A Brief History of New Mexico Water Rights Administration since 1907

G. Emlen Hall

University of New Mexico - School of Law

Follow this and additional works at: https://digitalrepository.unm.edu/law_facultyscholarship

Part of the Law Commons

Recommended Citation

G. Emlen Hall, A Brief History of New Mexico Water Rights Administration since 1907, CLE INTERNATIONAL, New Mexico Water Law Conference (1997). Available at: https://digitalrepository.unm.edu/law_facultyscholarship/56
New Mexico Water Law Conference

August 25-26, 1997
Santa Fe, New Mexico
8:30 Registration

9:00 Introduction
John B. Draper, Esq., Program Co-Chair
Montgomery & Andrews, Santa Fe

9:10 The History of Water Rights
Administration in New Mexico
The Development of Water Law
Professor G. Emlen Hall
University of New Mexico School of Law,
Albuquerque
John G. Baxter, Ph.D.
Santa Fe

10:10 New Initiatives by the New Mexico
State Engineer Office
Dedications; Adjudications; Application
Processing; Legislation; Interstate Issues
Thomas C Turney, P.E.,
New Mexico State Engineer
Santa Fe

10:55 Break

11:05 Regional Water Planning in New
Mexico Today
Key Issues Facing New Mexico’s Cities
Norman Gaume, Manager, Water Resources
Division
Public Works Department, City of
Albuquerque
Mike A. Hamman, P.E., Director
Water Services Division, City of Santa Fe

11:15 Mexico’s Rights in the Upper Rio
Grande Basin
Surface Water; Ground Water
Professor Albert E. Utton
University of New Mexico School of Law,
Albuquerque

2:00 Interstate Issues on the Rio Grande
The View From Texas
Jack A. Hammond, Commissioner
Rio Grande Compact Commission

2:45 Break

2:55 The Middle Rio Grande Conservancy
District
History and Legal Status; Policies on Sales and
Transfers of Water Rights
Professor Charles T. DuMars
University of New Mexico School of Law,
Albuquerque

3:40 Stock and Recreational Ponds in New
Mexico
Adjudication; SEO Policies; Private Litigation;
Clean Water Act Section 404
Benjamin Phillips, Esq.
White, Koch, Kelly & McCarthy, Santa Fe
D. L. Sanders, Esq.
New Mexico State Engineer’s Office, Santa Fe
John B. Draper, Esq.

4:25 Alternative Dispute Resolution in
Adjudications
The Lower Rio Grande Experience
Ted Apodaca, Esq., Chief Legal Counsel
New Mexico State Engineer’s Office, Santa Fe

5:10 Reception
CLE INTERNATIONAL
New Mexico Water Law Conference
Santa Fe, New Mexico
Tuesday, August 26, 1997

9:00 Introduction
Louis W. Rose, Esq., Program Co-Chair
Montgomery & Andrews, Santa Fe

9:15 The Federal/State Relationship
Emerging Issues; Federal Legislative Update
Tom Udall, Esq., New Mexico Attorney General
Santa Fe

10:15 Federal Legislative and Regulatory Developments
CERCLA Amendments; The Safe Drinking Water Act; Natural Resource Damage Regulations
Charles de Saillan, Esq.
Office of the Attorney General, Santa Fe

11:00 Break

11:15 State Legislative and Regulatory Developments
Voluntary Remediation Act; Nonpoint Source Regulation; TMDL Development; Groundwater Standards; Water Quality Standards Review
Nicholas F. Persampieri, Esq.
New Mexico Environment Department, Santa Fe
Louis W. Rose, Esq.

12:15 Lunch Break

1:30 Predicting the Future
Groundwater Modeling in New Source Permitting and Closure Decisions
Adrian Brown, President
Adrian Brown & Associates, Denver

2:15 Ethics Considerations
Key Issues for Water Law Practitioners
William R. Brancard, Esq., Assistant Commissioner
New Mexico State Land Office, Santa Fe

3:15 Break

3:30 State/Tribal Jurisdiction
City of Albuquerque v. Browner
Bruce S. Garber, Esq.
Garber and Hallmark, Santa Fe

4:15 Citizen Participation in Water Quality Disputes
Permit Hearings; Citizen Suits; Alternative Dispute Resolution
Douglas W. Wolf, Esq.
New Mexico Environmental Law Center, Santa Fe

5:00 Adjourn
A Brief History of New Mexico Water Rights Administration since 1907

I came to this conference last year and spoke for an hour or so on New Mexico water rights from the beginning to the end of time. I had trouble squeezing the material in. Apparently the presentation was such a great success that this year the program sponsors have limited my talk in two ways. They’ve given me less time and they’ve given me a narrower topic. This morning I’m going to address the early history of State Engineer water administration in New Mexico. (As John Baxter just explained, there were centuries in New Mexico, believe it or not, when there was no State Engineer and Steve Reynolds was not the King.) And this morning, I promise you that I will only speak for half an hour.

