoted almost his entire time to being president of the Denver Board of Water Commissioners. A very frugal man from an economic standpoint, he felt that unlimited annexation to Denver should not be anticipated so that the people of Denver should not finance the Blue River project but that it should be financed by the areas outside the city through a Bureau of Reclamation project. To this end, the South Platte Water Users Association was formed in the summer of 1942 with William W. Gaunt, a Brighton attorney, as its president. This association consisted of Colorado Springs, Douglas County, Arapahoe County, Adams County, and Jefferson County. Representatives of these entities met at the high school in Englewood with E. B. Debler, who was in charge of creating water projects of the United States Bureau of
Reclamation, in an endeavor to create a project such as is now typified by the Colorado-Big Thompson project, to develop the Blue River resource without the use of Denver funds and so as to supply additional water to all of the entities involved. It is to be noted that Colorado Springs has since joined Aurora in creating water supplies for those two front range communities from tributaries of the Colorado River. The effort to turn the Blue River project into a reclamation project instead of a Denver project failed at the hands of the Colorado Supreme Court (*Denver v. Northern Colorado Water District*), and the idea was abandoned.

**Water Exchanges**

Denver has been innovative in developing Colorado water law in a number of respects. An example is securing a decree for exchange of water using the natural stream and its waters as a basis for moving water up and down a natural watercourse. Recognizing the fungibility of the waters of natural streams, the statutes since the nineteenth century authorized the use of these waters as a vehicle for trading water placed in a stream at one place and removing a like amount at another. With the increasing demand for use of natural stream water for exchanging flows, it became apparent several decades ago that conflicting demands would mean that all desired exchanges could not sometimes be made.

Denver believed that using the water of a natural stream for exchange was a beneficial use for which a prior right could be
secured. Consequently, before others began the practice, Denver secured a prior right to use natural stream waters for exchanges necessary for the proper operation of its systems. Since Denver secured the first decree giving a prior right to use water for exchange purposes, decrees for this purpose have become quite common.

Issues Concerning Water Development

Although one would expect the United States government to be trying to help all of the citizens of the United States, some of its agencies have perennially opposed Denver’s development of a water supply. Its witnesses testified many years ago that the waters being appropriated from the tributaries of the Colorado River were not needed by the people of Denver, and figures were brought together, particularly by one Randy Riter of the U.S. Bureau of Reclamation to show that Denver’s population growth would not be as projected by the Denver Water Department. The Denver Water Department predictions have been entirely corroborated by actual events over the last 50 years (1935-1985).

It is not surprising that the estimates of water need have been accurate. The principal bases of these estimates have been long-range projections by business interests in the community which invest their money and thus put it at risk on the basis of accurate determinations of the population that must be served. Not only does the Water Department make its own projections, but also the gas and electric utility, the telephone utility, and the
voluntary organizations of commerce and industry. The estimates of growth in 1988 have been challenged by environmental groups opposed to changing the natural environment by conserving Colorado's rivers for human consumption. The highly developed civilization, not only urban but agricultural and industrial, which has been created by taking waters from natural streams for conservation, leads the beneficiaries of this civilization to forget that the loss of natural flow of rivers has made it possible to live in a civilized environment. Also overlooked is the fact that Eastern Slope rivers such as the Platte and the Arkansas supported a very limited irrigation community until reservoirs were built to store spring floods for use later in the summer.

Benefits of Storage

An example of the great benefit of conservation by storage is the case of the South Platte River. By building reservoirs in the mountains, Denver has made it possible to have a year-round supply of water, much of which is used to create the beautiful environment of trees, shrubs, flowers and lawns which now characterizes the city which was once a near desert. The water thus used percolates back rather slowly into the South Platte River above most of the irrigation which is below Denver along the Platte River on into Nebraska. In later years, the construction and operation of the Big Thompson project by the Bureau of Reclamation has had the same effect, but not quite so
effectively because it is farther down stream than Denver.

Together, these projects, as well as the project of Aurora bringing outside water into the Platte River and bringing storage water as well, have created a continuous year-round flow of water in the South Platte River. In the early days, the South Platte went dry in August or September, and there was no nesting ground either in Colorado or Nebraska for migrating birds. There simply wasn't any water. Bird habitat was injured by the floods of spring which tended to channelize temporarily and then be gone. After a hundred years of urban and irrigation development, the Platte River is now a haven, not only for people but for birds and waterfowl. Every new project, such as the Two Forks Reservoir, for which there is a water supply tends to increase this bounty.

The Williams Fork Project

A different phase of the development of the Denver water system relates to its Williams Fork project. During the Depression of the 1930s, all governmental agencies were working to find ways of putting the economy back in motion. Cities, states, and principally the federal government, promoted public projects. One of the ways of doing this was through the Public Works Administration under which the United States would provide a percentage of the cost of a local public project. The Denver Charter requires that the entire cost of the operation of the Denver water system be paid from rates charged to consumers. And
it had always been so. But there is nothing in the Charter to prevent accepting gifts.

