Hutchins published *The New Mexico Law of Water Rights* in 1955 and it has been given wide circulation by the State Engineer and the State Bar of New Mexico. Since 1955 there have been a number of important developments in water law in the state and in the nation. The Pelton dam decision in 1955 by the United States Supreme Court revived some old questions and raised some new ones also. Other recent decisions by federal courts as, for example, the *Hawthorne* case, together with the legislative proposals placed before Congress, as a result of these decisions, emphasize dynamic and unexplored dimensions of the federal system. This article is addressed primarily to recent developments in water law.

---

1. Technical Report No. 4, State Engineer of New Mexico in cooperation with the U.S. Dep't of Agriculture, Santa Fe, 1955. Hutchins' earlier work still widely used is *Selected Problems in the Law of Water Rights in the West*, published in U.S. Dep't of Agriculture Misc. Pub. No. 418 (1942). Hutchins has recently completed studies of several states and he is continuing his work covering all of the western states. His case gathering, descriptive and compendious method has been criticized for its lack of analysis, see Goldberg, Book Review, 9 Stan. L. Rev. 420 (1957).


4. The original proposal acquired the name of "the Barrett bill," S. 863, 84th Cong., 2d Sess. (1956). See Corker, *Water Rights and Federalism—The Western Water Rights Settlement Bill of 1957*, 45 Calif. L. Rev. 604 (1957). This legislative proposal which did not pass inspired numerous imitations, modifications and compromise measures, including four bills now pending which, if not identical in form, are the same in purpose: H.R. 5078, 87th Cong., 1st Sess. (1961) (Aspinall) "A bill to promote harmony between the United States and the States of the Union with respect to the administration of water, to strengthen rights to the use of water acquired under State law, and for other purposes. . . ." H.R. 5100, H.R. 5207, and H.R. 5224, 87th Cong., 1st Sess. (1961), have the same titles. The final report of the Senate Select Committee, S.R. No. 29, 87th Cong., 1st Sess. (1961), p. 19, makes no specific recommendation for legislation beyond advocating federal "cooperation with the States" and statement that "The committee hopes that appropriate legislation to implement these recommendations will be introduced. . . ."

New Mexico decisions and statutory changes. Additional attention is given to interstate and national consequences of local water law doctrine. For convenience the material is arranged in three sections: Surface water decisions and legislation, ground water law, and, lastly, the local and regional implications of federal-state relations in water resources policy.

I

SURFACE WATER

Recent Decisions: The New Mexico Supreme Court has reviewed comparatively few decisions during the past seven years that have involved, directly or indirectly, some aspect of surface water use. However, two of these decisions, Cartwright v. Pub. Serv. Co. and State ex rel Reynolds v. W. S. Ranch Co., are of far-reaching significance. In the original Cartwright case it was held, with two judges dissenting, that the inhabitants of Las Vegas were entitled to a priority under the Pueblo Rights doctrine going back to the establishment of the community. The action was brought by water users of the Gallinas River against the Public Service Company for injunctive relief, damages and apportionment of the water that the Town of Las Vegas, and the water company, were distributing. The court decided that the water company could withdraw as much water of the Gallinas as was necessary for the inhabitants of the community. My criticism of this decision was published elsewhere. The question of the application of the Doctrine of Pueblo Rights as it applies to ground water

7. 66 N.M. 64, 343 P.2d 654 (1959) (Case No. 1); 68 N.M. 418, 362 P.2d 796 (1961) (Case No. 2).
was recently before the New Mexico Supreme Court. The second *Cartwright* case upheld the dismissal of a complaint filed by plaintiffs in the first case. The plaintiffs alleged that the original Spanish or Mexican land grant was made to the "Town of Las Vegas Grant" and not to the "Town of Las Vegas" as determined in the first case. It was also alleged that the second suit was a proper continuation of the first as provided for in a statute (23-1-14) but which the court held "has no application to a case where judgment on the merits has been rendered" and, therefore, "the conclusion is inescapable that all issues raised in plaintiffs' complaint in this section were adjudicated in the first case and the matter is res judicata." The recent *Albuquerque* case, in which the municipality relied heavily upon the original *Cartwright* decision, is discussed in a subsequent section.

*State ex rel. Reynolds v. W. S. Ranch Co.* was an action by the State Engineer to enjoin New Mexico defendant company from diversion of surface waters above Costilla Reservoir. The district court dismissed for lack of indispensable parties, viz, the other water users on the stream system. The Supreme Court affirmed with leave to reinstate the action when the users below the reservoir were made parties; it also held that even though the Costilla Creek Compact of 1945, between New Mexico and Colorado, apportioned waters of the stream, "the Colorado water users were not indispensable parties." The court relied on *Hinderlider v. La Plata River & Cherry Creek Ditch Co.*, which held that any apportionment of water between states is binding on the citizens of each state.

In *W. S. Ranch Co.*, the court said:

We reaffirm the principles announced in those decisions [holding that State engineer's jurisdiction over ground water is limited but may be exercised under the police power to enjoin waste or excessive use].

But we do not construe the statute to authorize the state engineer

---

11. City of Albuquerque v. Reynolds, State Engineer, decided December 14, 1962. The indications are that there will be a petition for rehearing. The actual decision turns on jurisdictional and evidentiary questions rather than questions of pueblo rights. The Supreme Court said that:

We therefore hold that all of the findings of fact and conclusions of law of the district court relating to the Pueblo of San Felipe de Albuquerque and the claimed pueblo water right, should be stricken as not being within the issues properly before the court, and the judgment of the district court, insofar as it is based upon such findings and conclusions should be reversed.

15. See note 11 *supra*.
18. 304 U.S. 92 (1938).
either in the exercise of the State's police, or as a representative of other 
water users, to seek an adjudication of other water rights of one 
making a bona fide claim thereto which would affect the right of 
others, without the joinder of those persons whose rights may be 
affected.\textsuperscript{19}

The decision casts some doubt on portions of the court's past work. The court 
treated the case as an adjudication suit: "Whatever position the State Engineer 
takes in this action, it cannot be divorced from an adjudication of appellee's 
claimed water right. . . ." Yet in \textit{Pecos Valley v. Peters}\textsuperscript{20} the court said that 
an injunction suit was not an adjudication suit. There is further confusion in 
the court's reference, in conjunctive fashion, to "necessary and indispensable 
parties." Litigation can proceed in some instances without necessary parties, 
but without indispensable parties it cannot.\textsuperscript{21} This, also, raises the possibility 
of class actions under Rule 23\textsuperscript{22} which might have been allowed by an inter-
pretation of section 75-2-9 to authorize the State Engineer to bring the suit 
on behalf of all water users. This would seem to be the reasoning of \textit{Peters} and 
this would eliminate the possibility of inconsistent results. However, the court 
completely rejected the view of the State Engineer that the statute providing 
that "The state engineer shall have the supervision of the apportionment of 
water in this state . . ."\textsuperscript{23} could mean that "The state engineer represents all 
other water users and all other citizens of the state to prevent appellant from 
exercising the rights it claims."

Another question is raised by \textit{W. S. Ranch Co.} with respect to "piecemeal" 
adjudication as approved in \textit{ground} water matters in \textit{State ex rel. Reynolds v. 
Sharp}.\textsuperscript{24} It would seem that the feasible and pragmatic approach in \textit{Sharp} may 
now be questionable in actions involving \textit{surface} waters.