Let’s get right down to it: If the Big Bang Theory of the beginning of our universe applied to New Mexico water law as we know it today, there would be no trouble setting the date on which the Creation occurred: March 19, 1907. On that date the Water Code under which we now live became effective and the water world we now live in began. So important is this date in the cosmology of New Mexico water rights that every water lawyer and every water engineer---in short, every “eginawyer” in the words of United States District Judge Edwin Mechem---can recite the date by heart.

The creation of the 1907 New Mexico water code divided the New Mexico water world in two in a whole variety of ways. From that date on there were “pre-1907 water
rights" and "post-1907 rights". From that date on, more or less, as I’ll explain in just a minute, there were unpermitted water rights established by use and those sanctioned by a formal license from the State. From March 19, 1907 on the New Mexico Territorial Engineer centered the New Mexico water world. (After January 6, 1912 he became the “State” Engineer.) Before 1907, more or less, he didn’t exist.

You can read about the particulars of the 1907 Water Code in Ira G. Clark’s exhaustive (and exhausting) Water in New Mexico: A History of Its Management and Use. I don’t want to repeat the wonderful detail that he provides. Despite the fact that Dr. Clark himself is both a historian and a lawyer, I think that he sometimes misses the forest for the trees. This morning I want to focus on the forest. In showing you origins of the 1907 Water Code and the basic system that it established, I want to sketch for you the contours of the world in which we now live. Many of the details that Dr. Clark describes have changed, but the basic system and the values that it imposed are still very much with us today.

First and foremost, the 1907 Water Code moved the locus of control over New Mexico water up from local communities to the level of statewide government. It did so in two ways. First, it declared that the unappropriated waters of New Mexico now belonged to the state. And it assigned control of that water to a state level institution.

The rise was meteoric. In 1897 a New Mexico legislative committee had studied New Mexico’s water laws and found that they differed from region to region in New Mexico. However, the Committee’s report found that each region understood its different water law quite well, thank you, and there was no need for any comprehensive, state-wide water law or regime. In 1905 a new statute authorized the creation of a state water board
whose members represented the particular geographical districts which theretofore had unique control over the different water institutions. While the 1905 statute contained many of the principles embodied two years later in the basic water law code still with us today, it required no permit to make new appropriations. In 1907 the Legislature enacted the basic water law code and added the permit requirement.

Morris Bien of the Bureau of Reclamation drafted the outlines of that first 1907 Code. The Reclamation input tells us something about the prize the 1907 Code tried to capture: the unappropriated flood flows of western streams, everywhere sought after by the 1902 Newland’s Act sponsors. Despite the fact that New Mexico was supposed to follow the so-called “Colorado doctrine”, the 1907 Code really adopted the quite different Wyoming style of water-rights administration. The principle feature of the Wyoming version of prior appropriation was the unique power that it conferred on a professional water administrator, the State Engineer.

It is commonplace to note that with the adoption of the 1907 Water Code and the appointment of a State Engineer, all future new appropriations of surface water had to be based on a permit from that State Engineer. (I’ll come to the extension of his authority to ground water in 1931 shortly.) That is, of course, true and important and fundamentally changed prior pre-1907 practice where an appropriator acquired the right to take water simply by taking it and hoping he didn’t get sued. Now, under the new Code, he couldn’t just take the water and force earlier appropriators to prove that the new appropriation harmed their existing rights. Now, under the new Code, new appropriators had to prove before they ever took the water and to a professional expert that they could make the new appropriation without impinging on existing rights. This shifting of the burden and timing
of proof under the 1907 Code was critical and gave the new Engineer the job of making sure that new development did not impinge on existing rights.

However, in my opinion, the real power that the 1907 Water Code conferred on the new State Engineer was the corollary power to determine what water in the state was unappropriated and therefore subject to new appropriation and which applications for unappropriated water might be "detrimental to" (or "impair") existing rights. These two questions were not mirror images. Water might be unappropriated and the taking of it could still be detrimental to existing rights and vice versa. But however you put together the two powers now vested in the State Engineer, together they gave the new State Engineer the power to define administratively and, presumably, scientifically, the extent to which new appropriations would be allowed and existing rights would be protected. Mathers v. Texaco tells us how full of controversial science and debatable economics striking this balance could be. The 1907 Water Code left the choice between these contradictory goals to the professional wisdom of a state bureaucrat, trained in engineering, as the Code said, and paid $2,000 a year. Prior to 1907, the decision as to what water was "unappropriated" and which existing rights were "impaired" had been left to a loose mix of courts, county commissions and ancient community ditch associations all exercising overlapping and potentially conflicting jurisdiction. After 1907 the decisions, at least in the first instance, were to be made at the state level and by the Engineer.

The original 1907 Water Code superimposed on the powerful new state engineer a three-member Board of Water Commissioners, a throwback to the larger and more powerful Board of Control under the 1905 Act. The 1907 Board struggled with the first
Territorial Engineer, Vernon L. Sullivan, over the critical contours of the definition of "unappropriated waters." By 1915 the Board was gone and the courts differed mightily to the State Engineer's "expert" decisions. The effect was to further enhance the substantial political powers that the original Code conferred on the already powerful State Engineer.