Denver’s Williams Fork project provided for a tunnel from the Williams Fork River, which is a tributary of the Colorado River, into Clear Creek, which is a tributary of the South Platte River. During this period, Denver was beginning to have problems with the treatment of its sewage effluent. One of the potential methods of treatment was to provide high quality water to dilute sewage as it entered the South Platte River. While the waters of the Williams Fork had already been appropriated for all municipal purposes, the work of building a collection canal system and a tunnel under Jones Pass from the Williams Fork River to Clear Creek was still in the survey and design stage.

The idea developed to use an abandoned canal called the White Cap which ran from Clear Creek to a point on the Platte River where its outfall would mingle with various raw sewage outfalls in Denver before the polluted water would have to be used by others.

Denver had the good fortune that its outstanding engineer, George Bull, had been selected by the United States government to approve various public works projects for a region including Colorado. His offices were in El Paso, Texas. Denver Water Board personnel presented to him a plan for immediate completion of the design of the Williams Fork system and its construction to meet the dilution water requirements of the State Health Department. It took no long explanatory process to convince
Mr. Bull because he was already familiar with the program, having himself originally designed the outlines and assisted in the preparation of the appropriation filings.

During the construction for the project, the standards for sewage treatment were raised considerably so that mere dilution was no longer adequate. So the question of whether dilution of sewage as a beneficial use of water did not receive a judicial determination. But the physical system had thus been put into operation so as to bring water from western Colorado to the Platte River basin for customary beneficial uses. Instead of using the White Cap Canal, it was found economically feasible to drive the Vasquez Tunnel from Clear Creek into the Moffat Tunnel system, thus combining the waters of the Williams Fork River with those of the Fraser River for use in the Denver water system. Because these steps were purely mechanical and did not change the ultimate purpose for which the water had been appropriated, no court proceedings were required for their consumation.

The "Metro Sewage" Decision

To accommodate Denver's need to recycle its sanitary sewage so as to make it meet acceptable standards, it became necessary to move the place of return of Denver's sewage effluent from above a major ditch to a point below that ditch. After the change, the ditch would no longer receive the volume of the return flow. The ditch company contested the right of Denver to make this change, but the Supreme Court in Metropolitan Denver
Sewage Disposal District No. 1 v. Farmers Reservoir and Irrigation Company, 179 Colo. 36, 499 P.2d 1190 (1972), held that Denver, as the appropriator of the water which went through the sanitary sewers was not obligated to continue its early practices of returning such water to a natural watercourse at the same place as it had historically.

Developed Water

There is a type of water outside the "natural stream" water referred to in the constitution. That is water opened up by man's activities, such as mining, which would not otherwise be part of a natural stream or nontributary aquifer: developed water.

I conceived this developed water concept in the case of Pikes Peak Golf Club Inc. v. Kuiper, 169 Colo. 309, 455 P.2d 882 (1969). In this case, one Roy Pring transformed an area underlain by impervious shale from a place where practically all of the water was consumed by plant life. Only occasionally did any spill into Fountain Creek, a tributary of the Arkansas River, so that 240 acre-feet of water annually was consumed on the parcel itself, an amount which never reached Fountain Creek. By draining the swampy area and husbanding the water very carefully, a golf course was created and, for the first time, substantial amounts of water spilled into Fountain Creek. The State Engineer claimed this water for appropriators on Fountain Creek and ordered the golf course to cease its operations and effectively
deliver the 240 acre-feet that had formerly been consumed by plant life and evaporation, to water users on Fountain Creek. The Supreme Court held that the 240 acre-feet of water was not tributary water historically and therefore not subject to administration by the State Engineer under the priority system.

Salvaged Water

A distinction must be made between developed water and salvaged water. Developed water is water which was never part of a natural water course or the tributary ground water which is really part of a surface stream. Salvaged water is that which has been part of a natural stream or might become a part of such a stream but for changes brought about by the act of man.

The leading case regarding salvaged water is a decision written by Justice Edward C. Day, noted for his practical horse-sense approach to solving legal problems, in the Shelton Farms Case. Southeastern Colorado Water Conservancy District v. Shelton Farms, 187 Colo. 181, 529 P.2d 1321 (1974). It is well known that salt cedars in the bed of the Arkansas River, much like cottonwood trees, evaporate large amounts of water from the stream in which they are located. In the Shelton Farms case, landowners who removed salt cedars from their lands claimed a right to the saving to the stream brought about by such removal. This was clearly not a new source of water and any attempt to define it or administer it so as not to injure senior appropriators of water would have been next to
impossible. The Supreme Court rejected the salvage idea.

