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a study
significant
to the Southwest

ROBERT EMMET CLARK

Water Law Institutions and the Community

In New Mexico the role of water law continues to be crucial in community development. Water "right," i.e., water law, questions, whether they are those involving acquisition of the right, preferences among uses, or transfers of rights, must be understood against the background of public policy, property institutions and our framework of government.

According to the Lockean tradition of our society, governments were formed to protect property. Within this general term Locke included "lives, liberties and estates."¹ His political theory was the product of his philosophy which did not separate the ownership of the material substance of one's own body from the physical products of one's own labor. These philosophical assumptions are not pursued here although their validity and relevancy are questioned at the end of this discussion.

Property institutions are basic in our society. By institution is meant any man-made social device for alleviating or resolving human problems. These are the instruments of the community whereby human values and natural resources, including water, are secured and protected. The legal mechanisms found in constitutions, or in enactments of legislatures, or in rules devised by courts to handle water problems, are such institutions.

1. See Locke, *Of Civil Government*, Everyman's Library, E. P. Dutton and Co. (1940), p. 180: "... and it is not without reason that he seeks out and is willing to join in society with others who are already united, or have a mind to unite for the mutual preservation of their lives, liberties and estates, which I call by the general name—property."

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Among any group of citizens there probably exists a wide range of opinion as to the utility, meaning or even desirability of some present water law institutions. If suggestions were made for changes in them, the variety of opinion might be even greater. Many people believe that economic considerations and the activity of the market place are the only reliable criteria for good laws. Among engineers and scientists there may be a strong belief that knowledge of physical conditions and technological developments should provide the main standards for legislation. Still others, including humanists and the socially conscious, may seem to overemphasize the human condition when they affirm that model laws and multiple-purpose dams are desirable but not at the expense of man's individual identity. These are all legitimate points of view. The answers to many water law, and other community problems lie in bringing all of the points of view into the open where their merits can be examined, and selections can be made. Our community through its citizens must discover, and have explained, rational alternative approaches to the development of New Mexico's water resources. This calls for the exercise of more than the day-to-day decisional process of the world of business and community affairs. This duty demands that each of us see the forest of problems and not merely our individual trees. It means that we must abstract from the workaday scene some tentative picture of what is happening and what is likely to happen. We must identify and examine the factors producing the changing pattern of water uses. This means an examination of trends, relationships, policies and goals.

There appears at times to be a pessimistic attitude about the role of legal institutions in solving problems. That they can be adapted to actual social economic and political conditions is often doubted. A paradoxical corollary to this assumption should also be noted. It is that the present legal institutions are almost perfect or cannot be improved. Such shortsighted views reveal ignorance of American constitutional government and its dynamic characteristics.

In the development of social and legal institutions, just as in biological adaptation, function precedes form. More often than not we act before we describe and before we formulate generalizations—laws, if you wish—about our experience, or what our conduct should be. Legal institutions are shaped by functions that are already being performed and by those we think can, or should, be performed. Water law institutions are no exception. Here, as in other branches of law, the form or conceptual framework of institutions can be adapted to

changing functions by rational and intelligent choices. The alternatives to such choices may be a legislative patch-word structure that is unreadable as well as unworkable. The legislative process which erects legal institutions is merely one aspect of the entire social process.

Man is the only living creature consciously dedicated to changing his physical environment. Laws and legal principles play a major part in altering his ecological relationships. While man is altering his environment and rebuilding the landscape, he is redistributing the waters. The Southwest is an example of this process. Without the community *acequia* (and the Indian ditch that preceded it), and the care and attention given it as a community institution, this region would not have had the history about which we read and marvel. Yet experience and thoughtful inquiry tell us that the institutions of one era cannot always be depended upon for future development. Indeed, without some changes in the irrigation and agricultural institutions of this region we may hereafter have an unprofitable if not a short history.

Non-agricultural uses of water now offer many economic opportunities in this region. But it is common knowledge that the principal features of our water law institutions were designed to encourage agriculture and mining. They were built during the period of Western expansion which has been replaced by an age of conservation, that is, a period of wiser use. These earlier institutions were framed largely to encourage *individual* action in *single purpose local* ventures. They have never been adequate to handle the interrelated problems of a river basin, as the Colorado, Rio Grande and other Compacts demonstrate, where large sums of both private and public funds are invested in multiple-purpose interstate and international developments. The goals of the homestead era have been succeeded by the facts of urban life.