In none of the \textit{surface} water cases were substantial questions raised over the 
acquisition of new rights, or over transfers of such rights, although the question 
of prescriptive rights as against claimants below the Costilla Reservoir 
was raised in the \textit{W. S. Ranch Co.} case. All of the recent decisions, including 
the three discussed above, emphasize what is already common knowledge: 
\textit{surface} waters in New Mexico have long been fully appropriated except for

\begin{footnotesize}
\begin{itemize}
\item 20. 50 N.M. 165, 173 P.2d 490 (1945); 52 N.M. 148, 193 P.2d 418 (1948).
\item 21. N.M. Stat. Ann. § 21-1-1 (17) (a) (1953). If Rule 17a was not applicable, then the users are probably indispensable parties under Rule 19.
\item 24. 66 N.M. 192, 344 P.2d 943 (1959).
\end{itemize}
\end{footnotesize}
some supplies from the Canadian River and what may be diverted or imported from the Upper Colorado Basin.\textsuperscript{25}

This handful of decisions also seems to indicate that the devices for transferring surface rights provided by statute\textsuperscript{26} are not greatly involved in litigation although there are indications that they are being used.\textsuperscript{27} Yet we know very little about the utility of these sections of the statutes, which date from 1907, in terms of altered patterns of use arising from the rapid economic growth of the state. The absence of such recent surface water litigation might lead some to believe that adequate statutory methods exist for change and expansion. But the absence of litigation also seems to support many of the reasons given two generations ago for establishing an administrative system.\textsuperscript{28} The experience in Colorado where such a system has never fully developed presents a sharp contrast.\textsuperscript{29}

Two decisions, one of them by the court of appeals for the Tenth Circuit in 1952,\textsuperscript{30} not reported by Hutchins, were the result of the extreme drought conditions along the Rio Grande in the 1940's and 1950's. The later case, \textit{Elephant Butte Irrigation Dist. v. Gatlin},\textsuperscript{31} was decided in 1956 by the state Supreme Court. The alleged wrong was the diversion of Rio Grande water to Bosque del Apache National Wild Life Refuge north of Elephant Butte Reservoir. An injunction was granted by the state court against a subordinate official of the United States Department of Interior. The Supreme Court dismissed the action on the ground that the game refuge was lawfully established in aid of a U.S. treaty with Mexico and the Migratory Bird Conservation legislation of Congress. Thus the United States was held to be an indispensable party. The court held that a judgment for the Irrigation District would "expend itself upon the United States, its properties and administration and that ... the United States had not consented to be sued."\textsuperscript{32} The earlier case in the court

---


27. File No. 3665, State Engineer's Office (Albuquerque) refers to application for change from surface to ground water diversion by Kaiser-Gypsum Company at the new Rosario plant in the Rio Grande Basin. The Rio Grande Underground Water Basin Order No. 65, and the 8-page memorandum accompanying it, Nov. 29, 1956, anticipate such transfers.

28. See Farm Inv. Co. v. Carpenter, 9 Wyo. 110, 61 Pac. 258 (1900); \textit{Cf.} Board of Water Engineers v. McKnight, 111 Tex. 82, 229 S.W. 301 (1921).

29. See Lasky, \textit{From Prior Appropriation to Economic Distribution of Water by the State—Via Irrigation Administration}, 1 Rocky Mt. L. Rev. 161, 248 (1929), and 2 Rocky Mt. L. Rev. 35 (1929); Danielson, \textit{Water Administration in Colorado—Higher-riority or Priority}, 30 Rocky Mt. L. Rev. 293 (1958).

30. New Mexico v. Backer, 199 F.2d 426 (10th Cir. 1952).

31. 61 N.M. 58, 294 P.2d 628 (1956).

32. \textit{Id.} at 68, 294 P.2d at 635.
of appeals was cited. This previous decision, *State v. Backer*, was an effort by the state and a municipality to enjoin reduction in the level of Elephant Butte Reservoir. The action was brought against the construction engineer in charge of Elephant Butte Dam and Reservoir and employees of the Bureau of Reclamation. A temporary injunction was granted by the state court on the ground that lower water levels and the death of fish in the lake presented a health menace. The United States removed to federal court and the action was dismissed. The court of appeals affirmed holding that the action was in essence a suit against the United States to which it had not consented. The court relied on the United States Supreme Court case of *Larsen v. Domestic & Foreign Corp.* for its decision.

*State ex rel. Bliss v. Davis* in 1957 also involved an interstate stream, the Pecos. The district court for Eddy County refused to enjoin diversions from the river and the Supreme Court affirmed. The State Engineer brought the action on the theory that the rights claimed had never been perfected, or had been forfeited for non-use for four years, or were foreclosed by the Hope decree. Davis relied on the declaration of water rights filed in the county clerk’s office in 1903. The court held that there was substantial evidence of the ancient water right. However, the court referred to two earlier cases “in which the forfeiture statute . . . has been construed but not in the respect here mentioned” and then stated that it was “neither necessary nor proper to decide the question here, having no application to the facts. Hence we pass the question until it arises in a case where its decision is absolutely necessary.” In addition the court mentioned and avoided the question “whether the State itself

---

33. 61 N.M. 58, 294 P.2d 628 (1956).
34. 337 U.S. 682 (1949).
35. 63 N.M. 322, 319 P.2d 207 (1957).
36. *Id.* at 329-30, 319 P.2d at 211-12: “The defendant, J. C. Davis, was adjudged to be the owner of a valid right to appropriate water to the extent of three acre feet, per acre, per annum upon the 320 acres of land above described in Eddy County, New Mexico, as declared in the decree, subject only to the rights of the remaining defendants under existing purchase contracts. And as may very well have been declared in said decree but was not, the water right adjudged to defendant Davis is, of course, subject, further and necessarily to the unadjudicated rights and priorities, whatever they may be, as between him, Davis, and all water users of the Pecos River, as settled and determined by the decree in . . . Cause No. 712, Equity, entitled Hope Community Ditch v. U.S. . . ."

“Perhaps the most hotly contested issue presented at the trial was in the effort of counsel for the plaintiff [the State Engineer] to secure the admission in evidence of portions of the hydrographic survey made under the supervision of the State Engineer for use in the trial of Equity Cause No. 712 . . . .” (United States District Court for N.M., 1933).

37. *Id.* at 331, 319 P.2d at 213, citing *Chavez v. Gutierrez*, 54 N.M. 76, 213 P.2d 597 (1950); *New Mexico Products Co. v. New Mexico Power Co.*, 42 N.M. 311, 77 P.2d 634 (1938).
can be estopped to assert its rights [of forfeiture] in the administration of the public waters of the State. Hence we pass a decision on this matter raised in the case. Compare State ex rel. Erickson v. McLean, 62 N.M. 264, 364 P.2d 983 (1957)."^{38} The McLean case cited is a ground water decision holding that waste or non-beneficial use is a basis for forfeiture.

Martinez v. Mundy^{30} affirmed the trial court's finding that the use of the Mundy Tract near Chama for pasturage and livestock watering was permissive and not adverse. Therefore no rights to such water or land use was acquired by prescription. The decision adds additional weight to the conclusion that water rights cannot be acquired by prescription in New Mexico. This precise question was asked in 1937 in Pioneer Ditch Co. v. Blashek^{40} where Judge Brice said: "This testimony does not prove an abandonment of plaintiff's water right, nor a prescriptive right (if such a right can be acquired under our law). . . ."^{41} As pointed out above, the W. S. Ranch Co. case raised the question of prescriptive rights also.

Rascoe v. Town of Farmington^{42} affirmed a judgment on a jury verdict for damages against a municipality. The town was held liable for interfering with an irrigator's source of supply with resultant loss or damage to the plaintiff's crop. Laterals supplying the ditch had been filled up in 1954. Although the testimony was confusing as to who had filled in the laterals, the Supreme Court held that the evidence sustained the jury's finding that it was done by or under authority of the town. The court rejected any basis for punitive damages even though the word "wilfully" was used in the pleadings and instructions to describe the town's conduct. The court stated the rule that exemplary damages are not allowable against a municipality in the absence of statute.^{43} The court made no mention of Rix v. Town of Alamogordo,^{44} decided in 1938, which allowed damages against a municipality for having improperly constructed a culvert that was not large enough to accommodate flood waters. This old case is not cited by Hutchins in his 1955 work. However, the principles in Rascoe and Rix would seem to be the same, viz., that a municipality may be liable for blocking an irrigation ditch or in providing an inadequate drainage canal. Both cases proceeded on negligence theories. The Alamogordo case is digested under that heading which probably explains why it was not cited by Hutchins. The Farmington case is indexed under Waters and Watercourses.

38. Id. at 334, 319 P.2d at 215.
40. 41 N.M. 99, 64 P.2d 388 (1937).
41. Id. at 102, 64 P.2d 390 (emphasis added).
42. 62 N.M. 51, 304 P.2d 575 (1956).
43. Id. at 55, 304 P.2d at 577.
44. 42 N.M. 325, 77 P.2d 765 (1938).
Stahmann v. Elephant Butte Irrigation Dist.\(^{45}\) affirmed the trial court's refusal to interfere in the management and administration of the district and dismissed plaintiff's complaint. Land owners in the district had sued for refunds for "excess water" charges for two years. The district had assessed the charges on a graduated scale in excess of a one-acre foot minimum to all users in the district. The court held that in the absence of fraud, actual or constructive, there was no abuse of discretion by the district officials merely because the assessment charges were not based on cost of delivery.