Recently, a retired Forest Service employee by the name of Red Giffen, wrote a letter to the editor of a Denver newspaper pointing out that in heavily forested areas very little of the precipitation, whether it be snow or rain, ever reaches the ground so as to get into the flowing streams. He pointed out that careful cutting of timber could result in much more water reaching flowing streams. Such cutting would leave stands of timber adjacent to clear cut areas where small, newly growing trees would not keep precipitation from reaching the ground. Such a procedure over wide areas could produce substantially more water in natural streams. The article did not note the cost of this type of timber operation or of replanting. Those costs would have to be weighed against the cost of cloud seeding in areas tributary to natural streams but where heavy timber cover would not prevent the precipitation from reaching the streams. Such procedures seem to be far in the future when the population of the United States increases to the point where water supplies become a desperate necessity.

The "Vidler" Decision: The Question of Speculation

On the basis of distinguishing between "speculation" and "appropriation," the Supreme Court has recently indicated that unless an appropriator knew where he was going to put the water, had a market for it, and could demonstrate that he had the water, he could not make an appropriation. This is the decision in
Colorado River Water Conservation District v. Vidler Tunnel Water Co., 197 Colo. 413, 594 P.2d 566 (1979). Within 60 days of this decision, the Colorado legislature passed definitive legislation to provide guidelines reaffirming the conditional decree statutes. (Colo. Rev. Sections 37-92-103(3)(a) and 305(9)(a) and (b) (1973 and 1988 Supp.).

In an earlier case (Taussig v. Moffat Tunnel Water and Development Co., 106 Colo. 384, 106 P.2d 363 (1940)), an appropriator from the tributaries of the Fraser River had simply said that he wanted to use the water in eastern Colorado, where he knew there was need for a supply. A decree for this appropriation was affirmed.

Under the earlier philosophy, the Highline Canal, 150 miles in length, was built by English capital to serve land which had not yet even been patented and in which the settlers had not yet arrived to ultimately become water users. Appropriation was confirmed after settlers arrived, patented the land and put the water to use. Wheeler v. No. Colo. Irr. Co., 10 Colo. 582, 17 P. 487 (1888).

As has been correctly stated by the Supreme Court on several occasions, any water developer, whether public or private, could not well afford to make great expenditures of money in the development of a water resource in the present day without the assurance of a decree to entitle the developer to the water proposed to be put to beneficial use. It has always been recognized that such a decree, for its final effectiveness, would
be dependent on completing the appropriation with due diligence. To assure that the proposed appropriator was not merely speculating, but really intended to—and had the means of—completing his project, it was required that a showing be made every four years, in the case of a project taking many years to develop, that the proposed appropriator was diligently pursuing his appropriation. The four year requirement of a showing of due diligence was expected to weed out the speculators who might simply be attempting to tie up the water supply of a stream in the hope of someday finding a way to make use of the water. *Vidler* appeared to be a change of philosophy on the part of the Supreme Court from its philosophy in Taussig. However this may be, the definitive statute passed shortly after the decision in *Vidler* furnished the criteria on which future decisions of developers and courts must be based. This assumes, of course, that the legislature has the law-making power under our constitution and the Supreme Court is bound to follow the laws as passed by the legislature regardless of any personal views.

**The Statutory Response to "Vidler"**

Rather than further examination of *Vidler*, we therefore should look at the new statute. Passed in 1986, the first thing to be noted is that the statute ratifies the granting of conditional decrees. In Colo. Rev. Stat. 37-92-103(3)(a) (1973 and 1988 Supp.), we find the words "but no appropriation of
water, either absolute or conditional, shall be held to occur when the proposed appropriation is based upon the speculative sale or transfer of the appropriative rights to persons not parties to the proposed appropriation, as evidenced by either of the following: ***" Reference to "either absolute or conditional" is a clear ratification of the long-standing practice that decrees for uncompleted appropriations are to be given, conditioned on ultimate appropriation of the water for beneficial use. The language then goes on to give the courts criteria, not for due diligence, but only for what is considered to be a speculative appropriation.

The first criterion for what is to be considered speculative is that the purported appropriator does not have either a legally vested interest or a reasonable expectation of procuring such interest in the lands or facilities to be served by such appropriation, unless the appropriator is a governmental agency or an agent-in-fact for the persons proposed to be benefitted by the appropriation. First, we note that this language grants a special preference to a governmental agency or one who is an agent-in-fact for the persons proposed to be benefitted by the appropriation. Section 6 of Article XVI of the Colorado constitution militates against any special preference with the words "the right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied."

Next, it must be noted that the Highline Canal of the Wheeler case could not have secured its date of appropriation,
because the builders not only had no vested interest in the lands to be served, but the settlers had not even arrived.

On the other hand, the second alternative may save the situation. That alternative provides that the purported appropriator of record must have a specific plan and intent to divert, store or otherwise capture, possess, or control a specific quantity of water for specific beneficial uses. This language brings us back almost to Taussig, but not quite. In Taussig, the appropriator really had a general plan of carrying water from tributaries of the Fraser River and the Colorado River watershed for beneficial use somewhere in the South Platte River watershed where there was already a sufficient shortage of water that there was a practical certainty that someone would make beneficial use of the water once it arrived in that watershed. A change in the statute requires a specific plan which would necessarily require a fairly close definition, not only of the source of water, but particularly as to the place and character of use. The facts in the Wheeler case should meet this criterion.