One way of measuring the beneficiaries of the fundamental changes worked by the 1907 Water Code is to gage who took advantage of its provisions. You can tell that by looking at what the State Engineer's staff calls "The Granddaddy Books," six leather bound tomes in the basement of the Battaan Memorial Building which record the first eight-hundred applications for permits under the new 1907 Code. So anxious were developers to use the new permit provisions to tie up New Mexico's unappropriated water that they sometimes jumped the gun on the permit system itself. Application No. 1, for example, under the 1907 Code for a license to appropriate "all the unappropriated waters of the Rio Mimbres" in order to irrigate 104,000 new acres near Deming, actually began with a 1905 filing under the 1907 Code's 1905 predecessor. Early applications like this were responding to the State's own promotion of unappropriated water available for new developments. In 1905 the New Mexico Territorial Governor himself wrote, 

There is a vast opening for enterprise in reclaiming broad acres of as fertile lands as God ever created, lying under a perfect sky and in a well-nigh-perfect climate. Nor is there a lack of water for reclaiming at least a portion of the vast arid domain. The flood waters which flow to waste annually, the ordinary flow of rivers and streams that is wasted or not utilized, the tremendous underflow in most of the broad valleys, the feasibility and cheapness of pumping water from unfailing wells in many sections, and the undoubted existence of large artesian belts all promise that sooner or later a large part of New Mexico will be under successful irrigation.
To think that the Governor of New Mexico was referring to the desert we all know and love around Deming! It was to manage and secure fantastic future projects like this that the 1907 Water Code was enacted. (The Rio Mimbres application was cancelled in 1916 for failure to perform.\textsuperscript{17}) It did so by creating a State Engineer with absolute authority to require a permit for future new appropriations and vesting him with very broad powers to define “unappropriated waters” and impairment.

The 1907 Water Code recognized that there were significant rights to water that pre-dated the Code. As to these existing rights, the 1907 Code was significantly less generous in conferring on the new State Engineer the same broad technical and administrative authority that it gave him over new appropriations. For one, the 1907 Code recognized the customary ways that existing institutions, like the ancient community irrigation ditches, had of distributing water and said that the State Engineer should not disturb those customs with his new administrative powers.\textsuperscript{18}

As significant, perhaps, the 1907 Water Code, from the beginning, limited the supervisory jurisdiction of the State Engineer to “the licenses issued by him and the adjudication’s of the courts.”\textsuperscript{19} In effect, this provision insulated pre-1907 rights from the broad state executive control established by the 1907 Water Code until the judicial branch of government had brought those pre-1907 rights within the State Engineer’s executive ambit.

This, of course, didn’t mean that the holders of pre-1907 rights could not bring themselves within the ambit of protections offered by the 1907 Water Code and its immediate predecessor. Indeed one of the first filings on unappropriated waters allowed under section 17 of the 1905 Code was made by H.F. Robinson of the Indian Irrigation
Service. He claimed all the unappropriated surface flows of New Mexico’s rivers for the benefit of New Mexico’s Pueblos. 20 (That was nothing as compared with the United States Bureau of Reclamation’s claim to the same waters five times over. 21) The point is that ancient water users could use the early New Mexico codes for their benefit in the future. At the same time, the new, powerful State Engineer couldn’t assume full control over those rights until they had been brought within his executive jurisdiction by judicial decree.

This fact and the massive, centuries old, pre-1907 use of water by New Mexico’s long-standing hydraulic societies made the 1907 Water Code’s adjudication processes critical. 22 Unlike Colorado, for example, New Mexico’s Water Code from the beginning contemplated a comprehensive, one-time, final adjudication of all pre-1907 and post-1907 rights to common sources of water. Post-1907 priorities and quantities would, of course, be easily determined by the licenses finally issued by the State Engineer. Pre-1907 quantities and priorities, of course, would be confounded by federal claims to water, by lack of records after 1847 and by a profound lack of agreement as to the nature and extent of rights to water originating under New Mexico’s antecedent Mexican, Spanish and Native American sovereigns. 23 The Aamodt suit, adjudicating rights to the Nambe/Tesuque stream system, is the oldest pending lawsuit in the entire federal system. The Lewis adjudication of the Pecos River, begun in 1956, has generated so many cases in New Mexico’s appellate courts that it’s no longer possible to keep all the Lewis cases straight by name alone. 24 No matter which view prevails, the adjudications which the 1907 Code saw as pre-requisite to establishing the State Engineer’s full supervisory control over all rights to all New Mexico waters simply haven’t happened. As a result,
powerful as the State Engineer is, thanks largely to the powers conferred on the office by the 1907 Code, those powers have never been fully realized.

Over the 90 years that we have lived under the basic provisions of the 1907 Code as amended, God knows, those never fully realized powers have been further curtailed. The relatively recent trial de novo provisions of appeals from the determinations of the State Engineer to the district court potentially have made the courts more powerful than they ever were under the original 1907 Code and the Engineer correspondingly less powerful. More recent efforts to encourage regional water planning in New Mexico go against the unified statewide regime contemplated by the 1907 Code. The State Engineer already maintains different definitions of “unappropriated water” and “impairment” in different declared basins of the state. Regional planners eventually may take over the critical function with their plans. Then the question of how much a new appropriation could effect an existing appropriation before it was “detrimental to” or “impaired” it would be decided locally.