Cartwright v. Pub. Serv. Co.,\(^{46}\) mentioned above, established the Pueblo Rights doctrine previously rejected by the court.\(^{47}\) The court held that the Hope decree adjudicating the waters of the Pecos and tributaries did not limit or bind the town or city of Las Vegas. After the New Mexico Supreme Court rendered its decision, a petition for a "writ of assistance" in the United States District Court was denied. The United States District Judge held that the federal court had no continuing jurisdiction in the matter.\(^{48}\) As discussed above the second Cartwright decision held that matters in dispute were res judicata.\(^{49}\)

The second part of the doctrine implicit in Cartwright, i.e., its application to ground water, was rejected in the Albuquerque case\(^{50}\) recently decided by the state Supreme Court.

In State ex rel. Reynolds v. Bd. of County Commissions of Guadalupe County,\(^{51}\) decided February 28, 1962, the Supreme Court reversed the trial court which had dismissed a mandamus action by the State Engineer in connection with the creation of a water subdistrict along the Pecos River system. The Supreme Court held that the alternative writ was improperly dismissed because the respondent Commissioners were chargeable with the performance of a ministerial duty in carrying out the requirements of the statute\(^{52}\) (75-3-4) regarding the establishment of water districts and the placing of assessments on the tax rolls. The State Engineer had seasonably tendered requests for find-

\(^{45}\) 61 N.M. 68, 294 P.2d 636 (1956).
\(^{46}\) 66 N.M. 64, 343 P.2d 654 (1958). See notes 7 and 9 supra.
\(^{47}\) See New Mexico Products Co. v. New Mexico Power Co., 42 N.M. 311, 77 P.2d 634 (1938); State ex rel. Community Ditches v. Tularosa Community Ditch, 19 N.M. 352, 143 P.2d 207 (1914).
\(^{48}\) See Clark, The Pueblo Rights Doctrine in New Mexico, 35 N.M. Historical Rev. 265 (1960). The article makes reference to the sequence of events after Cartwright.
\(^{50}\) Albuquerque Case, supra note 11.
\(^{51}\) No. 6618, mimeographed opinion. The motion for rehearing was still pending on December 21, 1962.
\(^{52}\) N.M. Stat. Ann. § 75-3-4 (1953) requires that when a Water Master's budget is received by the Board of County Commissioners, they shall immediately cause the county treasurer to extend the tax rolls in the amounts required to be raised without reference to whether the act to be done is proper.
ings of fact and conclusions of law which the trial court failed to act upon. However, the Commissioners contended that lower court's recital in its order, which indicated that the State Engineer had not shown the necessity for such a subdistrict, constituted a sufficient finding for review purposes. The Supreme Court rejected this contention, stating that such a conclusion would ignore the mandatory requirement of Rule 52(b)\(^5\) that findings and conclusions shall be made when requested in non-jury actions as the court has previously held.\(^6\)

**Legislation:** The basic water law of New Mexico was enacted in 1907.\(^5\) This code referred to *surface* waters only. The 1911 Constitution embraced the appropriation theory and declared all unappropriated *surface* waters to be public.\(^6\) There is no specific reference to *ground* water in the Constitution. There have been numerous amendments to and changes in the original statutes, the most notable being the *ground* water statutes of 1927 and 1931. The recent amendments from 1953 through 1961 represent continued effort to improve the administrative process established in 1907 in the effort to provide efficient and fair allocation and in order to secure existing rights. A 1959 section\(^5\) largely codifies or formalizes the practices long followed in declaring ancient water rights. A method is prescribed for putting such claims on record. The declaration must be verified where possible but may be stated on information and belief. The amendment provides that it may be filed in the office of the county clerk in the county of the diversion works but it must also be filed in the State Engineer's office.

Several 1953 amendments\(^5\) give county commissioners power to condemn water rights under eminent domain procedures in order to provide for county water systems in un-incorporated communities. These sections also provide for financing community water systems through bond issues. A significant change in 1955 now requires the State Engineer to "permit the amount allowed to be diverted at a rate consistent with good agricultural practices and which will result in the most effective use of available water in order to prevent waste."\(^5\) The same amendment also limits the amount diversified to "water allowed by permit or by adjudication." The old rigid and pioneer formula for diversion was based on flow at the rate of "one cubic foot of water per second for each

---

55. N.M. Laws 1907, ch. 49, often called the New Mexico Water Code (N.M. Stat. Ann. §§ 75-1-1 to -5 (1953)). Earlier legislation in the Territory, going back to the Kearny Code of 1846, § 1, Watercourses, Stock Marks, etc., recognized the general principle of appropriation and the protection of existing uses.
56. N.M. Const. art. 16, §§ 1-3. The Constitution was adopted Jan. 21, 1911. New Mexico became a state Jan. 6, 1912.
70 acres, or the equivalent thereof, delivered on the land." There would not seem to be any conflict over application of the new amendment in areas like the Middle Rio Grande Valley which have few adjudicated rights and for which permits have not been issued. In the Middle Rio Grande Conservancy District since 1951 the directors, in consultation with the chief engineer of the district, have been "specifically empowered to make such proper and necessary distribution and allocation of the waters available for irrigation within such districts . . . as [they] shall determine to be reasonable and proper. . . ."

It should be noted here that this statute, although not called into question in *Middle Rio Grande Water Users Ass'n v. Middle Rio Grande Conservancy Dist.* in 1953, has considerably more relevance than might appear as a result of that case. The case is scarcely mentioned by Hutchins in his 1955 work and then not on the most significant point of the decision. The litigation arose over the validity of a contract between the federal government and the Middle Rio Grande District under which the federal government agreed to acquire and cancel outstanding bonds of the District, rehabilitate and extend the irrigation and drainage system of the District and also improve or rectify the channel of the Rio Grande. The Water Users Association composed of farmers within the boundaries of the District challenged the contract and its proposed effect on their water rights. The contract was upheld except for one objectionable section later amended and approved before the mandate went down. The significance of the case lies in the approval of the limitation on delivery of water under a federal reclamation contract. The court upheld the 160-acre limitation. This was several years before the question reached the United States Supreme Court in *Ivanhoe Irrigation Dist. v. McCracken*, where 160 acre contract limitations were upheld and the Supreme Court of California was reversed.

In 1941 and 1957 there were amendments to the *surface* water forfeiture statute to excuse non-use beyond the irrigator's control, as is recognized in several cases. The 1957 amendment expressly exempted land put in the Soil Bank from the four-year non-use forfeiture action. A number of 1959 provi-

---

60. N.M. Laws 1907, ch. 49, § 43.
sions cover the water needs for highway construction and airports. These provide that the highway commission

. . . shall make application to the State Engineer for a change of location of use, a change of method of use, change of point of diversion, advance withdrawals or withdrawals of accrued unused waters of any water right, whether such water right be for surface, subsurface, artesian or underground waters and whether or not either the location of the changed use or the location of the point of diversion or both be within or without the boundaries of any declared underground water basin or irrigation or conservancy district. . . .

The amendment further provides that for purposes named—"construction, re-construction, maintenance or repair of public roads, streets, highways and airports"—the State Engineer may authorize changes in location of use, method of use, point of diversion and advance or accrued withdrawals "after publication and hearing as provided in § 75-11-3" which is a section of the ground water statute of 1931. The application may be granted if in the opinion of the State Engineer such changes or withdrawals "will not be detrimental to the other holders of water rights." The other 1959 provisions limit advance withdrawals of ground waters to five times the annual amount of the right held and limit the time to a period not to exceed five years or in the State Engineer's discretion. Provisions are also made for a periodic accounting of withdrawals by the highway commission. The same sections provide for reversion of accrued or unused water to the status of unappropriated water where the highway commission attempts to transfer its right. However, under the same section the commission may transfer a right within the same basin to a new point of diversion. No right can "exceed five times the annual amount of the water right retained."

The amended forfeiture provision for non-use found in the surface water statute does not contain the one-year extension period that is found in the ground water forfeiture statute.

Minor changes were made in the irrigation districts sections of the statutes.

70. N.M. Laws 1931, ch. 131, § 3.
75. Ibid.
These are mainly concerned with bond issues, borrowing limitations and compensation of directors and the secretary.

The 1955 amendment of the conservancy district reclamation contract act\(^79\) inspired a four-sentence *per curiam* decision\(^80\) that construed § 75-32-26 to mean that the legislature had intended "three" and not four election precincts.