While it has always been well-established that the Constitution authorizes appropriation for use and not for speculation, as found in Supreme Court decisions, there had been no legislative definition of speculation until 1979 with the adoption of Colo. Rev. Stat. Section 37-92-103 (3)(a) (1973 and 1988 Supp.). The language of the statute is somewhat uncertain in that it says that " * * * no appropriation of water * * *
shall be held to occur when the proposed appropriation is based upon the speculative sale or transfer of the appropriative rights.

This language would not specifically eliminate appropriation by an individual who did not propose to sell or transfer the water, but was personally speculating as to how he might apply the water to beneficial use. Such a concept may have little practical relationship to present-day conditions because appropriations today are made on a relatively large scale with a view to application to beneficial use of the waters appropriated by many individuals.

In 1979, the legislature added a new concept in a provision found at Colo. Rev. Stat. Section 37-92-305(9)(b) (1973 and 1988 Supp.) with these words:

No claim for a conditional water right may be recognized or a decree therefor granted except to the extent that it is established that the waters can be and will be diverted, stored, or otherwise captured, possessed, and controlled and will be beneficially used and that the project can and will be completed with diligence and within a reasonable time.

This language requires an appropriator to have the gift of prophesy. It is the word "established" which, if literally applied, would make further appropriations impossible. When it comes to the actual application of this word, the judiciary will probably relate the word "established" to the concept of burden of proof. This would mean that if the evidence made it reasonable to assume that there would probably be water available and that the "specific plan" referred to at Section 37-92-103 (3)(a)(II) (1973 and 1988 Supp.) appears by competent evidence to
be supported, a decree can be granted.

The McCarran Amendment

The National Reclamation Association (NRA) was a voluntary group of representatives of all the reclamation states, that is, those relying on the appropriation of water as the basis of their social fabric. The Board of Water Commissioners of Denver, which had all the powers of the city respecting the management and operation of a waterworks system and plant, strongly supported the NRA. Because of this, as an attorney for the Board, I held a long tenure on its Resolutions Committee. One of the most active programs of NRA was to integrate the United States claims for water into the water rights systems of each of the reclamation states.

Working under the auspices of the NRA, I prepared what was known as the Barrett Bill, so named for the Wyoming representative in Congress who introduced the bill. This bill simply provided that the United States could only acquire water in any state pursuant to the laws of that state. This comports with the Reclamation Act, which says that, with respect to its reclamation projects, the United States must acquire water under state law.

The concept gradually filtered through to the members of Congress so that, in 1952, Senator McCarran of Nevada attached the substance of the matter to another bill as an amendment. When Senator McCarran brought the matter to where there was going to be a real hearing and a recommendation to the Senate with
respect to the concept, I received a telephone call from Judge Sturrock from Texas, who was active in the National Reclamation Association. He said that the time had come for me to get to Washington and support the association's viewpoint. In these hearings, my adversary was Bill Veeder, a Colorado lawyer who practiced law in Colorado Springs but left there to work for the U.S. Department of Justice. He is the one who started the Santa Margarita cases in California (which nearly caused a revolution), a very dedicated public servant for the United States and a true believer that the United States should supersede the powers of all individual states. He would never have voted even for a confederacy. He believed in the dominant federal government and made the case for the federal agencies before the Senate Committee, saying that the United States had so many water rights that it would take several years to prepare to present these cases for adjudication. Thirty-five years later, the Department of Justice is making the same plea in cases for adjudication of water rights and asking for postponement because they have not had time to find out what they needed or what they wanted.

Need for the McCarran Amendment

The necessity for integrating U.S. water claims into the state administration system was emphasized by the Colorado Supreme Court, whose Chief Justice Stone said in Denver v. Northern Colorado Water Conservancy District, 130 Colo. 375, 414, 276 P.2d 992, 1011-12 (1955):
Water rights cannot in fact be adjudicated as to part of the claimants only. They are relative both as to time and amount. None is certain unless all are determined. If the contention of Government immunity be true, then all the many water adjudication proceedings in Colorado and elsewhere in which the rights of the United States have been submitted by its officers and have been adjudicated by the court have resulted in decrees void as to the United States and therefore uncertain as to the rights of all other parties. If this contention be true, the landowner who is so fortunate as to have the use of other taxpayers' money through the Reclamation Bureau in building his reservoir or ditch is exempt from our statutory proceedings for adjudication of his water rights, and the arm of the state is paralyzed in this vital function, at least until such time as the officers of the Federal Government see fit in their superior wisdom to bring action in the Federal Court.

The McCarran Amendment gave consent to join the United States as a defendant in any suit for the adjudication of rights to the use of water of a river system or other source or for the administration of such rights. It provided that when the United States was a party to any such suit, it should be deemed to have waived any right to plead that the state laws are inapplicable or that the United States is not amenable thereto by reason of its sovereignty, and that the United States should be subject to the judgments, orders and decrees of the court having jurisdiction.