A change like this wouldn’t so much do violence to existing practice---after all, what is now, under state-wide policy, “impairment” in Grant County is not “impairment in Lea County---as it would change the locus of decision-making power. Now Grant County and Lea County would be making the decision themselves. At that point New Mexico would have come full circle.

Here in 1997 we would celebrate the 100dth anniversary of the 1897 Legislative Committee report. That 1897 report, as you now know, said that there was no need for a single body of New Mexico water law. Of course, as you also now know, the basic 1907 Water Code rejected the decentralization of control over New Mexico’s waters that the
Report recognized and championed. Today regional water planning would adopt the 1897 Report’s point: the definitions of “unappropriated water” and “impairment” are not so much technical as political and in a place as diverse as New Mexico those definitions are best left to local communities, not a single State Engineer.

The failure of our adjudication suits to fully and finally incorporate pre-1907 rights under the State Engineer’s complete power is also a serious blow to the comprehensive supervisory role that the 1907 Code contemplated. The New Mexico experience with comprehensive stream system adjudication has been so discouraging that several experienced, long-term State Engineer ex-veterans really thought that New Mexico-style adjudications were impossible and should be replaced with something else. The replacement would probably combine regional water planning and the kind of right-by-right adjudication of pre-1907 rights proposed for transfer for new uses at new places that characterizes middle Rio Grande practice now. Unpersuaded, the Office has just begun the Lower Rio Grande adjudication. Whatever the ultimate fate of comprehensive adjudications, after 90 years, they have not yet played the pivotal unifying role that the 1907 Code envisioned for them.

In a sense the 1907 Water Code established fundamental principles we in New Mexico have never achieved. Even as we move towards them, they recede from us. Especially these days it’s very difficult to say where the contradictory tendencies will end up. For almost a century, the Code’s principles have guided the appropriation and conservation of New Mexico water “under a perfect sky” as the Governor said in 1905.
An Act to Conserve and Regulate the Use and Distribution of the Waters of New Mexico; To create the Office of Territorial Engineer; To Create a Board of Water Commissioners, and for other Purposes. Laws of New Mexico, 1907, Chapter 49.


3 1907 Act, sections 1 and 2. These basic provisions repeated similar provisions in the earlier 1905 Code, “An Act Creating the Office of Territorial Irrigation Engineer, To Promote Irrigation Development and Conserve the Waters of New Mexico for the Irrigation of Lands and for Other Purposes” 1905 Laws of New Mexico, chapter 102.


5 1905 Law, supra.

6 Clark, Water, p. 118.

7 Clark, Water, p. 118-119.

8 1907 Law, chapters 25-29 covers the original permit requirements.

9 E.g. 1907 Laws chapter 49, secs. 27, 44. Now codified as 1978 NMSA72-5-26 and 72-5-23.


11 Baxter, Dividing New Mexico’s Waters, 1700-1912 (UNM Press: Albuquerque, 1997). The turn-of-the-century Tularosa Community Ditch cases probably represented a legal effort to make New Mexico’s ancient community ditches, not the state, the owners of unappropriated stream system water.

12 1907 Laws, chapter 16.

13 Clark, Water, 123-125.

14 State Engineer Office, Bataan Memorial Building, Santa Fe.


16 Annual Report of the Governor of New Mexico to the Secretary of Interior (1905), 20, State Records Center and Archives, Santa Fe.

17 Notice of Cancellation of Filing No. 1, 24 February 1916, SEO, Santa Fe.

18 E.g. secs. 72-9-1 and 72-9-2 NMSA 1978; Laws 1907 chapter 49, sections 57 and 59.

19 Sec 72-2-9 NMSA 1978, Laws 1907, ch. 49, section 12.


21 Section 22 of the 1905 Code allowed the United States to “file” on unappropriated waters. In addition to the Robinson filings for the Pueblos, the United States filed five applications notifying the then Territorial Engineer of the federal government’s intent to appropriate all the unappropriated flood flows of New Mexico for a variety of federal projects.

22 Secs. 72-4-16 et seq. NMSA 1978, Laws 1907, chapter 49 sections 21-23.


24 For Aamodt see note 20 above; the most recent Lewis decision appears as State v. Lewis (and Thomas) N.M. , 910 P2d 957 (NM. Ct. App., 1996)

25 NM Const. Art XVI, sec. 5.

26 Remarks of Special Assistant Attorney General Martha Dabney in a variety of public forums in the 1990s.
In New Mexico, water has always been a precious commodity. Located in a semiarid region with limited precipitation, our state is extremely vulnerable to drought. During the last few decades, population growth and urban development have intensified competition for available supplies of water. According to news reports, demand increases each day from agricultural, industrial, domestic, and recreational consumers, often resulting in lawsuits. Recent publicity aside, disputes concerning rights to water are not new in New Mexico. In fact, they have recurred frequently during the state's long history. For centuries, Spanish, Mexican, and United States administrators have wrestled with water apportionment issues and related problems. In the past, as now, governmental authorities searched for ways to allocate water equitably in keeping with the values of the community.