The conservancy district act originally passed in 1927\(^81\) was amended in 1959\(^82\) so as to provide for an elected board of directors. Directors of the districts' 100,000 acres or more formed before July 1, 1952 had previously been appointed by the conservancy court.\(^83\) This change was inspired by the formation of the Sandia Flood Control District under the General Conservancy Act.\(^84\)

The practical effect of the change so far has been negative in terms of going forward with flood control plans for the Bernalillo County area.

A new section added to the statutes in 1959 is entitled the Boat Act.\(^85\) The stated purpose of the legislation is "to promote safety for persons and property in and connected with the use, operation and equipment of vessels and to promote uniformity of laws relating thereto."\(^86\) This section calls attention to the increasing recreational uses of water and the holding in an earlier case\(^87\) that such uses are beneficial uses.

The Interstate Stream Commission legislation has been changed principally to aid programs of construction and financing property acquisitions in connection with relations with the United States.\(^88\) The question may be raised here as to whether the State Engineer, who is the chief water administrator and technical expert for the state, should continue to be a voting member of the Interstate Stream Commission. In effect he is now an important interstate and intrastate policy maker. With the enactment of the State Planning Act\(^89\) (4-20-1) in 1959 which has among its purposes "planning for the long range,

\(\text{\ldots} \)

\(^84\). See *In re Sandia Conservancy Dist.*, 57 N.M. 413, 259 P.2d 577 (1953).
\(^87\). *State ex rel. State Game Comm'n v. Red River Valley Co.*, 51 N.M. 207, 182 P.2d 421 (1947).
\(^88\). N.M. Stat. Ann. §§ 75-34-9 to -27 (Supp. 1961). See also Senate Select Comm., *Statement of New Mexico* 228, 238 (Comm. Print No. 6), Note 25 *Supra*.
comprehensive, balanced development of the state's natural, economic, and human resources and public facilities . . ." it would seem the argument is even stronger for separating as much as possible technical functions from policy-making in the State Engineer's office. His technical and administrative services could be made fully available without his being a voting member and officer of the commission.  

There are time-honored reasons for separating policy-making from policy-enforcing functions, and with the growth of the state these reasons become more cogent and obvious. In New Mexico this principle is heavily beclouded in the area of water resources and land use.

II

GROUND WATER

A. Conditions and Trends

Since 1955 there have been a number of ground water decisions reported. A majority of these established significant doctrine and illuminate important areas of policy. During the period since 1955 the State Engineer, exercising statutory authority, has extended his administrative jurisdiction by the declaration of seven new ground water basins and by enlarging the boundaries of several older basins. Controls are now applicable in a total of nineteen ground water basins

90. N.M. Stat. Ann. § 75-34-1 (1953). The Commission has seven members "and the seventh member to be the state engineer. . . . The state engineer shall be the secretary of this commission." In New York the Water Power and Control Commission "may, with the approval of the conservation commissioner, appoint an executive engineer and a secretary. . . ." N.Y. Conserv. Law § 397 (emphasis added). In Arizona which also has an Interstate Stream Commission, the land commissioner, who is the chief administrative officer in the management of water, is an ex-officio member of the Commission without vote. Ariz. Rev. Stat. Ann. § 45-503 (1956). Several western states have no interstate streams commissions. In Colorado, the governor is empowered to appoint commissioners "from time to time" to represent the state. They serve at his pleasure. Colo. Rev. Stat. § 148-1-9 (1953). In 1957, Wyoming repealed the 1945 statute designating the state engineer as commissioner to represent the state. The director of resources is now designated as the interstate streams commissioner and the governor may appoint assistant commissioners. Wyo. Stat. Ann. § 41-481 (1957).

91. These Orders, since 1955, signed by the State Engineer, are numbered as follows:

Order No. 51. Extension of Portales Basin
52. Excludes Part of Portales Basin
53. Closing Mimbres Basin (Eastern Extension)
54. Closing Part of Mimbres (Western Extension)
56. Declaration of Playas Basin, Feb. 23, 1956
57. Extension of Animas Basin
58. Extension of Mimbres
60. Declaration of Bluewater Basin, May 21, 1956
65. Declaration of Rio Grande Basin, Nov. 29, 1956
71. Extension of Carlsbad Basin
77. Extension of Roswell Basin
78. Re-open Mimbres (Eastern Extension)
80. Extension of Mimbres
The large and important Rio Grande Underground Water Basin was declared on November 29, 1956. Many legal problems in this basin have not yet been resolved.\cite{83}

These recent developments contrast sharply with the earlier period from 1883, when the Territorial Supreme Court first commented on ground waters,\cite{94} to 1955 during which time less than a dozen decisions involving ground waters had been reported. These earlier decisions include one case that was twice appealed\cite{95} and three others which involved no more than peripheral concern with ground waters.\cite{96} It is true, of course, that the basic constitutional questions raised by the ground water legislation of 1927 and 1931 were answered in Yeo v. Tweedy\cite{97} in 1930 and in Bliss v. Dory\cite{98} in 1950. These decisions along with other earlier cases were discussed by Hutchins in 1955.\cite{99}

A majority of the recent ground water decisions have highly important implications for emerging ground water doctrine. A third of these decisions deal with enforcement provisions of legislation, injunctive relief, statutory construction and the exercise of the police power. In general the public control structure has been clarified as well as strengthened by these decisions. The recent amendment of 1949, 1953, and 1959\cite{100} have also improved the overall controls which can be traced in chronology if not in legal origins to the artesian well regulations of 1905 and 1909\cite{101} in New Mexico.

\begin{enumerate}
\item Declaration of the Gila-San Francisco, Oct. 20, 1960
\item Declaration of San Simon, Oct. 20, 1960
\item Extension of Virden Valley
\item Declaration of Lordsburg Basin, Nov. 18, 1960
\item Declaration of Nutt-Hockett Basin, Aug. 11, 1961
\item Declaration of Jal Basin, Nov. 24, 1961
\item Letter from S. E. Reynolds, State Engineer, to R. E. Clark, Nov. 28, 1960.
\item See Albuquerque case; supra note 11.
\item Keeney v. Carillo, 2 N.M. 480 (1883).
\item Pecos Valley Artesian Conservancy Dist. v. Peters, 50 N.M. 165, 173 P.2d 490 (1946); 52 N.M. 148, 193 P.2d 418 (1948).
\item Keeney v. Carillo, 2 N.M. 480 (1883); El Paso & R.I. Ry. v. District Court, 36 N.M. 94, 8 P.2d 1064 (1931); Burgett v. Calentine, 56 N.M. 194, 242 P.2d 276 (1952).
\item 34 N.M. 611, 286 Pac. 970 (1930).
\item 35 N.M. 12, 225 P.2d 1007 (1950).
\item See 36 N.M. Legislative Assembly C.B. 20, Approved Feb. 22, 1905, and N.M. Laws 1905, ch. 17; N.M. Laws 1909, ch. 64. The Background of these regulations can be found in Eccles v. Ditto, 23 N.M. 235, 167 Pac. 726, 1918B L.R.A. 126 (1918), where references are made to the provisions of the Code of 1915.
\end{enumerate}
The recent New Mexico experience with ground water law amendments does not represent a unique trend in western water law development. Increased legislative concern since World War II has resulted in ground water enactments in a number of western states.\textsuperscript{102} New Mexico's basic ground water statute dates from 1927\textsuperscript{103} when only one other state in the West had attempted any comprehensive legislation on the subject. However, New Mexico had enacted earlier ground water controls and in 1917 the Supreme Court upheld the constitutionality of an artesian well control statute passed in 1909.\textsuperscript{104} The court found this a proper exercise of the police power:

The lien imposed upon the well and land of the owner who permits a well to become out of repair and waste water is not upon the theory of benefit to the owner, but is taxed as the cost and expense of abating a nuisance and is, we think, fully justified by the authorities. The act in question declares that an artesian well which is in such condition that water wastes therefrom is a public nuisance, and authorizes its summary abatement by the artesian well supervisors in one of two modes; either by repairing or plugging. The statute declares and defines a new species of public nuisance not known to the common law nor declared to be such by any prior statute. Certainly the Legislature had the power to declare an artesian well used in such manner as to be a detriment to the public interest and welfare a public nuisance, although not recognized as such at common law. . . .