Judicial Interpretation of the McCarran Amendment

The effectiveness of the McCarran Amendment was attacked by the United States. Ken Balcomb, a Glenwood Springs attorney representing Colorado River water users, took on the Department of Justice so effectively that the United States Supreme Court held that the McCarran Amendment meant just what it said: That
an adjudication of water rights could be of any substantial segment of a water system and did not have to cover an entire water system, which was insisted on by the United States. It was an obviously correct decision, and if it had gone pursuant to the contentions of the United States Department of Justice, there would have been no tribunal to hear adjudications of waters of the Colorado River which run through seven states.

After passage of the McCarran Amendment, a quiet title suit in federal court in Salt Lake City was turned back to the local courts by the federal judge there. But Judge Knous of Montrose, the judge in the United States District Court in Denver, retained jurisdiction in the federal court of a quiet title suit by the U.S. Department of Justice in an effort to evade the effect of the McCarran Amendment. This would have been appealed by Denver but for the fact that it finally worked out a settlement of the relationship of Denver's Blue River diversions to the United States Green Mountain Reservoir on the Blue River which resulted in what is known as the Blue River Decree. I was living in an oxygen tent at that time because of asthma, and the actual negotiations were carried on by Harold Roberts assisted by John Dickson. I appeared from time to time under heavy medication, emerging from my oxygen tent for a few hours. The basic decree was worked out when Lee Rankin represented the U.S. in October 1955. An impasse of conflicting views occurred in 1964 when Denver started to fill Dillon Reservoir. When it appeared that a negotiated settlement could not be reached, I contacted Ramsey
Clark, a top legal person in the Department of Justice in Washington, and we worked out the sticking point by phone so that a negotiated decree was reached.

Federal Reserved Water Rights

In spite of the plain language of McCarran that in the adjudication of water rights the United States, by the terms of this law, could not plead that the state laws are inapplicable, the Colorado Supreme Court, relying on U.S. Supreme Court decisions growing out of protection of Indian rights, discounted this law, and other laws of congress, and held that the United States has certain reserved rights. United States v. City and County of Denver, 656 P.2d 1 (Colo. 1982). This case has sometimes been referred to as "Denver I." A similar case which arose in a different water division covering the same issues became known as "Denver II," this latter case being entitled City and County of Denver v. United States, 656 P.2d 36 (Colo. 1982).

Denver I is a leading case resolving the relationships between the United States government and the people of the State of Colorado with respect to water. It reflects efforts commenced more than 10 years earlier to define the position of the United States, whose officers and employees had taken the general position that the United States was above and beyond any authority of the individual sovereign states and did not have to comply in any respect with state water law.

Jurisdiction over the United States has been obtained in
every water division in the state. The question of the extent of United States water rights was pushed in Water Divisions No. 1 and No. 5. The trial judge in Division No. 1 in the Denver II case, Donald A. Carpenter, had been steeped in water law from the time he had assisted his father, Delph Carpenter, in the making of the Colorado River Compact and was thoroughly trained in the law of water. Judge Carpenter entered a declaratory judgment, on the basis of the pleadings, that the United States held no reserved rights in Colorado, that Colorado laws are applicable to the United States, as stated in the McCarran Amendment, that by accepting Colorado into the union with a constitution providing that all of the waters of the state belonged to the state itself and that even before that, the United States, by the Desert Land Act of 1877, the Act of July 9, 1870, and of July 26, 1866, the United States had recognized that the water of the reclamation states belonged to the people of those states. It was also noted that the property of the United States can be disposed of only by an act of the Congress and that, with respect to the statutes just mentioned, there had been a disposal by Congress of the waters of the reclamation states. The Colorado Supreme Court refused to uphold Denver II.

In the decision in Denver I, the Supreme Court acknowledged that: "The doctrine of federal reserved water rights is judicially created." 656 P.2d 1, 17 (Colo. 1982). There has never been an act of Congress creating reserved rights. The Supreme Court in Denver I went on to say:
Based upon a recognition of Congress' underlying power, the United States Supreme Court has constructed a body of law, derived by judicial implication from congressional actions, holding that:

"Congress, in giving the President the power to reserve portions of the federal domain for specific federal purposes, impliedly authorized him to reserve 'appurtenant water then unappropriated to the extent needed to accomplish the purposes of the reservation.'" United States v. New Mexico, 438 U.S. at 699-700, 98 S. Ct. at 3013-3014 quoting, Cappaert v. United States, 426 U.S. at 138, 96 S. Ct. at 2069 (emphasis in original).

Feeling obliged to follow decisions of the United States Supreme Court respecting reserved rights, in spite of the peculiar situation of Colorado with its constitutional provision, accepted by Congress, that all the waters of Colorado belong to the people of the State of Colorado, the Colorado Supreme Court in Denver I determined that the United States does have reserved rights in those unappropriated waters available at the time of a land reservation without which the purpose of the land reservation would be wholly defeated.

