

NEW MEXICO WATER LAW AS IT RELATES
TO THE PECOS RIVER WATERSHED

C. D. Harris^{1/}

Water law may have been the first law developed in that area we now call New Mexico. As Remi A. Nadeau pointed out in his book The Water Seekers:

"Bleak ruins stand today in the cliff country of the Four Corners of New Mexico, Arizona, Utah and Colorado, uninhabited for more than six hundred years. From the time of Charlemagne to the last Crusades the cliff dwellers flourished there, making advances in irrigation, architecture, rudimentary engineering. But, beginning in 1276, an appalling twenty-three year drought struck the Southwestern country. It cut the roots of the cliff dwellers' civilization. Defeated by nature, they moved southward in quest of water, leaving behind the shells of their communities in the Colorado cliffs."

"In the sun-drenched Gila Valley of New Mexico and Arizona are the remnants of another Southwestern society -- The Hohokam people. A thousand years ago they had achieved an advanced civilization through the wise use of water. By patient, plodding labor, they built elaborate canals up to twenty-five miles long, irrigating more land than any other people on the American continent in their time. They were fast developing an agricultural empire of the kind which founded the first-known civilizations of the Nile, Tigris, and Euphrates valleys. From about 1450 the Southwest was stricken once more with long years of drought. The great irrigators failed to find an answer to the terrible water famine which gripped their homeland. They migrated elsewhere, leaving their parched canals to stand unused for several hundred years."

I suggest that in all probability one of the first laws developed by the Hohokam and cliff dwellers societies was the law of waters.

Certainly the precedents for our present day law of waters go back many centuries in New Mexico history. One of the first proclamations after the conquest of Mexico by the United States was the Kearny Code of September 22, ~~1918~~¹⁸⁴⁶ which provided in part:

"that the law theretofore enforced concerning water-courses should continue in force,***"

^{1/} Attorney at Law, Roswell, New Mexico

Among the early pronouncements by the Territorial Supreme Court was to the effect that:

"the doctrine of prior appropriation has been the settled law of the territory by legislation, custom and judicial decisions." U. S. vs. Rio Grande Dam & Irr. Co., 9 N.M. 292.

Although the basic philosophy of our water law and the early decisions were established by conditions arising from the Rio Grande Watershed, the bulk of the legislative enactments and court decisions since statehood has arisen from conditions on the Pecos River Watershed. In fact, as early as 1909, the legislature provided for the regulation of artesian wells (New Mexico Laws of 1909, page 177, also Laws of 1912, chapter 81).

In the early 1920's, in an attempt to bring some order to the water rights controversies in the Pecos Valley, the United States Government undertook to adjudicate all of the water rights along the Pecos from the Carlsbad Irrigation Project to the headwaters of the Pecos. After ten years of hearings, the Federal Court entered the final judgment in the United States vs. Hope Community Ditch, et al.

In spite of all the time, effort and money spent on this case, the water law of the Pecos River was still unsettled, and many problems remained unresolved. Inevitably, claims were made that lands and parties were omitted, rights on the tributaries were not adjudicated, and no attempt was made to adjudicate ground water rights.

Shortly after the turn of the century, the potential of the Artesian Basin in Chaves and Eddy Counties was discovered. A large scale agriculture economy developed in the Roswell and Artesia communities. Alas, early in the 1920's the economy based upon artesian wells was threatened. Many wells ceased to flow. Tributary streams dried up. Mortgages were foreclosed.

Probably at the insistence of the mortgage holders, the people of the Pecos Valley determined to enact a water code to control the appropriation and use of ground water. New Mexico was not the first state to enact ground water legislation; however, in 1927 the legislature declared the water of underground streams, artesian basins, reservoirs, and lakes having reasonably ascertainable boundaries to be public.

The Supreme Court in 1930 declared the 1927 Act unconstitutional for technical reasons, but again re-affirmed the doctrine of prior appropriation and held that it had always been the law of New Mexico that ground water as well as surface water belonged to the public and was subject to regulations by the legislature. Our water law was re-enacted in corrected form in 1931, and

New Mexico was the first state to put in operation an expensive ground water code, and has set the pattern of ground water law in the Western states.

The constitutionality of the 1931 Act was upheld by the New Mexico Supreme Court in 1950 and by the United States Supreme Court in the following year. State vs. Dority, 55 N.M. 12, Dority vs. State, 341 U.S. 924.

Since 1955 the Supreme Court of New Mexico has written over 35 decisions concerning water controversies arising from the Pecos Valley. In 1955 the court held that the appropriator had the burden of proving that his application would not impair existing rights. Spencer vs. Bliss, 60 N.M. 16. Since that time the court has held that drainage water is private and not public. Langenegger vs. Bliss, 64 N.M. 218. That waste of water was not of beneficial use, State vs. McLean, 62 N.M. 264, and that in a case where the ground water contributed to the flow of the stream, the appropriator from the stream could trace his water to the source by drilling a well, Templeton, et al. vs. Pecos Valley Artesian Conservancy District, 65 N.M. 59. In the case of Kelley vs. Carlsbad Irrigation District, 71 N.M. 464, the Supreme Court held that the District Court in reviewing a decision of the State Engineer was limited to the record before the engineer.