\* \* \*

[It] is plain to be seen that the statute was designed to accomplish a useful purpose and to promote the interests of the state and advance the welfare of the people residing in the artesian belt. . . .\textsuperscript{105}

Although New Mexico ranks fourth among the four heavy ground water producing states\textsuperscript{106} of the West, it remains the only state among the four with reasonably effective controls. Arizona had no controls over percolating ground

\begin{footnotes}
\item[104] Eccles \textit{v.} Ditto, 23 N.M. 235, 167 Pac. 726 (1917).
\item[105] Eccles \textit{v.} Ditto, supra note 104, at 244-45, 167 Pac. at 728-29.
\item[106] See McGuinness, \textit{Estimated Use of Water} 1955, U.S. Geological Survey Circular No. 398, Figure 1 (1955). In the recent Senate Select Committee study, "ground water was not treated as a separate element of study." Senate Select Comm. on Nat'l Water Resources. 86th Cong., 2d Sess., \textit{Water Supply and Demand} (Comm. Print 32, 1960).
\end{footnotes}
waters until 1948, and has very poor ones now.\textsuperscript{107} The doctrine of appropriation was and continues to be applied only to subterranean streams.\textsuperscript{108} California has recently established token legislative controls\textsuperscript{109} and continues to rely on the judicial doctrine of correlative rights.\textsuperscript{110} In Texas there are no statewide controls.\textsuperscript{111} Controls devised in other western states are aimed at better management, conservation and protection to existing rights. This legislation has come somewhat late and much of it is too weak to afford investment security on the scale that will encourage and insure orderly development of ground water supplies. As everyone knows, population increases in the West and Southwest exceed the rate of growth in the nation.\textsuperscript{112} It would seem that in some states the ground water problems have received attention in proportion to population increases and the new suburban, industrial, pollution and recreation considerations that should precede but usually follow population growth. Additional problems involve changing uses and preferences that may be anticipated on the basis of economic interests. Matters of this nature have been examined by the Senate Select Committee although not specifically with respect to ground water.\textsuperscript{113} The general case for New Mexico was stated by the State Engineer in response to the Committee's invitations for a statement of views as follows:

A key factor in New Mexico's water-resources problem is the fact that agricultural pursuits will provide relatively little opportunity for increased employment, and progressively larger amounts of the State's water supply must be put to municipal and industrial uses to meet the needs of the expanding population. This fact was clearly recognized as early as 1950. \ldots \textsuperscript{114}

In commenting on the rapid development of New Mexico's ground waters in recent years the State Engineer told the Senate Select Committee that:

\begin{itemize}
  \item \textsuperscript{108} Maricopa County Municipal Water Conservancy Dist. No. 1 v. Southwest Cotton Co., 39 Ariz. 65, 4 P.2d 369 (1931).
  \item \textsuperscript{109} Cal. Water Code §§ 1005.1, -2, 1050-51, 4999, 5001-08.
  \item \textsuperscript{110} See Hutchins, California Water Law of Water Rights (1956), published by State of California.
  \item \textsuperscript{111} Tex. Rev. Civ. Stat. art. 7880-3c (1948) provides for voluntary underground conservation districts.
  \item \textsuperscript{113} See note 106 supra.
  \item \textsuperscript{114} Senate Select Comm. on Nat'l Water Resources, 86th Cong., 2d Sess., \textit{Views and Comments of the States} 229 (Comm. Print No. 6, 1960).
\end{itemize}
The use of ground water for irrigation in the State of New Mexico has developed rapidly in the past 20 years. In 1940 an estimated 140,000 acres were irrigated with ground water; in 1950 an estimated 320,000 acres; and in 1955 an estimated 588,000 acres. In 1955 approximately 1,260,000 acre-feet of ground water was pumped for irrigation and about 105,000 acre-feet was pumped for municipal and industrial purposes. An additional 13,000 acre-feet was pumped for rural uses other than irrigation. In 1955, according to Geological Survey estimates, 90 percent of the municipal and industrial requirements of the State were met with ground water.

The locations of all large supplies of ground water in New Mexico are generally believed to be known and an increase in ground-water usage in the next 20 years comparable with that of the last 20 years cannot be predicted.\textsuperscript{115}

The State Engineer projected the needs of the Albuquerque metropolitan area from 1956 to 1980 as follows:\textsuperscript{116}

\begin{table}
\centering
\begin{tabular}{|c|c|c|c|}
\hline
\textbf{Year} & \textbf{Population} & \textbf{Total diversion} & \\
& & \textbf{Million gallons} & \textbf{1,000 acre-} \\
& & \textbf{per day} & \textbf{ft. per yr.} \\
\hline
1956 & 220,000 & 47 & 53 \\
1960 & 264,000 & 58 & 65 \\
1965 & 354,500 & 81 & 91 \\
1970 & 463,600 & 109 & 122 \\
1980 & 672,200 & 168 & 188 \\
\hline
\end{tabular}
\caption{Projections of population and water requirements of Albuquerque metropolitan area (Bernalillo County), 1956-80.}
\end{table}

Other areas of the state are experiencing high rates of urban growth. But the increased demands for residential, recreational and industrial uses are only one facet of the development-allocation problem. In some areas of the state agricultural development is predicated on mining techniques; conditions in one such area have been summarized as follows:

The State Engineer's formula was worked upon a theoretical life of 60 years for the Lea County Basin which would, in reality, mean a practical life of 40 years based upon present calculations. It is realized by the administrator that at the end of 40 years there will be a considerable quantity of water which it will be economically unfeasible to pump for irrigation purposes. It is hoped that this residue will be sufficient for domestic uses for an indefinite period of time. This carries with it a burden upon the users who will attempt to extract the water

\textsuperscript{115} Id. at 233.
\textsuperscript{116} Id. at 244, table 4.
after 40 years, of paying the additional pumping costs. The local economy will have to pay the price of using the water in just exactly the same way that any other mining economy must pay the cost.

It is necessary for the public of Lea County to realize that, as in any mining economy, within a foreseeable future, the product or resource on which the economy is based will no longer be present. The administrator has the responsibility within the spirit of his delegated powers to inform the public of this matter.117

With the physical facts of limited supply, population growth and increasing demands in mind, the administrative process and the recent actions of the legislature and the courts take on more meaning. For convenience the discussion of recent legislation precedes an examination of the cases.

B. Recent Legislation

One of the most significant pre-1955 amendments to the ground water statute requires well drillers to be licensed and bonded.118 This 1949 provision would seem to be an indispensable element of effective control and is also necessary for data collection.119 In 1957, a further amendment exempted driven wells with a maximum outside diameter not exceeding 2½ inches.120 These wells are typically the shallow household-use type from which large withdrawals cannot be made. A 1953 amendment declares "all underground waters of the state . . . to be public"121 and subject to appropriation. The amendment seeks to clear up the uncertainty that has existed since 1927 as to the public or private status of ground waters outside the control of the State Engineer’s statutory powers. The early legislation specified classes of public waters to be regulated: “underground streams, channels, artesian basins, reservoirs, or lakes, having reasonably ascertainable boundaries.”122 The New Mexico Constitution makes no express reference to ground waters123 and contains no all-inclusive language such as is found, for example, in the Montana Constitution.124 This was a large part of

119. The State Engineer emphasized this in his statement to the Senate Select Committee; see Senate Select Comm., supra note 114, at 237: “Basic data are essential to orderly programs of water-resource investigation and development.”
123. N.M. Const. art. 16, §§ 1-3. Section 2 refers to “every natural stream, perennial or torrential.”
124. Montana Const. art. 3, § 15, speaks of “all water.”
the problem in *Yeo v. Tweedy*\(^{125}\) in which the 1927 legislation was viewed favorably even though it was technically defective in extending legislation by reference in violation of the constitution.\(^{126}\) The court said:

... The irrigation code declares public "all natural waters flowing in streams and water courses," and subjects them to appropriation for beneficial use. Code 1915, § 5654. The constitutional provision is substantially the same. Article 16, § 2. Appellees argue that the statutory and constitutional inclusion of this class of waters, as subject to appropriation, amounts to an exclusion of all others. It will be admitted, however, that both the statute and the Constitution in these affirmative provisions are merely declaratory of existing law. Under a well known canon of construction, the rule invoked does not apply: State v. Trujillo, 33 N.M. 370, 266 Pac. 922.

The right claimed (overlying owners to percolating waters) has never been declared in this jurisdiction by judicial decision. Hence, it will be found, if at all, in the undeclared law. Ordinarily in such a case we say that we are controlled by the "common law as recognized in the United States of America." Code 1915, § 1354. But under that section we recognize as controlling only so much of the English common law as is applicable to our condition and circumstances. ...

* * * * *

... So it is not necessarily true that the rules governing the use of percolating waters in England have been, up to 1927, the rules for the use of artesian waters in New Mexico, any more than it is true that the taking of water from the Rio Grande is subject to the limitations upon taking from the Thames. ...