Since that time, in a matter concerning the oil shale claims of the United States, in United States v. Bell, 724 P.2d 631 (Colo. 1986) the Court held that the United States can amend an original application but the amendment takes the priority date of the amendment and not the original application, thus upholding Colorado's antedation law.

Regulation of Municipal Water Rates

Because of a wide law practice outside the Board of Water
Commissioner's business, I have also been involved in the application of the constitutional provision that no special commission created by the legislature may take control of any municipal assets. The Supreme Court of Colorado, itself a state agency, has not favored this limitation on the powers of state agencies, and it has found ways to limit it, particularly in the electric field. Under the constitutional provision, a municipally-owned water system may not have its rates or practices governed by the Colorado Public Utilities Commission, which is a special commission created by the legislature. The provision was followed in a case involving the Denver Water Department entitled City of Englewood v. City and County of Denver, 123 Colo. 290, 229 P.2d 667 (1951).

Municipal Ownership of Water

In Colorado, most domestic water utilities, are municipally-owned. As discussed, such municipal water utilities are not subject to regulation by the Colorado Public Utilities Commission. Another facet of municipal water ownership of water is that, contrary to the law of contract carriage for agricultural users who are the true owners of the water rights, the customers of a domestic utility are not the true owners. In a transfer case, the customers of a municipal utility are never made parties. Nor do such customers have to be consulted with respect to the acquisition or disposition of the water rights of the utility.
The universal custom in Colorado is that a purely domestic water utility is the owner of the water rights and may deal with them without consulting the ultimate users.

This is a necessary rule for practical reasons. Taking the most extreme example, when the City and County of Denver is a party to water litigation, the million people who receive that water could not, in any practical sense, become parties to the litigation. Nor could any one of those, or even a combination of those who are users decide to take a portion of the water supply and divert it through their own facilities as can be done by agricultural users if they choose. The domestic water utility is related to its users in the same way as an electric utility without regard to the law governing the exercise of water rights.

Water Quality

Water law has developed to the point where now it is much more than a question of putting water to use from natural streams or underground aquifers, and has entered into the law of water quality and the character of return flows. It is no longer enough to have a water supply. When a developer plans to create more housing, more manufacturing, or more office facilities, water for these enterprises must be disposed of so as not to impair the quality of the waters into which the return flows are inserted. Consequently, the field of water law has now become a field of environmental law in which the legal adviser must contemplate not only securing a supply but the disposal of that
supply in a safe and economical manner.

Colorado water law is a complete deviation from the old English common law, which required natural streams to be allowed to flow undiminished in quantity. Necessity in this arid region created a new common law encouraging the removal of water from streams to meet the needs of a civilized society. But the law continues to follow that part of the old English common law, which required natural streams to be left unimpaired in quality.

In what is known as the Chain O'Mines case (Wilmore v. Chain O'Mines, 96 Colo. 319, 44 P.2d 1024 (1934)), tailings from mill operations were emptying into Clear Creek Canyon above agricultural lands irrigated by this water. These tailings were filtering out when the water was applied to the land so that in a field of corn which was a quarter mile in length along the distribution system, the first corn would be a foot high while the corn at the end of the row would be five or six feet tall.

In a suit to enjoin the miners, District Judge Charles C. Sackmann in the Denver District Court held that a reasonable amount of pollution had to be permitted because both the miners and the agriculturalists had to be accommodated. The Supreme Court reversed in the Chain O'Mines case, saying that the miners had no right to pollute the stream so that its quality was below that of the natural watercourse. This was particularly important in this state because it affected the waters of Clear Creek, properly named because in its natural state, it runs through rock and gravel so as to be very clear and practically pure snow.
water. This early legal pronouncement is being emphasized more and more today.

Decrees giving a right to divert for beneficial use referred entirely to volumes of water and not at all to the quality of that water. This matter came up in A-B Cattle Co. v. U.S., 196 Colo. 539, 589 P.2d 57 (1978) when the Pueblo Reservoir, constructed in the streambed of the Arkansas River, changed the quality of the river from heavily sedimented to essentially clear water so that the Bessemer Ditch, which had always been sealed by the natural sediment in the Arkansas River, became porous and leaky.

The court was strongly divided as to the disposition of this case. The original majority held that an appropriator has the right to the natural quality of a stream without man-made modifications of that quality. On rehearing, Justice Don Kelly changed his position and accepted what had been originally the minority view that only H₂O is subject to appropriation, and therefore the appropriator has no right to the quality of water in the stream as it was in its state of nature.

What the final Groves majority had overlooked is the fact that the Colorado Constitution does not merely say that pure water is subject to appropriation, but says the "water of every natural stream" is subject to appropriation. This certainly does not refer to distilled water or pure H₂O. In the dissenting opinion, which originally was the majority opinion by Justice William Erickson, appears the sentence: "I sincerely hope that
this Court will reconsider this issue in future years." It is my view that this case must be reconsidered along with Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961). They are a part of developing law to which the legislature is going to have to give consideration if it expects the Supreme Court to avoid becoming a legislative body to fill a vacuum not filled by the legislature.