In spite of all of the litigation during the last decade, there remains many unresolved problems concerning water law. It now appears that there are more questions to be answered than ever before.

In order to bring more stability to property rights on the Pecos River Watershed, the P.V.A.C.D. and the State Engineer filed a petition in 1956 asking the court to adjudicate and determine all ground water rights in the Roswell Artesian Basin.

Over 1900 defendants have been named, over 300 days have been taken in presenting evidence in court, property rights valued at over \$70,000,000.00 have been involved in this one lawsuit. This does not include the value of the water rights from municipalities and industries. The court has adjudicated over 140,000 acres of land as having valid water rights, including separate adjudication suit involving the lands under the Hagerman Canal.

The plaintiffs have now asked for the two adjudication suits to be combined and the court has set down the final hearing for May 18, 1965. At the time of the final hearing the court will consider requested findings of fact and conclusions of law, requests for provisions for final judgment, corrections of mistakes, omissions, and errors, and will consider procedures for the administration of the final judgment, determination of whether a water master should be appointed, determination of whether measuring devices should be installed and assessment of costs.

This case involves hard and dramatic decisions for the court. The results of this adjudication will have dramatic and far reaching effects upon the people of the Pecos Valley and for the State of New Mexico.

It appears to this writer that the year of 1965 will be THE YEAR OF DECISION.

To illustrate the complexities of the problems, you should bear in mind that under all the permits issued by the State Engineer, the appropriator has been limited to three acre feet of water per acre per annum. The special master and the court have determined that on all the irrigated acres adjudicated that the duty of water is three acre feet per acre per annum measured at the well; yet, U.S.G.S. studies made in 1956 show that for the period from 1951 to 1956 approximately 3.2 acre feet of water was used on the average on each acre of irrigated land. I understand that more recent studies show that since 1956, four acre feet or more have been applied on the average on the over 140,000 acres of irrigated land in the Roswell Artesian Basin.

If meters are required to enforce the provisions of the final judgment, many problems will remain. The questions that will be presented requires determination of who will pay for the meters. Will the defendants be required to pay for and install the meters under the supervision of the water master appointed by the court?

There is a possibility that the Pecos Valley Artesian Conservancy District can aid in financing the meters or might even consider paying for all or part of the cost of the meters as a part of its conservation program. Certainly there should be a good possibility that the Conservancy District can act as purchasing agent in order to expedite the buying of the necessary meters. Even if meters are installed, there will remain the problem of administration of reading of the meters, of enforcing the court's allocation of the water, and of paying for the costs of administration.

Even if meters are required and the appropriation of water can be reduced from something like 560,000 acre feet to 420,000 acre feet, this will still not mean that the Valley is living within its water income. Hydrologists tell us that a significant percentage of the recharge of the Pecos River comes from ground water sources and that this recharge has been depleted by pumpage from the shallow and artesian wells of the Roswell Artesian Basin. Certainly there is a shortage of surface water on the Pecos River. New Mexico is faced with the possibility of a priority call from surface users. In the event of a priority call, will junior water users be enjoined from using water until the senior users recover their supply? Unlike the priority call of a surface stream, a priority call on ground water users would be extremely complicated and very expensive in the economy of this state. If the junior ground water users were enjoined from taking water, it might take many years for the reduced pumpage to help the surface users.

Heretofore I have primarily discussed the competition for irrigation water in the Pecos Valley, but it may well be that the big problem of the next decade will be the problems of insuring a dependable source of water for industrial and municipal uses.

Right now the city of Carlsbad is considering expenditure of money for water rights. I understand that these figures may involve over a million dollars. In the adjudication of the Roswell Basin the Special Master held and this ruling was affirmed by the court that the cities of Roswell and Artesia had the right to extend use of the well to the limit of their capacities for extending city use.

At the present time the city of Roswell uses approximately 12,000 acre feet of water per annum, but its well capacity at the time of the adjudication was 27,190 acre feet. In 1931 Roswell was using 2100 acre feet of water per annum. It can be seen at the time of the adjudication, Roswell was using approximately five times as much water as it was using in 1931 and it may have the right to use $2\frac{1}{2}$ times its present use. If the population of Roswell was 40,000 at the time of the adjudication, its paper rights may be sufficient to serve a population in the neighborhood of 100,000. At the time of the adjudication, Artesia was using approximately 3,000 acre feet of water per annum and apparently the court held that it had the right to appropriate to the capacity of its wells which would amount to 5,806 acre feet.