* * * * *

Nearly all of the states of the Union in a general way recognize the common law of England. Yet they have reached different results as to riparian rights and as to rights in percolating water. ... As is well known, a number of Western States have rejected the doctrine of riparian rights for that of prior appropriation. ...

* * * * *

... Even among the Western States uniformity is not found, either in the extent of modification of the common law doctrine of riparian rights or in the theory upon which modification has been based. New Mexico, in this respect, long since concurred in the "Colorado doctrine," the most far reaching of all.\(^{127}\)

\(^{125}\) 34 N.M. 611, 286 Pac. 970 (1929).

\(^{126}\) N.M. Const. art 4, § 18: "No law shall be revised or amended, or the provisions thereof extended by reference to its title only; but each section thereof as revised, amended or extended shall be set out in full."

\(^{127}\) Yeo v. Tweedy, 34 N.M. 611, 614, 615, 286 Pac. 970 (1929).
The 1953 amendment on ground water being public clarifies what may be inferred from *Yeo v. Tweedy* and *State ex rel. Bliss v. Dority* and a logical extension of the "Colorado doctrine" under which surface water rights were held separate from interests in land. It must be remembered, however, that the classes of water described in the statute are still the only public waters that are subject to administrative controls and only after formal declaration of a basin. The 1953 amendment did not enlarge directly the State Engineer's jurisdiction. He must first declare a basin "having reasonably ascertainable boundaries" before he has authority to grant or deny permits to appropriate although his technical knowledge of conditions within a basin which is physically related to an area outside of the declared basin may be the basis for action to limit or prohibit withdrawals. However, the management problems of ground water in the state remain divided into two categories: those in the declared basins where administrative procedures apply and those arising in areas beyond the State Engineer's jurisdiction. In the first category of declared basins, the statutory methods of appropriation, change in point of diversion, method or place of use and the transfer of rights are exclusive. In other areas, the administrative process does not apply. This situation is fully recognized by the State Engineer in his statement to the Senate Select Committee:

> The legislature has declared all of the ground waters of the State to be public waters, but the State engineer has assumed administrative control over ground waters only in the areas indicated [on a map showing the declared basins]. A State permit is not required for the drilling of wells or the appropriation of ground water in other areas of the State.

Although no decisions have tested the 1953 amendment, it seems to have removed entirely the lingering hope that the English landowners' rule of unlimited withdrawals might still be revived on the basis of the dicta in *Keeney v. Carillo* decided in 1883 and *Vanderwork v. Hewes & Dean* in 1910. The amendment did not improve management and inventory procedures, however,
since the State Engineer was not granted jurisdiction over all public ground waters. But this problem is not as great as it appears since the State Engineer has brought or is bringing all areas of known deposits within the statutory control pattern provided by the earlier legislation through the declaration or extension of basins.

One 1953 amendment, further amended in 1959, has dubious utility or, perhaps, validity. It prohibits the pumping or transportation of ground water outside the State. The 1959 amendment expressly excepts tank truck hauling in oil and gas exploration. The owner of a well involved in this kind of operation has the duty of ascertaining the use of the water and he must keep records. This amendment declares that "the amount of water withdrawn from any one (1) well for such exploration shall never exceed three (3) acre feet." This provision must mean that the limit is three acre feet in any one year. This conforms with the State Engineer's rule of thumb for allocating water to agricultural uses.

Important 1957 and 1959 amendments relax the forfeiture provision by granting the State Engineer authority to grant extensions of time to one year and except lands under the Soil Bank Act. It should be noted that the 1957 amendment to the surface water forfeiture statute does not contain the provision granting the State Engineer authority to extend the time up to one year for putting water to beneficial uses. The ground water forfeiture statute has never been precisely construed by the court as applied to non use. In State ex rel. Erickson v. McLean the court held that continuous non use through waste, for more than four years was the basis for forfeiting the appropriative right. However, the court laid more stress on the specific artesian well statutes which define waste and provide penalties for violation than on the forfeiture statute. The court did not mention the statute on abandonment of an artesian well for more than four years which makes waste from such a well a public nuisance. The contention was rejected that the irrigation of native grass and use of the well for livestock watering were beneficial uses so as to negate the intent element of abandonment.

136. See Senate Select Comm., supra note 114, at 233: "The locations of all large supplies of ground water in New Mexico are generally believed to be known and an increase in ground-water usage in the next 20 years comparable with that of the last 20 years cannot be predicted."


141. 62 N.M. 264, 308 P.2d 983 (1957).


The 1959 amendments generally emphasize emergency situations, replacement wells within 100 feet, or more than 100 feet from the original wells, supplemental wells and save rights in areas where new basins are declared or old basin boundaries are extended. Well owners who have not made beneficial use of the supply were given “ninety [90] days from the date of first declaration of such basin by the state engineer, or its enlargement . . . or the effective date of this act, in which to file with the state engineer plans for the development of such water. . . .” The amendments also require the applicant’s plan to state the time for completion of his plans “not to exceed four (4) years unless the time is extended by the state engineer. . . .”

Another section of the 1959 amendments expands the definition of “person” to “include corporations, cities, towns and villages and other legal entities” that may wish to make applications for water or are included within a ground water basin. Hearing procedures, objections to applications and the publication requirements are also covered in another 1959 amendment. Denial of a permit on the ground that it “would impair existing water rights” is the same as provision they found in the older ground water legislation. Priorities are also established by the new amendments. Appeals from the State Engineer’s “decision, act or refusal to act” are provided for “within thirty [30] days after notice of such decision, act or refusal to act, and unless such appeal is taken within said time, the action of the state engineer shall be final and conclusive.” This language is the same as that found in the surface water statute which was later incorporated in a short section of the ground water act of 1931. This provision of the earlier statute was construed in Plummer v. Johnson which held that the appeal to the district court contemplated by the statute does not require the granting of the appeal by the district court or by the State Engineer. No formal application or allowance of appeal is necessary. The procedure required is service on the State Engineer and interested parties with a notice of appeal within 30 days of the State Engineer’s decision. The 1959 ground water

151. Ibid.
159. 61 N.M. 423, 301 P.2d 529 (1956).
statute amendment\textsuperscript{160} spells out the procedural requirements and is identical with the old surface water statute\textsuperscript{161} except for the reference to "person" rather than "applicant," and the amount of the docket fee. This same section contemplates a de novo proceeding in the same manner as the earlier surface water statute. In \textit{Spencer v. Bliss}, the court expressed a preference for the findings of the State Engineer in a de novo proceedings by saying:

\begin{quote}
We are satisfied we need not here decide just what effect the decision of the State Engineer should be given in the de novo trial provided for the hearing of an appeal. . . . We think we have demonstrated, however, it will be an unfortunate day and event when it is established in New Mexico, that the district courts must take over and substitute their judgment for that of the skilled and trained hydrologists of the State Engineer's office in the administration of so complicated a subject as the underground waters of this state.\textsuperscript{162}
\end{quote}

It would appear from this statement that the hearing before the State Engineer is much more than a rehearsal in preparation for an appearance in district court. A recent case, \textit{Heine v. Reynolds},\textsuperscript{163} seems to do away with de novo in this context of the statute which says, "evidence taken in hearing before State Engineer may be considered as original evidence." The case held that the State Engineer had not acted arbitrarily, capriciously, or unreasonably in denying an application to change the location of a well and the place of use of water. His findings on impairments were supported by substantial evidence. The court rejected the notion that the impairment had to be "substantial." In this case the question went to problems of salinity. Apparently, the rule is that, without denying the character of the district court trial as de novo, the court will decline to overturn the decision of the State Engineer unless it is without support of the evidence, is contrary to the evidence, or is the result of fraud or misapplication of the law, as was stated by the Arizona court in \textit{Manning v. Perry},\textsuperscript{164} from which the court in \textit{Heine} quoted.