The Western water law doctrine of prior appropriation, under which the first beneficial user of surface water obtains a valuable property right in the use of the available supply, was the product of necessity. This doctrine must be clearly distinguished from the riparian doctrine of the humid East. Under riparian doctrine the owner of land abutting a stream owns a water right which is part of his estate in the land. He owns it whether he uses the water or not. Appropriation doctrine separates the ownership of land from the usufructary right to the use of water. The water right originates in beneficial use. This doctrine served the region well during the pioneering era when the principal water and property questions turned on the acquisition of ownership. Stability was promoted by this doctrine during an unsettled period

noted for speculation and investment losses. However, as the surface flows came to be fully appropriated (and in New Mexico there are no more unappropriated waters except a small amount in the Canadian River and what can be imported from the Colorado Basin) the doctrine of appropriation received new scrutiny. It was seen that the doctrine had become hardened into verbal formulations called constitutions and statutes and case decisions. These water codes of fifty years ago encouraged an illusion of perfection. Today it is plain that the main legal problems of water use no longer concern acquisition of rights in the source of supply. More often they arise from transfers of rights to different locations or to other uses or involve more complex forms of ownership and administration.

As surface waters were fully appropriated ground water sources became more important. New Mexico's basic ground water legislation was passed in 1927 and 1931. This legislation accepts the doctrine of prior appropriation. Under this legislation the State Engineer has administrative control over "an underground stream, channel, artesian basin, reservoir or lake the boundaries of which have been determined and proclaimed . . . to be reasonably ascertainable." Thirteen such areas have been designated in the state, including the Rio Grande underground basin declared in November 1956. The doctrine of appropriation is now applicable generally to all underground water in the state, if the legislative amendments of 1953, 1955 and 1957 are construed to have accomplished that practical goal.

The doctrine of appropriation as applied to ground waters in New Mexico has also worked reasonably well. But the virtues of its utility seem somewhat irrelevant to the doctrine itself. These may be summarized as follows:

1. During Territorial days the courts decided that there were no riparian rights in surface streams in the Territory. It was held that the common law had never been in force with respect to surface waters. Riparian ownership was not recognized, i.e., abutting landowners were not permitted co-equal rights in the surface flow of streams as is the case in the humid Eastern States. This same reasoning was later applied to ground waters. Thus, no dual system of riparian and appropriation doctrine grew up in New Mexico, as it did in California, to further confound the problems of both surface and ground water uses.
2. The principle of state or public ownership announced in the early cases and embodied in the State Constitution, together with the

system of administrative control that was devised more than a generation ago, set a pattern for regulated development, at first applicable in the southeastern part of the state, but eventually extended to other areas. Thus the system was in effective operation when the great ground water demands in the state began taking place in the 1940's and 1950's. Many Western states still have no adequate system of ground water control other than common law rules. The Eastern states are in a similar position.

3. The statutory system was made sufficiently flexible so that adaptation to the physical conditions of a given area, or the characteristics of a particular aquifer, may be made on the basis of accumulated scientific data and engineering skills. The policy of closing certain basins to new appropriation and the practice of well-spacing are examples of this adaptability.

4. The administrative officials and professional men charged with enforcing the laws, and with devising methods for their intelligent application, have been imaginative, inquiring, and conscientious beyond what can usually be expected of modestly paid civil servants.

This comment on our ground water laws should not lead to an impression of complete satisfaction. These laws are good but they can be improved. They are still part of a larger system that divides and administers all water arbitrarily in two separate legal categories: surface waters and ground waters. This is done with the help of such terms as "diffused surface waters," "percolating waters," "subterranean streams," "shallow ground waters," "seepage waters," "springs," "artificial waters," and by the use of other poorly defined concepts such as "beneficial use" and "reasonable use."

The historical and pragmatic classification of all waters in their natural state as surface or ground water is not in keeping with hydrological principles by which all water in the earth's zone of saturation is simply ground water in a particular phase of the hydrologic cycle whether it is percolating through the soil or is confined in subterranean areas. The hydrologist is conscious of the movement of water through the entire cycle and he does not think in terms of vested rights in any segment of the continuing cycle of moisture from ocean to cloud from which it is returned to the land as precipitation and then runs off to the sea.