This morning, I will give a brief overview of the development of water administration in New Mexico from the colonial period through the first decade of this century. Beginning with the first settlement made by Juan de Oñate in 1598, New Mexicans established an agrarian/pastoral society based on grants of land from the public domain. Because agriculture was virtually impossible without irrigation, governmental authorities emphasized the importance of water availability as they distributed lands to found new communities. As settlements took root, Hispano farmers devised a system for managing irrigation water in which the community acequia became the preeminent institution. In the past, local officials were usually able to arrange settlements based on
recognized custom and common sense rather than abstract principles taken from law books.

Hispano colonization of New Mexico begun in 1598, when don Juan de Oñate led a large expedition out of San Bartolomé in present Chihuahua to establish a permanent settlement on the upper Rio Grande. After an arduous journey, the party's advance guard reached the junction of the Rio Grande and the Rio Chama above today's Española. There, Oñate set up headquarters at a Pueblo Indian village, which he renamed San Juan Bautista. Soon after their arrival, the colonists started to build an acequia, purportedly with assistance from 1,500 Pueblo laborers recruited for that purpose. The ditch was intended to serve an impressive new capital city to be called San Francisco de los Espanoles. Because Oñate's plans were overly optimistic, the community never got off the drawing-board, but the ditch project clearly demonstrated the importance of securing a reliable water supply for agricultural and domestic purposes.

In 1610, Oñate was succeeded as governor by Pedro de Peralta who had instructions from New Spain's viceroy to lay out a new capital. Known as La Villa de Santa Fe, the town was situated in a small valley bisected by a steady stream flowing west from the Sangre de Cristo Mountains toward the Rio Grande. As directed by the viceroy, Peralta laid out a central plaza to be enclosed by public buildings. He also appointed municipal officials who distributed house sites, garden plots, and farmlands to each citizen, who also received sufficient water to irrigate his
fields. The colonists soon built an acequia system serving both sides of the river including the acequia madre, a south-side ditch which is still in use today.

After the establishment of Santa Fe, settlers established farms and ranches along the Rio Grande Valley from Taos to Socorro. Unfortunately, no records concerning land titles or water rights from the seventeenth century have survived. In August 1680, disaster struck the frontier colony when the Pueblo Indians rose in revolt and forced the Spaniards to retreat down the river to the El Paso area. There, they remained in exile for twelve years. Under the leadership of the redoubtable Diego de Vargas, the colonists returned in 1692-93, reoccupying old landholdings and settling new ones. Colonial officials established procedures for granting lands from the royal domain to individuals or group of household heads.

Throughout the eighteenth century and into the first half of the nineteenth, governmental authorities made many land grants as New Mexicans moved their families into new areas. Eventually, a growing population accelerated competition for arable lands and irrigation water between Hispanics and Pueblo Indians and between contending groups of Hispano settlers. Inevitably, conflicts resulted that were litigated by the colonial judicial system in which the provincial governor held ultimate authority. Appointed by the king, governors were selected primarily for their military capabilities and seldom received formal legal training. Although they sometimes had access to codifications of Spanish law, gover-
nors usually relied on local custom and practical wisdom to
determine their decisions. In subordinate jurisdictions, provin­
cial executives appointed prominent citizens to serve as alcaldes
mayores, who were empowered to settle everyday problems within
their localities. More difficult issues came before the governor,
either through referral by the alcaldes or on appeal by the
litigants. Water matters were disposed of under this arrangement
along with other lawsuits, both civil and criminal.

Not surprisingly, assuring an equitable distribution of water
for irrigation was a recurrent problem for local officials,
particularly during times of drought. In the summer of 1722, for
example, a prolonged dry spell withered crops at Santa Fe.
Recognizing that unregulated water use would be disastrous for
all, the villa's alcalde mayor, Francisco Bueno de Bohorques y
Corcuera, took steps to minimize discord and inconvenience. Bueno
appointed two juezes repartidores, one for each side of the river,
who were empowered to inspect farmlands and acequias and allocate
water based on need. Certain restrictions were imposed. Those
who failed to weed or cultivate their fields faced a water em­
bargo. Favoritism toward friends and relatives was strictly
forbidden. Miscreants who took water without permission faced a
fine of twenty-five pesos and eight days in jail.

Sometimes, normally law-abiding citizens became violent when
they found unauthorized users poaching water. Such a confronta­
tion took place in 1745 in the lower Chama Valley between Juan
Antonio Salazar and his neighbor, Manuel Valerio. Thirty years
earlier, Salazar's father had received a land grant in the area and had taken out an acequia from the Chama, which established a valid priority. Later, Valerio had purchased nearby lands served by the same ditch. Conflict began after Valerio commandeered the ditch's entire flow for two days without permission. When Salazar diverted the water into his own fields, the offender arrived in a fury. After some name-calling, Valerio struck his enemy on the head with a shovel, causing a nasty gash. From his sickbed, Salazar fired off a complaint to the alcalde at Santa Cruz in which he claimed total ownership of the ditch and demanded that Valerio be jailed. After making an inquiry, the alcalde turned his findings over to Governor Joaquín Codallos y Rabal, who rendered a decision intended to end the quarrel and restore harmony to the community. Ignoring Salazar's claims of ownership, he ordered the alcalde to bring the parties together and persuade them to forgive each other as neighbors and countrymen. Happily, the case ended with an abrazo by the combatants and payment of eight pesos each to the alcalde for the vexation they had caused.