The gist of A-B Cattle is that the change in stream content was man-made, just as in Chain O'Mines. No one today questions that it is unlawful to dump man-made toxic material into a natural stream. The final decision in A-B Cattle overlooks the fact that the change in water quality complained of was man-made.

The recent New Mexico case of Ensenada v. Sleeper involved a transfer of a decreed right which worked a man-made change in the quality of stream flow. The court relied on A-B Cattle in allowing the change, overlooking the fact that the change in water quality was man-made.

Changing Beneficial Uses of Water

There is a change in the philosophy of what constitutes a beneficial use which has occurred since 1860. As the United States has developed, in addition to ranching and agriculture, Colorado now has become a national asset, not only as an educational and technical center, but also as a recreational center. Some of the best values in Colorado are to be found in its high mountains, its forests, its streams.
The diversion of water is totally unnecessary for the preservation of its forests except for the low value Blue Spruce, which has to have its feet wet. Other evergreens obtain all their water nourishment from their needles. However, these forests can provide substantial storage where the trees are open enough so that they act as a windbreak to drop blowing snow into open spaces where it can reach the natural watercourses. Under a law passed by the United States Congress, the national forests are to be maintained for the purpose of providing a continuous supply of water and timber. 16 U.S.C.A. Section 475 (1985). These two objectives are consistent because with timber cutting which provides open spaces for precipitation to fall and the timbered areas to impede the flow of air so that the snow and rain will get to the earth, both timber and water are supplied. This is why there should be no wilderness areas where there are forests because they are unproductive and inaccessible for recreation to about 98% of the American public.

Cutting trees to create ski slopes creates open spaces where snow can fall and also creates an economic benefit to the state. Ski areas require a domestic supply of water, which means that a substantial amount of high-altitude water needs to be retained to sustain the ski industry.

Another area of recreation is river rafting and kayaking. A very early statute permitted the floating of logs on our streams. With modern transportation, this statute can be repealed as unnecessary. On the other hand, river rafting and
kayaking have become a major sport and a major economic benefit to Colorado. The diversion of water out of the streams so as to diminish their flow impairs this kind of use. Such a use, at the beginning of Colorado, would have been unthought of. It would not have been considered beneficial. Beneficial use must necessarily mean utility for the needs of mankind. Mankind today does want river rafting, and consequently the maintenance of streams for this sort of use has become a beneficial use which was not in existence at the time Colorado water law was first envisioned. Colorado law does not yet adequately meet this problem, particularly in that it attempts to give the state of Colorado the sole right to appropriate water for this beneficial use, although the constitution clearly says that the right to appropriate water for beneficial use shall never be denied to anyone.

**Interstate Water Allocations**

Because Colorado is at the high point in the Northern Hemisphere of the range of mountains that runs from the south to the north throughout the Western Hemisphere, waters from its natural water courses flow out of the state and into other states. Broadly speaking, legal rights with respect to the waters of these interstate streams are treated the same as waters moving from one fully sovereign state to another. In Europe, water moves in international streams from one nation to another. Each of these nations is sovereign. The same thing is true of
the states of the United States except to the extent that they have given up a portion of their sovereignty to the Union. The basic law of interstate streams in the United States as it affects relations between various states is the same as the law of international streams between fully sovereign nations.

There are many refinements but, basically, each sovereign has the right to an equitable apportionment of the waters of an interstate stream. The equity is based on preservation of the existing civilization. This requires a consideration of such matters as maintenance of commerce and of water quality. The international law protecting commerce is strongly influenced by the commerce clause of the United States Constitution, as recently illustrated in the case of Sporhase v. Nebraska, 458 U.S. 941 (1982) in a matter which is not directly within the experience of the writer.

Allocations of the Colorado River

Well within the immediate experience of the writer, however, is the Colorado River Compact and the Upper Colorado River Compact. The operation of the terms of the Colorado River Compact should be of great concern to the states of the Upper Basin.

The Lower Basin states of the Colorado River Drainage Basin are endeavoring to create a perception that, aside from the Mexican commitment, the states of the Upper Basin must supply them with 7-1/2 million acre-feet of water from the Colorado
River at Lee Ferry each year, regardless of any deficiency in runoff, so that if there is less than 15 million acre-feet of water available at Lee Ferry in any year, the entire shortage must be borne by the Upper Basin. The time may now be approaching when this concept should be rectified.

Article III(a) of the Compact makes an apportionment of water of 7-1/2 million acre-feet to the Upper Basin and 7-1/2 million acre-feet to the Lower Basin. It was thought that there was substantially more than 15 million acre-feet available for division and, therefore, Article III(b) provided for the Lower Basin to increase its beneficial consumptive use by 1 million acre-feet per year. In addition, paragraph (c) provided for water for the Republic of Mexico out of surplus waters above the 16 million acre-feet provided for in subparagraphs (a) and (b). Subparagraph (c) also provided that if there was not a sufficient surplus to meet the Mexican obligation, the burden of any such deficiency would be borne equally by the Upper and Lower Basins, again emphasizing an equal division of responsibility.