The recent \textit{Albuquerque} case involved the introduction of new evidence in support of the claim of a pueblo water right, at the hearing before the district

\begin{quote}
\textsuperscript{160} N.M. Stat. Ann. § 75-11-10 (1953).
\textsuperscript{162} 60 N.M. 16, 28, 287 P.2d 221, 228 (1955). One is reminded of the Wyoming court's approval in 1900 of the statement in Kinney, § 493: "In the state of Wyoming, at least, there will no longer be the ludicrous spectacle of learned judges solemnly decreeing the right to from two to ten times the amount of water flowing in a stream, or, in fact, amounts so great that the channel of the stream could not possibly carry them; thus practically leaving the questions at stake as unsettled as before." Farm Inv. Co. v. Carpenter, 9 Wyo. 110, 61 Pac. 258 (1900).
\textsuperscript{163} 367 P.2d 708 (N.M. 1962).
\textsuperscript{164} 48 Ariz. 425, 62 P.2d 693, 695 (1936).
\end{quote}
court. The Supreme Court in reversing the district court noted that "No evidence was offered at the hearing [before the State Engineer] in support of the claim of the city to the pueblo water right." The district court, upon the evidence presented in the trial, concluded, in part, the following:

4. That the State Engineer has no jurisdiction to impose upon the city . . . any requirement of retiring surface water rights . . . because the said City, as successor of the pueblo San Felipe de Albuquerque, has an absolute right. . . .

11. That the State Engineer has no power to impair or disturb the ancient water rights of the City of Albuquerque, New Mexico, which were vested and existed prior to 1907.

In reversing the district court the Supreme Court stated that:

Proper disposition of this appeal does not require that we attempt to determine and delineate the exact character or extent of the powers which are vested in the state engineer, nor the exact character and extent of a trial "de novo" which is had in the district court on an appeal from an order or decision of the state engineer under the provisions of § 75-6-1.

The last section of the 1959 amendments is somewhat ambiguous in the use of the term "domestic wells." The provision reads: "This act shall in no matter [sic. (manner?)] affect subsequent stock waterings, stock wells and domestic wells." Obviously this section is qualified by the 1957 amendment exempting driven wells up to 23/8 inches from the licensing provisions. However, a "domestic well" of larger size and drilled is not per se excepted by the provision enacted in 1959. This is shown by the conditions stamped on the applications filed with the State Engineer.

The statutes on artesian conservancy districts were amended in 1957 to provide for district enlargement because of the extensions of the boundaries of an artesian basin by the State Engineer. Upon petition, notice and hearing, the district court is empowered to include additional lands within the conservancy district.

165. Albuquerque case, supra note 11.
166. Ibid.
167. Ibid.
170. See Form WR-15, Application for Permit.
C. Judicial Decisions and Administrative Controls

1. The Police Power and Enforcement Procedures

In *State v. Myers*, the 1949 amendments requiring well drillers to be licensed and bonded were tested in criminal actions. The land owner and the unlicensed driller were convicted under penal provisions of the new statutes and the cases were consolidated on appeal. The land owner had permitted the driller to "drill, deepen, repair or clean" and existing well in the recently declared Rio Grande Underground Water Basin. The court concluded that the new sections of the statutes had been violated. These provisions were found by the court "to be legitimate exercise of the police power of the State." The appellant questioned the legality of the State Engineer's order declaring the basin for the reason that it was, as appellants claimed, "absurd on its face" because "the Rio Grande Valley from the Colorado State Line to the Elephant Butte Dam is not and cannot be an underground basin" within the meaning of the statute requiring the designation of "reasonably ascertainable boundaries" of a basin. The appellants had introduced no expert testimony but requested the court to employ a theory of judicial notice in order to find that the declaration of the basin was a "scientific absurdity." The court rejected this argument by saying that "... in view of the state of the record in this case, we must presume that the action of the state engineer is correct . . ." and added that "For the purpose of this opinion we recognize that the appellant Myers may well have a valid existing water right pre-dating the State Constitution." The Court then referred to the specific matter before it:

The cases cited by the appellants do not hold that the State may not in exercise of its police power require a license of any person drilling a well in any area determined by the state engineer to be an underground source of the boundaries of which have been determined to be reasonably ascertainable.

---

172. 64 N.M. 186, 326 P.2d 1075 (1958).
174. The basin was declared Nov. 29, 1956, by Order No. 65 of the State Engineer of New Mexico.
176. *Id.* at 191, 326 P.2d at 1078.
177. *Id.* at 192, 326 P.2d at 1079.
178. *Id.* at 191, 326 P.2d at 1078.
179. *Id.* at 192, 326 P.2d at 1079.
180. Ibid.
181. *Id.* at 193, 326 P.2d at 1080
182. Ibid.
prosecuted and included the 1957 amendment\textsuperscript{183} which exempts driven wells not in excess of $2\frac{3}{8}$ inches in diameter. On rehearing the court recognized one point "which we feel requires clarification."\textsuperscript{184}

The court stated that:

The theory on which the case was tried was that deepening a well constituted drilling a well. Nowhere in the court below or in the brief on the appeal was it argued that the appellants' acts were not with the statutes. . . . Our opinion is to be construed in that light. We are not deciding that the State Engineer has the authority to require a permit for the cleaning or repairing of a well as that phase of his authority is not before us on this appeal.\textsuperscript{185}

Nowhere in the opinion did the court refer to \textit{Eccles v. Ditto}\textsuperscript{188} which upheld the police power of the state under a 1909 statute which declared waste from an unrepaired artesian well to be a public nuisance. The discussion of the nature of the police power in the earlier New Mexico case is as appropriate and persuasive as the statements from the courts of Washington and Utah found in the principal case.

\textit{Rhodes v. State ex rel. Bliss}\textsuperscript{187} was an injunction violation-contempt proceeding. The court found that the contempt was civil and held that the State Engineer had the right to seek an order restraining the defendant from preventing the State Engineer's staff from entering upon his land for the purpose of making an hydrographic survey. The court affirmed the trial court even though it was admitted that there may have been harmless error in issuing a restraining order without reciting the reasons for not requiring security as stated in Rules 65 and 66(a), Rules of Civil Procedure. The court added that these provisions were unlike any found elsewhere. The court concluded that the order was not void.

\textit{State ex rel. Bliss v. Potter}\textsuperscript{188} was an action by the State Engineer to enjoin use of water from the Roswell Basin on two farms east and southeast of Roswell. The trial court denied the injunction on the ground that defendant had existing rights. An error in the alleged acreage of one tract was confessed on appeal and that part of the judgment was reversed. Left for decision was the question of water rights on two tracts on the farm southeast of Roswell. On one tract the

\textsuperscript{184} State v. Myers, 64 N.M. 186, 195, 326 P.2d 1075, 1081 (1958).
\textsuperscript{185} Ibid.
\textsuperscript{186} 23 N.M. 235, 167 Pac. 726 (1917).
\textsuperscript{187} 58 N.M. 579, 273 P.2d 852 (1954).
\textsuperscript{188} 63 N.M. 101, 314 P.2d 390 (1957).
court found that the evidence supported the existence of a right. On the other hand, the court held there was no right. The court held that question of the State Engineer's authority could not be raised on appeal where the trial had proceeded only on a fact issue which, in the case of the second tract, was whether or not certain acreage had in fact been continuously irrigated. The court said:

The evidence offered by the defendant as to the use of water on Tract A is vague and unsatisfactory when we weigh it in opposition to two hydrographic surveys and one aerial photographic survey made in different years, showing this tract to be unirrigated salt grass land; and these facts taken in connection with the acquiescence of the former owners in the permit and license for the new well compel us to hold the trial court erred in its findings that this tract had a valid water right.

We have a different situation as to Tract B.

The court upheld the water right on Tract B and commented:

The aerial photograph is rather dim and unsatisfactory, but it is clear there were ditches on the exterior from which this tract could have been irrigated.

* * * * *

We do not want to be understood as disparaging these hydrographic surveys made by the State Engineer and his staff at a time when there was no real dispute as to the tracts being irrigated. They were made by competent engineers on the ground and from the best information available, and are therefore deserving of serious consideration by fact finders.\textsuperscript{189}

The type of evidence relied upon and the court's explanation of its attitude toward such evidence emphasizes the need for adequate technical preparation in water right controversies.

\textit{State ex rel. Bliss v. Greenwood}\textsuperscript{190} upheld a contempt conviction arising out of withdrawals from wells drilled without a permit. The court held that this was a criminal contempt governed by the criminal law.\textsuperscript{191} Thus, guilt beyond a reasonable doubt had to be established. Although the trial court had held the acts were a civil contempt, the Supreme Court decided that this was harmless

\textsuperscript{189} \textit{Id.} at 104, 314 P.2d at 392.

\textsuperscript{190} 63 N.M. 156, 315 P.2d 223 (1957).