The interrelation of ground and surface waters is not acknowledged by any existing New Mexico statute, although one case held that in a

statutory suit to adjudicate surface water rights of a stream system the court had jurisdiction over the claimed rights of appropriators from an artesian ground water basin. In order to clarify hydrological relationships, as well as to protect investments in ground water developments, further legislation may be necessary. However, additional research on physical conditions should precede such legislation. At the present time the State Engineer is relying on the flexibility of the legal framework to accommodate hydrological principles which may need further empirical verification.

The whole water law structure requires examination and study. Methods may be found for improving the system's functions. New procedures might be devised for encouraging practices now winked at by the law, or not covered at all. For example, legal provision is made for the beneficial use of a limited amount of water for discovery and exploration purposes in the oil fields. But the method of "secondary recovery" by which water is pumped into an old well to increase production is not contemplated. Yet large quantities of water may be used in this manner. Should this use be limited to briny water or should valuable fresh water supplies be depleted in this manner? A more useful though naive question might be: Is this a "beneficial use" as now legally defined?

The built-in preferences and priorities found in Western constitutions and statutes need review. The handling of these policies at the federal level is producing an improved attitude of cooperation between the states and may set the pattern for more realistic practices within the states. The rigid features of the appropriation system have merit and they served the nineteenth century very well. But we need to know more about their present effect. Also, the transfer of rights from use to use needs more analysis. How much actual transferring to different uses, for example, takes place? The statutes declare that the place of diversion, storage, or the purpose of the use may be changed upon approval of the State Engineer who must determine if there will be a "detriment to" other surface sources or an impairment of other ground water rights. A recent study² of applications for water rights in the State Engineer's office filed during the biennium 1952-54 indicates that for that period very few applications were made to change the purpose of use. During the period under study there were 4,013 documents of all types filed in the State Engineer's Office pursuant to

2. By Clark and Wollman under a grant from the University Research Committee for 1957-58. The complete report is in preparation.

ground water legislation or regulations issued thereunder. (These figures encompass nine ground water basins. In 1952-54 no documents were filed affecting the Animas Valley Basin which was declared in September 1948. The other three existing basins, Bluewater, Playas, and Rio Grande, were not declared until 1956.) Of the total number of documents filed in the nine other basins, 2,523 were applications for permits to appropriate. A large number of documents were applications for extensions of time to complete works, to move wells, to repair wells and to change the place of use. It is significant that in the category covering changes in the purpose of use, only twenty-five applications were filed, twenty-four of them in the Roswell and Lea County areas which were declared basins in August, 1931. The purpose of the present uses in both areas is overwhelmingly agricultural with a comparatively small amount of water going to human, animal, recreational and industrial uses. In the Roswell and Lea County basins, new applications were approved for human and domestic uses of water totaling 1,125 acre feet during 1952-54 as compared with 192,297 acre feet for irrigation and 24,262 acre feet for industrial uses during the same period.

In the Rio Grande Basin current uses are also predominantly agricultural. But it would seem that the pattern of uses along the Rio Grande may undergo a marked change toward larger residential and industrial uses during the next few years. At least the projection of urban growth leads to that conclusion. Studies of the type indicated above, if made during each biennium, may help delineate the trend.

It has been suggested³ that further use can be made of the public corporation as a community means for acquiring, controlling and allocating water rights to those with the highest economic priorities. Constitutional protections need not be endangered and legal precedent is available. For example, under legislation passed in 1951 the Directors of the Middle Rio Grande Conservancy District, a public corporation, are "empowered to make such proper and necessary distribution and allocation of the waters available for irrigation within such districts as the board of directors thereof, in consultation with the chief engineer . . . shall determine to be reasonable and proper."

A 1955 legislative amendment declares that "The State Engineer shall permit the amount allowed to be diverted at a rate consistent with good agricultural practices and which will result in the most effective

3. Wollman, "Economic Factors in the Study of Water Use," *The Law of Water Allocation in the Eastern United States* (Ronald Press, 1958).

use of available water in order to prevent waste." The policies that statutes such as these establish must be determined by the circumstances in specific situations.