Unless there are objections at the time of the final hearing to adjudicate rights of the municipalities, it is apparent that the municipalities, without acquiring any additional water rights, may increase their withdrawal from the basin many times, but in the case of Roswell particularly, there are severe physical handicaps in its search for additional water. In the area adjudicated, Roswell to the north and east, the salt content of the ground water had increased to alarming proportions.

At the time the isochlor map was drawn in 1960, approximately 5,000 acres of irrigated land were in an area where the water contained over 1,000 parts per million of chlorides. By 1965, there were over 8,000 acres of land being irrigated from sources having over 1,000 parts of chloride per million. Probably over 6,000 of these acres have a priority of 1920 or earlier.

Any increase in pumping for municipality uses will probably cause corresponding increases in the salt content of the water. Roswell was faced with the prospect of locating its well field farther and farther to the west, but if I understand the hydrology correctly a program of moving wells to the fresh water area to the west of Roswell may well be self-defeating.

I understand that all the students of hydrology agree that the salt water encroachment can only be stopped by increased Artesian pressure. Conversely, increased pumping of Artesian water would have to decrease the Artesian pressure and allow further encroachment of salt water. Moving wells to the west would apparently only decrease the Artesian pressure and allow the salt water to move in the fresh water zones at an increased rate. It appears to me that we have not yet been willing to face the problem of water deficiency as a matter of individual and public responsibility. We have not yet been able to develop techniques in law to live within the water income.

As a layman in the field of hydrology and as a student of water law, I do suggest the following beginning steps in a program of survival:

1. The elimination of illegal pumpage which would require a program of metering so that all users would be limited to their legal duty.
2. A transfer of water rights from agricultural to industrial and municipal uses to take care of the increased appropriation of water by municipalities, by Walker Air Force Base, and by industrial users. This would require purchase or condemnation of water rights by the cities of Artesia, Roswell, and Walker Air Force Base. I submit that the cost of acquiring water rights would be less than the cost of importation or the relocation of well fields far removed from the users of the water.
3. An increased program of retiring water rights by the Pecos Valley Artesian Conservancy District. This might require an increase of the taxes levied for this purpose.
4. A stepped-up program of conservation which has been going on in the Pecos Valley for many years and which has been accelerated by the program of long term loans by the Pecos Valley Artesian Conservancy District in cooperation with the Interstate Stream Commission.
5. Although it might not be necessary, since I believe that the cities could purchase sufficient water rights at a reasonable cost, it would be helpful if the laws defining the cities rights of condemnation could be clarified and strengthened.

Steve Reynolds, the State Engineer, at one time said that if the projected population increase of New Mexico were borne out, that by 1975 New Mexico could expect to have a population of 2½ million, and to have sufficient water to serve this population, it would require a deduction in irrigation of 7 per cent.

Although a reduction in our irrigation would be painful we can afford to pay this price.

We need to have some system of allowing transfer of water rights in this arid state from users of low economic value to users of high economic value. Bear in mind that it requires approximately 1 million gallons of water to irrigate one acre of land; whereas the same 1 million gallons of water will take care of many more people in a municipality.

I do not underestimate the agricultural value of water nor the economic value of our irrigation community, but I do feel that it would be better for farmers to be given just compensation for their property rights before their wells run dry and they are reduced to bankruptcy.

Since this is a water deficient state and since the Pecos Valley is a water deficient area our laws and institutions will have to be geared to the proposition that we get the highest possible value out of each gallon consumed.

I think that a program of survival, no matter how costly it would be, would be better than allowing salt water to ruin an entire basin; to contaminate the Pecos River; and to result in a condition where either there is no water, or the water is unfit for use.

In 1930 when the Supreme Court approved the doctrine of appropriation it said:

"We are here considering 'artesian basins, reservoirs, or lakes, the boundaries of which may be reasonably ascertained by scientific investigations or surface indications.' Such bodies of subterranean water are the principal resource of the localities where they occur. Their employment to the best economic advantage is important to the state. According to the 'correlative rights' doctrine, each overlying owner would have the same right - the right to use whenever he saw fit. The right does not arise from an appropriation to beneficial use, which develops the resources of the state. It is not lost or impaired by nonuse. Regardless of the improvements and investments of the pioneers, later comers or later developers may claim their rights. The exercise of those rights which have been in abeyance will frequently destroy or impair existing improvements, and may so reduce the rights of all that none are longer of practical value, and that the whole district is reduced to a condition of non-productiveness."

"The preventive for such unfortunate and uneconomic results is found in the recognition of the superior rights of prior appropriators. Invested capital and improvements are thus protected. New appropriations may thus be made only from a supply not already in beneficial use. Nonuse involves forfeitures. A great natural public resource is thus both utilized and conserved."

We are still faced with the problem of developing law and institutions that will allow us to survive while utilizing and conserving a great natural public resource. We cannot fail. We must develop the necessary institutions and laws to survive in this desert.