In addition to litigation, governors and alcaldes also reviewed petitions from settlers requesting supplementary water supplies. After first occupation, land grant recipients occasionally found the original water source inadequate and requested some augmentation. To provide additional flow for irrigation, owners of the Fernando de Taos grant asked Governor Fernando Chacón to allow them use of the aguas sobrantes (surplus waters) from the Rio Pueblo and Rio Lucero. Official permission was necessary
because the Pueblo of Taos and the Hispano community of Los Estiércoles (today's El Prado) already held prior rights in the two streams. After due consideration, Chacón agreed to the request and ordered Taos alcalde Antonio Ortiz to prepare a document indicating his decision.

When Mexico won independence from Spain in 1821, the new government made some changes in the local administrative structure that encouraged greater public participation. Reforms included reestablishment of popularly elected municipal councils known as ayuntamientos. As Mexico became a sovereign state, the ayuntamientos relieved governors and alcaldes of some local responsibilities, including water administration. One of the most active and best documented councils was located at Taos, on New Mexico's far northern frontier. The members often discussed water issues and also advised the governor concerning disposition of public lands for creation of new settlement, which they usually opposed.

In 1823, the Taos ayuntamiento debated a famous case concerning apportionment of the Rio Lucero that pitted the village of Arroyo Seco against the pueblo of Taos and Hispano settlers downstream at Don Fernando and Los Estiércoles. Trouble had been brewing since pioneers at Arroyo Seco discovered that the meager stream bordering their lands was, as the name suggests, inadequate for irrigation. To help out, the settlers dug an acequia from the Lucero which ran out of the Sangre de Cristos and continued across the plain more than a mile away. Unwisely, Arroyo Seco's leading citizens made some extravagant claims to the Lucero's waters that
infuriated the earlier users, who complained vigorously to the ayuntamiento. After careful deliberation, the members ruled that, on the basis of ancient use, the pueblo of Taos possessed first rights in the stream, followed by Los Estiercoles, and farmers at Don Fernando, who had been awarded the river's sobrante in 1797. Arroyo Seco was not completely shut out however. Recalling the mandate to protect agriculture, the ayuntamiento allotted that community a single surco (enough to fill a ten inch pipe) so that planting there would not be lost. Thus, the ayuntamiento recognized priority of use, but also acknowledged the needs of later applicants; no petitioner received all he asked, but no one was left empty-handed.

Once established the ayuntamientos did not assume all the powers formerly exercised by lesser officials. Frequently, alcaldes at small placitas managed to resolve problems such as acequia maintenance and flood damage without recourse to higher authority. Change came again after 1836, however, when the conservative faction came to power in Mexico. New legislation divided the nation into departments and reorganized the three branches of government. As a department, New Mexico was partitioned into two districts, the Rio Arriba and the Rio Abajo, each administered by a prefect responsible to the governor. Regarded as dangerously democratic, the ayuntamientos were abolished, except for the one in Santa Fe. Many former council responsibilities passed to the prefects and a new class of local officeholders known as juezes de paz. Although the forms of local government
changed significantly under Mexican administration, water regulation problems remained much the same as those of the colonial period. By this time, the community acequia had become the principal institution for administering water use. Parciantes (water users) of each ditch elected a mayordomo, who supervised water allocation and directed annual cleaning and maintenance of the ditch in which all landowners participated.

Mexican sovereignty in New Mexico ended abruptly in 1846 following conquest of the region by United States forces during the Mexican war. On August 18, 1846, troops commanded by General Stephen Watts Kearny marched into the Santa Fe plaza and ran up the Stars and Stripes over the Palace of the Governors. Before leaving for California, Kearny established an interim government and promulgated an assemblage of U.S. and Mexican laws that became known as the Kearny Code. At the local level, the code provided county governments to be directed by prefects and alcaldes, offices retained from the Mexican period. Prefects served as county administrators and also had the duties of probate judges under U.S. law. For water management, a catch-all section at the end of the code stated that "laws concerning water courses, stock marks and brands, horses, enclosures, commons, and arbitrations shall continue in force." Several years later, Congress superseded the Kearny Code by passing the Organic Act, part of the great intersectional legislation known as the Compromise of 1850. Its terms included a provision that the local offices of prefect and alcalde be renamed probate judge and justice of the peace, but
their duties remained the same. In 1851, the first session of the Territorial legislature made the two positions elective.