The future development of New Mexico's water resources will involve the examination and application of many policies. Some of them will be modified or abandoned. The present preferential attitudes toward agricultural uses may have to be altered sharply in view of industrial and residential demands. By water resources policies is not meant fixed or predetermined plans which ignore man's limitations or overlook the principle of inertia which seems to be an important social factor. Within the term "policy," room is left for the partly irrational responses of society to myths and symbols and clichés of the past. That there are such responses needs no documentation.

Policy cannot be divorced from politics and the whole social process. Politics is the social-governmental interplay over the choice of goals and methods—good, bad, selfish, idealistic, rational and foolish. It is the essential process by which free people establish institutions for attaining their goals. Water law institutions are built by this process. And the legal relationships that they create are the result of society's efforts to balance the public interest and private rights.

Complex social problems have always required the molding of better legal institutions as a method to find fair and useful solutions. For example, the old community acequia which was recognized in 1852 by the legislature as a public ditch, became a public corporation in 1895. More recently, drainage, irrigation and conservancy and artesian districts became legal institutions by legislative enactments. The period from the first artesian well control law in 1905 to the ground water statutes of 1927 and 1931 and their subsequent amendments in 1953, 1955 and 1957 parallels the transition from the hand pump to the modern deep well pump.

Legislation is not, of course, the answer to all problems. Effective administration is also necessary. An example of this is found in an early New Mexico case. The water code of 1907 handed to the Territorial Engineer and the board of water commissioners (abolished in 1923) the responsibility for approving or denying applications for new surface diversions. In 1910 the Territorial Supreme Court was called upon to interpret this legislation. The court held that the board of water commissioners had construed the concept of public interest too narrowly with regard to the functions of the Territorial Engineer. This official had rejected an application for a private reclamation proj-

ect he found infeasible. His reasons were that there was insufficient water for the project and construction of the works for a small acreage would not be justified. The board reversed his decision. The Territorial Supreme Court reversed the board and upheld the Territorial Engineer stating:

The view, apparently adopted by the water commissioners in their decision, that the power of the territorial engineer to reject an application, "if in his opinion the approval thereof would be contrary to the public interest" . . . is limited to cases in which the project would be a menace to the public health or safety, is, we think, not broad enough.

There is no such limitation expressed in terms in the statute, and, we think, not by implication, . . . The fact that the entire statute is designed to secure the greatest possible benefit from (the waters) for the public should be borne in mind . . .

. . . The failure of any irrigation project carries with it not only disastrous consequences to its owners and to the farmers who are depending upon it, but besides tends to destroy faith in irrigation enterprises generally.⁴

Here public policy as announced by the Supreme Court drew the line between public interest and private right.

Some areas of inquiry have been indicated together with some general principles applicable to them. It may be objected, in the words of Justice Holmes, that general principles do not solve concrete cases. But they do help the inquiry. And inquiry must precede solutions or proposals for changed attitudes. For example, in New Mexico we should be asking whether the public interest is an overriding factor in deciding that a growing community (and this might be Albuquerque or Hobbs or several other communities) shall have the right to drill more water wells for municipal, industrial and residential uses. Or should the right be denied so that the same quantity of water may continue to be used to irrigate cotton, chili or beans? The economic return to the community is demonstrably greater from a thriving tourist business and the many uses of water by tourist motels with their air-conditioned restaurants and heated swimming pools, than from some other uses to which water is put. But as already indicated, economic considerations are not the only criteria for establishing community values and goals.

4. *Young & Norton v. Hinderlider*, 15 N.M. 666, 677 (1910).