Subparagraph (f) provided for a further equitable apportionment any time after October 1, 1963, after the 16 million acre-feet had been totally consumed. Since 1963, the river has never reached 15 million acre-feet. Consequently, all thought of a further apportionment has been abandoned.

In order to avoid the injury which might occur as the result of a particularly dry year or dry period, Article III(d) attempted to make the equal division of water between the Upper
and Lower Basins workable by providing a ten-year running average of 75 million acre-feet, rather than requiring 7-1/2 million acre-feet each and every year.

When Article III(c) provided for Mexico's claims, it clearly made the additional apportionment of Article III(b) water a burden to be borne equally by the Upper and Lower Basins without providing a guarantee of flow by the Upper Basin. Careful consideration should be given to the proposition of whether or not the III(b) apportionment was intended not to interfere with the basic apportionment of 15 million acre-feet, but effective only if there were a surplus over that amount, regardless of the further apportionment provided for in III(f). There is provided in III(f) for further apportionment of flows beyond the 15 million acre-feet anticipated in III(a), the one million acre-feet in III(b), and the Mexican water of III(c). III(f) leaves the apportionment wide open— all to Lower Basin, all to Upper Basin, or whatever. Of course, the additional apportionment under III(f) available after 1963 will not occur, as we discuss below.

Those in the Upper Basin who have responsibility for implementation of the Colorado River Compact and the Upper Colorado River Compact need to keep in mind that Article III(a) and (b) are apportionments of water, but that Article III(d) is not an apportionment but simply a device to implement the apportionment. When the Lower Basin seeks to use III(d) as an guarantee of 7-1/2 million acre-feet of water annually, on an
average, it must be borne in mind that there is an evident intent in the Compact to divide the water equally between the Upper and Lower Basins, and that III(d) is simply an ill-conceived manner of dividing the water equally based on a mutual mistake of fact.

Flows Available in the Colorado River

The State Engineer is exceedingly well aware of the fact that of the 26 years of recorded flow at Lee Ferry prior to the negotiation of the Compact, the last 24 years far exceeded 150 million acre-feet per decade of water available for division. The fact is that the division was made on recorded flows which are the highest in the entire history of the Colorado River and have never been met since the making of the Compact. The facts were sufficiently obscure at the time of the Compact negotiations that the states believed there would be a substantial amount of water available for further division among them in the future and provided a date for that further division. The date has long since passed, and everyone who knows anything about the matter is aware that there is no surplus, and, as a matter of fact, there is a deficiency of water when full utilization is made by each state of its allotment.

In addition to physically recorded flows, we now have access to tree ring records which confirm the fact that the Compact was made on a mistaken set of facts, to wit: The flows used as the basis for division of water among the states of the Colorado River Basin were the highest since the year 1500. In addition,
we are aware now of five drought periods which have occurred in the course of history of more than a third century each, when it is certain that the flows at Lee Ferry will be such that there is much less than 15 million acre-feet of water to divide between the Upper and Lower Basins. In fact, the river may become so deficient that unless there is equal division between the Upper and Lower Basins, and the Upper Basin is held to a 75 million acre-foot delivery at Lee Ferry for each successive ten-year period, there would be a substantial reduction in water for the Upper Basin states.

Reformation of the Compact

As a matter of equity and justice, the Lower Basin is entitled to know now, before it spends more money on further water development out of the Colorado River Basin, that it does not have an assured supply of 75 million acre-feet every ten successive years. In order that equities may not run against the Upper Basin, the time has come for the Upper Basin states to join together in litigation seeking the reformation of the Compact, which is a contract as well as a treaty among the states. Reformation of a contract can be made to conform to the true facts when the contract was made upon the basis of a mutual mistake of fact. The reformation would be on the basis of securing an equal division between the Upper and the Lower Basins which would simply require a change of the number to meet the now proven situation.
There is no reason to try to renegotiate the entire Colorado River Compact. It has now been in operation for more than 60 years and is the basis for judicial decisions and the Upper Basin Compact, as well as federal legislation, all of which rely on the equal division of waters between the Upper and Lower Basins of the Colorado River. The principles of the Compact are sound: an equal division of the waters between the Upper and Lower Basins. The compact should simply be reformed to reflect its intent in the light of now known availability of water.

From a tactical standpoint, Colorado should not undertake the reformation effort alone. This should be a unanimous effort by all of the Upper Basin states. Colorado has historically been the leader, not only in creating water law, but in creating relations with other states, not only because of the capability of its people, but because of the necessity arising out of the fact that waters flow out of Colorado into other states with practically none flowing into Colorado, creating a need for Colorado to protect its interests either by judicial decision or compact involving downstream states. Although the principles above stated were delineated by a group of Coloradoans an number of years ago, it turned out that the political climate was adverse for Colorado to exercise leadership at that point. That time may be soon approaching.