Once a government had been organized, native New Mexicans faced the problem of adapting the newly imposed institutions to their traditional culture. How could they shape this unfamiliar and rather exotic system to their advantage? For several decades, Hispano citizens managed to achieve that objective quite successfully. Since popular elections determined the distribution of legislative seats and county offices, members of the local elite almost always emerged victorious. Once elected, justices of the peace and probate judges functioned in much the same way as jueces de paz and prefectos had done under Mexican rule, which smoothed the transition. Justice of the peace courts usually provided the original venue for litigating water issues. Under terms of an act passed by the Territorial legislature in 1852, the justices became responsible for conducting elections to choose mayordomos for each ditch in their communities.

Important water litigation went before county probate judges through original jurisdiction or on appeal from justice courts. Probate rulings, in turn, could be appealed to district court, the next rung on the judicial ladder. Under territorial government, the post of probate judge, or el prefecto, became a political plum usually reserved for members of the rico class, often serving as a stepping stone for those who aspired to higher office. Frequently, water apportionment between competing communities proved to be the most difficult problem confronting probate judges. In
1864, Taos county's Judge Juan Santistevan tackled the touchy issue of a fair division of the Rio Lucero between Arroyo Seco, Fernando de Taos, and Los Estiercoles. Trouble erupted when people from Estiercoles shut off the Acequia Madre del Rio Lucero, causing a determined group from Arroyo Seco to reopen it with approval from the local juez de paz. Hoping for some resolution, the parties turned to Judge Santistevan, who listened to testimony and then proposed an allotment based on a sliding scale. When the Lucero carried fifteen surcos, Arroyo Seco received three; when there were ten surcos, the portion dropped to two; if the flow dwindled to eight surcos, Arroyo Seco was allowed only one, but that was a guaranteed minimum. Although the judge deserved credit for a good try, his ruling ignored the interests of Taos Pueblo, which had to be considered in any permanent settlement.

To supplement probate court decisions, New Mexicans used the territorial legislature to preserve traditional water administration. During the first session in July 1851, lawmakers began to codify old practices derived from Spanish law and custom, making them part of the territorial statutes. The first bill passed authorized citizens to construct acequias as needed and take water for them "wherever they can," paying fair compensation for right-of-way. Six months later, in the second session, legislators passed an act specifying the duties of mayordomos, procedures for their election, and causes for their removal from office. By dominating local politics, New Mexicans were able to shape the
institutions imposed by territorial government so that they became compatible with traditional forms of water management.

Change came rapidly with the arrival of rail transportation in 1878. On December 7, the first locomotive crossed Raton Pass on tracks laid by the Atchison, Topeka and Santa Fe Railway, thus linking New Mexico to the national economy. Other lines soon began to compete with the Santa Fe. Together, they encouraged immigration, both foreign and domestic, bringing new citizens with valuable skills and capital for investment. Between 1880 and 1890 property valuations rose from $49 million to $231 million. Between 1880 and 1910, New Mexico's population ballooned from less than 120,000 to more than 300,000. Reorganizing opportunity, entrepreneurs appeared seeking profits and prestige from mining, cattle ranching, and irrigated lands.

The entry of railroads into the territory coincided neatly with a sudden surge of interest in irrigation as a means of "reclaiming" arid lands for agriculture. In 1878, Juan Wesley Powell, then an Interior Department employee, presented his famous Report on the Lands of the Arid Regions of the United States, in which he discussed the feasibility of bringing irrigation to immense areas within the public domain. As irrigation excitement swept across the west, New Mexico politicians of every persuasion hurried to embrace grandiose water projects with almost hysterical enthusiasm. Perceiving the tremendous potential for economic growth presented by irrigation projects, the territorial legislature passed laws to facilitate the agglomeration of
development capital. In 1887, lawmakers enacted a bill authorizing incorporation of irrigation companies for construction of reservoirs, canals, ditches, or pipelines. Such corporations were allowed to enter private property to make surveys, to acquire right-of-way through condemnation, and to divert surplus water from any stream, lake, or spring in the territory. Attempting to safeguard existing users, the legislators established some important restrictions: water companies could not interfere with the needs of prior appropriators, nor could they take water needed by a public acequia between February 15 and October 15 without consent from every agricultural landowner under the ditch. By superimposing new legislation on the old, lawmakers tried to accommodate innovative technology and to preserve the community acequia at the same time. In effect, they created a dualistic authority intended to bridge the gap between the past and the future. Although successful in some ways, their efforts could lead to conflicts when the two systems came together.

During the 1880s, important changes also occurred in procedures for settling water disputes. With increasing frequency, water cases were litigated in Territorial district courts instead of county probate courts, which diminished local control. In 1876, the legislature passed an act establishing a three-man board of commissioners for each county that assumed many of the powers previously exercised by probate judges. By 1897, jurisdiction of probate courts had been largely confined to estate administration and similar matters. For water users, the
consequences resulting from the shift into district court included a new dependence on attorneys, more formalized procedures, often in an unfamiliar language, and greater emphasis by judges on abstract legal principles in making decisions.