Inquiry should be directed to questions of industrial use. If industry can and does produce more economic goods with an annual 10,000 acre feet of water than can be produced with the same amount of water on about 3,300 acres of lands, should the law be changed to prefer prospectively this type of use? Or should industry be required to buy up the traditionally protected agricultural rights? If this is done, how will land uses and land values be affected? Not to be overlooked in this inquiry is the effect all of this may have on the appearance of the community and the intangible elements of civic pride that are involved. A simple question is, should more water be used to make the community more attractive? By this inquiry we raise the question of possible relationship between aesthetic values and money in the pocket. Could the failure to use water for more downtown parks and swimming pools have anything to do with the fact that tourists do not spend more time and money in Albuquerque and other New Mexico communities? Perhaps our faith in economic "laws" as the source of community welfare and improvement makes these questions irrelevant. We must inquire into these so-called "natural laws" and learn if they can be depended upon to drive out the lower economic demands for water in favor of higher priority uses. Perhaps they can, but by that time it may be that large areas of the Southwest will be reseeded to cactus or mesquite. The supply of ground water is being mined in several areas of New Mexico and will be exhausted for all except domestic uses in fifty or seventy-five years. New Mexico at present takes about 25 to 30 percent of its total water supply from ground waters and the balance from surface sources. In Arizona the ratio is just the reverse. In California and Texas the ratio is about fifty-fifty.

In New Mexico the increased demands for city supply will be primarily from ground sources, at least until the state's share of the Colorado River has been obtained or other out-of-state sources are found. At the present time, except for Santa Rosa and Santa Fe and a few other communities, the municipalities of the state depend largely on ground waters.

The trend of urban growth in New Mexico and the nation will surely alter the pattern of residential and industrial uses as compared with agricultural uses. There are not only more people in New Mexico than formerly, but each person also uses more water. Residential and industrial uses are related to each other and to community development. With this knowledge it would seem that there is need for water

resources planning on an extensive scale. This raises the question of the adequacy of present legal institutions to provide for municipal water development.

Three doctrines applicable to municipalities should be identified:

Pueblo Rights. The modern applicability of this old Spanish doctrine to the town of Las Vegas' claim to the waters of the Gallinas is now before the New Mexico Supreme Court.⁵ The old town of Las Vegas, founded in early colonial times, asserts the right to a municipal supply for its inhabitants superior to any subsequent appropriations for agriculture. New Mexico rejected this doctrine on narrow grounds in a decision involving the city of Santa Fe. The doctrine is derived from the Spanish law principle that the central government, or the sovereign, held water rights which could be granted to new communities. These rights, it is claimed, were granted to the towns or pueblos like Las Vegas and Santa Fe by their founding documents and therefore take precedence over later claims to supplies from the same sources. The doctrine has nothing to do with Indian rights. It never applied in its original form to ground waters. California has extended the doctrine by judicial decision to cover ground water sources of a stream. This view can, of course, be supported in some areas by hydrological data. The doctrine is not too clearly understood and contains a number of legal impediments to its modern application. Some exaggerated claims have been made in its name. Yet it may still prove useful in some areas of New Mexico.

Eminent Domain. The general rule is that this sovereign power to condemn private property for a public use upon the payment of just compensation does not extend beyond the municipality limits. In New Mexico this limit was two miles extended to seven miles by the 1951 Legislature. An old statute contains a general provision under which lands may be condemned for canals, aqueducts, reservoirs, tunnels, flumes, ditches, water storage and similar purposes. No mileage limit is placed on this power. There are other similar statutes on this subject, including one allowing villages to use their powers three miles beyond their limits for these purposes. In construing these laws the State Supreme Court in two cases has suggested that towns and cities have power to condemn property for municipal water works at a reasonable distance as determined by the circumstances, from the city limits. This

5. A motion for re-hearing is pending on a 3-2 decision in *Cartwright et al v. Public Service Company* filed December 12, 1958. This decision recognized the "pueblo right" in Las Vegas.

mileage uncertainty presents some difficulty in municipal water planning. However, that problem is not as pressing as the one raised by a decision of the Supreme Court which holds that a city may not condemn a structure already dedicated to another public use. The city of Albuquerque tried to condemn an old acequia for a street right of way. The ditch formerly carried water for irrigation. The court denied the condemnation. The sting of this decision was partly removed by legislation in 1929, but even under this later amendment 50 percent of the water users on a ditch can stop the condemnation. This line of reasoning in the cases is based on public policy in New Mexico established two generations ago which makes irrigation a "public use." This policy is embodied in a statute under which "the United States, the State of New Mexico, or any person, firm association or corporation, may exercise the right of eminent domain. . . ." Irrigation is such an important "public use" that individuals are permitted to exercise sovereign powers in enlarging the beneficial use of water. Other decisions of the Supreme Court have said that lumbering and mining are not "public uses" in New Mexico. This aspect of the eminent domain power may cause difficulties for communities that desire to condemn farm lands for municipal well sites because these irrigated lands are already devoted to a "public use."

Proprietary Powers of Local Government. The powers and functions of local government units are traditionally divided into those considered governmental and those termed proprietary. Distinctions usually turn on what has been one or the other function in the past. But one of the recognized functions of municipal government has long been the maintenance of water works. With rapidly increasing urban populations it may be necessary in New Mexico for cities to acquire land and water rights by purchase many years in advance of their actual use. In other words, municipal government may have to go into business and become a proprietary owner of private property. There are legal and philosophical objections to this which are also heard in cases involving municipal acquisition of commercial building sites and urban redevelopment plans. Yet community development will be aided by this kind of foresight and planning.

CONCLUSIONS AND QUESTIONS

The President's Advisory Committee stated in 1955 that "The policies we adopt for the development of our water resources will have a profound effect in the years to come upon our domestic, agricultural

and industrial economy." This report estimates that the demands for water will be doubled in the nation by 1975. By 1975 the nation will be using about 27 percent of the maximum available supply of water as compared with about 15 percent now being used. In 1950 the national estimates placed about 9 percent of all uses in homes and municipal uses, about 48 percent in irrigation and 43 percent in industry. Obviously, the present picture is much different in New Mexico.

The Southwest has always had problems of drought and flood. The presence of a rapidly increasing population in the past twenty years has added other dimensions to the old problems. In order to meet industrial needs, atomic energy developments from uranium mining to the residential demands of Los Alamos, Sandia Base and one and three-quarter bath suburbia, we must, as citizens and decision-makers in the democratic process, ask ourselves three basic questions:⁶

1. What is *physically* possible to improve conditions of supply or to plan for the future? Here we must rely on the physical sciences and the engineering skills. What available supplies are there? What advantage can be made of saline waters? What technological and other methods exist for the conservation of our known water supplies?

2. What is *economically* feasible? Here we must ask ourselves how resources development can best be carried on under programs of public and private investment. Are the so-called "natural laws" of supply and demand and the profit structure to govern our choices? Can some changes be made in the state's economic structure which will bring greater benefit to the whole community? Should the tourist and recreation businesses receive a greater allocation of present water supplies?

3. What is *institutionally* permissible? Within our framework of government and laws and the pattern of our social and economic ideals, what policies can be evolved to reach our individual and community goals? How much government participation is desirable and necessary? What further public controls, if any, are desirable and permissible in the interest of community improvement?

The President's Water Commission of 1950 reported that "Municipal water supply should continue to be primarily a local responsibility, including intercommunity cooperation through the formation of metropolitan water districts."

The concept of community should not be rigidly defined. We may properly think of local, state and national communities. In solving

6. See Timmons, *Problems in Water Use and Control*, 41 Iowa L. Rev. 160 (1956) where these three questions are posed and discussed.

water problems at all levels of community we must not overlook the various legal devices already in existence which may be used for handling regional and interstate and international water problems. The several interstate compacts to which New Mexico is a signatory are important water law institutions. The regional and international projects of the Federal Government are likewise important in any plans for community development.

Although rights to the beneficial use of water are of primary concern, other rights must not be overlooked in municipal planning. In New Mexico these rights include protection from the injurious effects of water, e.g., flood, land erosion, pollution, wrongful diversions or damages resulting from the obstruction of canals or water courses.

Our water law institutions were originally designed to expand individual opportunity for certain preferred and local uses from the intra-state supplies available. The refinements in legal doctrine have passed through several stages in the general attempt to balance individual rights and community interest. In the early West, local custom and court decisions adjusted rights to suit the economic demands of the period. This was a period of flexibility. It ended with the enactment of water codes and statutes and constitutional provisions which hardened the procedures for acquiring and determining water rights. This was a time of maximum emphasis on vested property rights. We live in a third period when community needs are better understood and it is recognized that no man and no community is an economic island. Early water law institutions encompassed surface water problems almost exclusively. Ground waters were largely untapped and were of minor importance to the positive law. The picture has changed. Ground water demands have increased enormously and with them have come suggested ways for their development and control. Ground water uses have been stimulated by a number of factors. The over-appropriation of surface supplies has required the use of supplemental ground water sources. Modern pumps and cheap power have made pumping economically feasible. Various modern types of pipe and plastic tubing have increased the acreage under irrigation. Increased urban uses by rapidly growing cities like Albuquerque and El Paso and greater ground water withdrawals have lowered water tables, thus requiring more and deeper pumping.