District court dockets often included water cases that previous authorities had found difficult to resolve, such as the old quarrel for the Rio Lucero between Taos Pueblo and Los Estiércoles against Arroyo Seco. Although the settlement imposed in 1864 by Judge Santistevan had endured for two decades, it flared again in 1887. Angered by what they believed was a continuing over-appropriation by Arroyo Seco, the Indians closed off the village acequia madre and announced that, henceforth, their adversaries would be restricted to the single surco mandated by the ayuntamiento in 1824. Since compromise seemed impossible, Arroyo Seco's citizens filed suit in district court, requesting an injunction to prevent further interference in their acequia. Once filed, the case bogged down for six years until Judge Edward P. Seeds rendered a verdict favoring the pueblo on May 23, 1893.

Because that year was particularly dry, his ruling failed to bring peace. Undaunted by their recent rebuff, the Arroyo Seco people initiated a new lawsuit on July 6, seeking rights to the Rio Lucero. To support their claim, they relied heavily on confirmation by the Court of Private Land Claims in 1892 of the Antonio Martinez grant that included the community's irrigated fields and the disputed ditch. Eager for final resolution the court appointed three prominent Taoseños as a commission empowered
to divide the stream permanently. Less than two weeks after organizing, the commission reported to the court. On July 31, 1893, Judge Seeds accepted the commission's findings and issued a famous decision in which Arroyo Seco received 30 percent of the Lucero's flow, while Estiércoles, (which had become El Prado), and the pueblo of Taos secured 35 percent each. The case presents some interesting points. Although the opposing parties were all Hispanos or Pueblo Indians, the judges, attorneys, and other officials were almost all Anglos, familiar with English common law and courtroom procedures. Those with most at stake participated only as witnesses. Nevertheless, with some slight modifications, the decision has stood for over one hundred years.

On some occasions, Hispanos and Pueblo Indians alike found their water rights endangered by large-scale irrigation projects after passage of the incorporation act of 1887. That legislation allowed companies to condemn right-of-way with no requirement that they own property of their own. As a result, water became a commodity to be bought and sold and used wherever the owner desired. In earlier times, it had been regarded as necessary for subsistence agriculture, tied to the land on which it was used. A corporation formed in 1897 by Albuquerque businessmen serves to illustrate the point. Known as the Albuquerque Land and Irrigation Company, its purpose was to supply water from the Rio Grande for undeveloped lands through a complex system of canals, ditches, and pipelines. With a huge capacity of 210 cubic feet per second, the main canal was proposed to run from the pueblo of
San Felipe along the river's east bank to the pueblo of Isleta, a distance of thirty-five miles. Early in 1898, company officials hired an engineer, who began to plot a route for the canal north of Albuquerque. Immediately, the surveyors encountered fierce opposition from Hispano farmers and their Pueblo neighbors at Sandia and San Felipe, who ejected the intruders at gunpoint. The company then filed two lawsuits in district court requesting injunctions to prevent further interference with the work.

In addition to the right-of-way question, the principal issue to be determined was whether or not the Rio Grande carried a surplus which the canal company could use. During arguments, the court heard testimony from Philip E. Harroun, a civil engineer whose survey for the company had sparked the lawsuits. Using scientific measurement techniques, he explained that the river usually carried some excess, except during the summer months of the driest years, a view accepted by the court. In a long opinion, Judge John R. McFie set forth the attitudes prevailing among progressive Anglos toward irrigation development and the dual system for water management. Concerning the community acequia, the judge wrote: "I do not underestimate the present ditch system... and so long as it is in existence its status must be upheld by the courts; but it is not an economical system. It would seem strange that a system more than one hundred years old could not be improved." The judge also believed that the legislators did not intend to impair existing rights by passing the incorporation bill; instead they wished to provide a more
modern and improved system for irrigation in the future. "Canal companies," McFie wrote, "are beneficial in development of the country and the right of eminent domain is accorded them to facilitate their operations." Further, he ruled that, based on Harroun's data, a surplus did exist beyond the needs of the community ditches, portending total victory for the corporation. Finally, the judge declared that irrigation companies could act as an intermediate agency, not necessarily as consumers, which served to separate the traditional ties between land and water. Dissatisfied, the defendants appealed to the state Supreme Court, but that body reaffirmed McFie's decision without a single dissent.

During the 1890s, as irrigation expanded throughout the territory, governmental officials saw a need for a comprehensive code of water law and a centralized agency for its administration. In 1905, the legislature enacted new water laws and established the office of Territorial Irrigation Engineer to provide supervision. Two years later, lawmakers passed a stronger bill giving the administrator greater powers and changing his title to Territorial Engineer. He received authority to make hydrographic surveys to determine water availability, regulate apportionment in various stream systems, and issue permits for new projects. Although the legislation undoubtedly strengthened water administration, the new laws, like the court system, caused problems for Hispanics accustomed to older ways. While officials gave lip-service to existing rights as they reviewed applications
for unappropriated water, their procedures left large loopholes easily exploited by sharp operators. Recently, as water users have become better informed about government regulations, they have formed regional acequia associations for mutual protection. Local participation in water litigation has increased, but ensuring a voice for small communities during the process remains a problem.