The development of ground waters has taken place with the aid of four legal doctrines:

1. The common law unlimited ownership theory which allows the

landowner to pump water from under his land without legal restraint. This is generally the ground water law in the East and in Texas.

2. The reasonable use theory is a modification of the unlimited ownership theory and outlaws any unreasonable uses or diversion.

3. The correlative rights theory is the doctrine in California. It is the application of oil and gas law principles to the overlying owners of land to make all of their interest joint. This theory has in it some elements of riparian doctrine under which co-equal rights exist in a given supply of water.

4. Prior appropriation is the doctrine in New Mexico with respect to both surface and ground waters. Rights under this doctrine do not arise as an attribute of land ownership. Land and water rights are legally separable. This is the first-come first-served doctrine. Its application to ground waters is best suited to areas where there is a substantial and dependable recharge, or where the recharge rate is equal to reasonable uses. In several areas of New Mexico the rate of recharge of ground water aquifers is negligible—as for example in Lea County. Here the supply is being “mined” under a calculated plan of depletion over a period of sixty or seventy years.

The prior appropriation system, both of surface and ground waters, has these main advantages and disadvantages:

Advantages. There is certainty as to the quantum of one's rights *whenever the supply is available*. The right can be forfeited or lost by failure to use it. The state grants the right to appropriate and maintains control over the method of its use. This is a proper exercise of the police power of the state.

Disadvantages. The rigidity of priorities tends to “freeze” a given quantity of water to a specific tract of land. These priorities and preferences now exist generally in favor of agriculture. Provisions for transfers of uses give some pliancy to the doctrine, but there are no sanctions to require transfers.

It has been said that the physical sciences have suffered from premature generalization. The same may be said more emphatically about law and the social sciences generally. Yet large practical achievements are possible with inadequate theoretical bases. Certainly that has been the case with water law. But that is not to say we can do without theories. The real problem often is to recognize that our early theories have become rigid and they may stifle achievement. With them we cannot be ready for tomorrow's demands. Mankind's advances have usually exposed blind spots in earlier thinking. Our water law structure

was built on property concepts and the common law definitions of vested rights. Today the expanding concepts of public policy and the public interest are more fully understood.

The words "right," "property," "public interest" are among the key terms with which this discussion began. Yet they remain without precise definitions. What are legal rights? Does the existence of a right pose the question of whether there is also a correlative duty? Is this a community duty? Does this question take us into the area of public policy and the public interest? What are property rights? Are we born with property rights that are a projection of the possessory interest in our bodies as Locke assumed,⁷ or do we acquire them from the organized community? Is the community actually created by these property rights? These questions may embarrass us when we realize that we all act on the basis of assumed answers to these and similarly disturbing questions. They are disturbing because they go to the fundamentals underlying our choice of individual and community values and objectives. We are often tempted to quell our inner disturbances with a type of mechanical thinking. When applied to legal institutions this kind of thinking views the law like the multiplication tables. It concludes that once a water right always a water right. This view considers that legal institutions change scarcely at all or that any changes are due to a mysterious and unknowable process and are probably bad. This attitude when applied to legal rights often leads people to jump to the conclusion that property rights are absolute rights. In 1945, Justice Jackson of the U. S. Supreme Court, said: "Rights, property or otherwise, which are absolute against the world are certainly rare, and water rights are not among them."⁸ In other words, the U. S. Constitution, the state constitution and due process requirements protect rights against unjustified or unreasonable infringement. However, this protection does not make these rights absolute as against the claims of the community and the general development of society. In New Mexico we must have water law institutions that continue to be responsive to human expectations and economic needs while at the same time preserving a balance between private rights and the public interest.

7. "Though the earth and all inferior creatures be common to all men, yet every man has a 'property' in his own person." Locke, *Of Civil Government*, Everyman's Library, E. P. Dutton and Co. (1940), p. 130.

8. *United States v. Willow River Power Co.* 324 US 499 (1945).