\textsuperscript{191} \textit{Id.} at 159, 315 P.2d at 225: "Tested by the above rules we agree with appellant that this proceeding was one for criminal contempt, and, therefore, was governed by rules of criminal law."
error because guilt beyond a reasonable doubt had been established by substantial evidence. The defendant contended that the district court had no power to fine for contempt in amount exceeding $50.00 without a jury trial as provided by an early territorial statute. The court held that the old statute was invalid as in conflict with the Organic Act of 1850 and in not setting proper limits to the court's inherent power to punish for contempts. The decision emphasized the rules previously considered in *Rhodes v. State ex rel. Bliss*;¹⁹² (1) that the merits of an injunction are not open to question in a contempt proceeding subsequent to final judgment, (2) the distinction between civil and criminal contempt which is (3) "the purpose for which the power is exercised."¹⁹³ In *Rhodes* the citizen was held in civil contempt for interfering with the State Engineer's hydrographic survey. In *Greenwood* the purpose was punitive rather than merely to coerce compliance with an order as in *Rhodes*. The court recognized that "the line of demarcation between civil and criminal contempt [is] somewhat hazy."¹⁹⁴ However, the court accepted the polar concepts of "punitive" versus "remedial" and held Greenwood guilty of criminal contempt.

*State ex rel. Erickson v. McLean*¹⁹⁵ is clearly a leading case in New Mexico. This was an action by the State Engineer to enjoin uncontrolled flow from an artesian well in the Roswell area. The trial court held for the landowner. The Supreme Court reversed and held that allowing water to run 24 hours a day over grazing land without a constricted irrigation system was a non beneficial use. On that basis the irrigator lost his appropriative right by forfeiture under the 4 year statute. This case is important in defining "waste" in a particular context. The court said:

... [I]t is important to observe that, no matter how early a person's priority of appropriation may be, he is not entitled to receive more water than is necessary for his actual use. An excessive diversion of water, through waste, cannot be regarded as a diversion to beneficial use, within the meaning of the Constitution. Article 16, §§ 1, 2 and 3 and § 75-11-2 of 1953 Compilation. Water, in this state, is too scarce, and consequently too precious, to admit waste.

* * * * *

The amount of water which has been applied to a beneficial use is, of course, a measure of the quantity of the appropriation. Waste of water must not be practiced. Wasteful methods, so common among the early settlers do not establish a vested right to their continuance. Such methods were only deemed a privilege, 'permitted merely because it

---

¹⁹³. 63 N.M. 156, 158, 315 P.2d 223, 225 (1957).
¹⁹⁴. Ibid.
could be exercised without substantial injury to any one.' . . . The use must not only be beneficial to the lands of the appropriator, but it must also be reasonable in relation.

All water within the state, whether above or beneath the surface of the ground belongs to the state, which authorizes its use, and there is no ownership in the corpus of the water but the use thereof may be acquired and the basis of such acquisition is beneficial use. . . . The state as owner of water has the right to prescribe how it may be used. This the state has done . . . beneficial use is the basis, the measure and limit to the right to the use of water. The Legislature has also the power to provide that the right to use of water would be lost and forfeited by four years of continuous non-beneficial use. Sec. 75-11-8.196

The court quoted from Kinney197 at length on the distinction between forfeiture and abandonment of water rights, pointing out that the element of intent is necessary in abandonment but unnecessary in a forfeiture situation. The case holds that continuous non-beneficial use for four years, through waste, results in forfeiture of an appropriative right.

The principal case was cited in State ex rel. Bliss v. Davis198 where a surface water right was alleged to have been forfeited. The question was raised as to estoppel of the state to claim a forfeiture. The court found it unnecessary to answer the question and said: "Hence, we pass a decision on this matter raised in the case. Compare, State ex rel. Erickson v. McLean, 62 N.M. 264, 308 P.2d 983."199

In view of the court's reliance on Kinney which emphasizes that forfeiture requires some failure on the part of the appropriator to do some affirmative act, and because of the specific wording of the New Mexico statutes,200 it seems clear that the burden of proof in working a forfeiture rests on the state. But in State ex rel. Reynolds v. Mitchell,201 an adjudication proceeding, the court observed that "The evidence presented (by the irrigator) is sufficient to establish that the tract did not lie idle for any consecutive four year period."202 In State ex rel. Erickson v. McLean203 the court agreed that estoppel and laches cannot be invoked against the state. However, the burden of proving the facts of non-

196. Id. at 270, 271, 308 P.2d at 987.
199. Id. at 334, 319 P.2d at 215.
201. 66 N.M. 212, 345 P.2d 744 (1959).
202. Id. at 214, 345 P.2d at 745.
use or non-beneficial use, as was done in McLean, may be difficult where irrigation has been stopped for a period of years and then resumed again. Hydrographic surveys and aerial photos would of course still show evidence of irrigation as indicated in State ex rel. Bliss v. Potter.

2. Administrative Process and Ground Waters

As stated at the beginning of this article, there are currently 19 ground water basins in the state of New Mexico. Physical conditions in all of them obviously are not the same. However, the applicable legislation is general in scope. Judicial decisions have established additional principles as well are specific rules. These decisions were reached on the basis of statutory sanctions and policy as construed, applied or adopted, in several cases, by the State Engineer under his statutory authority and as applied to the physical conditions of supply and actual uses in a particular basin. For the purpose of analyzing the decisions the basins of the state may be divided generally into those which are rechargeable and thus can be managed on some theory of "safe yield," those that are being "mined" on a rational basis, and those in which the relationship of surface and ground water supplied receives special attention. The areas outside of declared basins contain public ground water and are not beyond the State Engineer's technical interest. He must decide initially what area shall become a new basin, even though the area is not within his statutory jurisdiction until the basin is declared.

The trial courts on the whole have had to look for guidance in their decisions to the principles announced in decisions which have determined rights and policy within a few basins.

204. 63 N.M. 101, 314 P.2d 390 (1957).
205. See note 92 supra.
206. See Senate Select Comm., supra note 114, at 234, Statement of State Engineer of New Mexico: "The Roswell artesian basin is susceptible to operation on a continuous yield basis but the present withdrawal of about 440,000 acre-feet per year amounts to about 190 percent of the currently estimated safe yield. . . ."
207. See Senate Select Comm., supra note 114. "In the declared Animas, Mimbres, Playas, Fortales, Lea County, and Estancia Basins, as well as in other areas of intensive ground-water irrigation, water is being withdrawn primarily from storage, and water levels will continue to decline. . . . The policy of the State is, insofar as possible, to limit withdrawals in these areas to that which can be sustained for a reasonable payout period, usually about 40 years.

"It is desirable, of course, that the groundwater resources be available to future generations in perpetuity; however, the mining of water can be justified as readily as the mining of any of our other mineral resources such as uranium, oil, or coal. . . ."

208. The State Engineer's Rio Grande Underground Basin Order No. 65 of Nov. 29, 1956, is based on the theory of interrelationship of surface and ground supplies. In the Roswell and Carlsbad basins the relationship is also recognized.
209. See text at note 133 supra (quote from Senate Select Committee's Comm. Print No. 6). See also N.M. Stat. Ann. §§ 75-11-1 to -22 (1953).
Carlsbad Basin

Spencer v. Bliss\(^{210}\) arose in the Carlsbad Underground Water Basin which is an area of "continuous yield" and where considerable attention has been paid to the interrelationship of surface and ground supplies. There was a denial by the State Engineer of two applications to move ground water rights to a new location. On appeal to the district court the holding was for the applicant. The Supreme Court reversed and held that the applicant had not sustained the burden of proof that the change requested would not impair existing rights. As a result, the burden of proof rule seems well established.\(^{211}\) However, the case is important for additional reasons. The expert testimony of the State Engineer, which is quoted by the court, directs attention to administrative policies. The court's statements reveal specific attitudes toward the administrative process. The case involved two applications to change well locations by the same individual. These were treated by the district court as if they had been consolidated. The applications related to irrigation wells drilled in 1944 and in 1947, both within the same section and township. The wells had been drilled before declaration of the Carlsbad basin. Declarations of ownerships had been properly filed. The supply from the wells was used in conjunction with sewage effluent from the Carlsbad Air Base. The wells supplying the base had also been drilled before declaration of the basin. When the Air Base was closed the supply of effluent stopped. At this time, the applicant requested approval from the State Engineer to move his rights to an area about 1 1/2 miles away. The opinion of the court states that existing rights in the "move-to area" would not be materially affected. However, it was also stated that in the move-to area "there are more wells in operation than are operating in the area from which the use of water is now authorized." Water tables in both areas showed "no substantial difference." The State Engineer had advised the applicant by letter in 1950 that his rights would be recognized "only so long as, and at times when, sewage was available for diversion and provided always that the sewage water was used to the extent of its availability." In substance, the letter stated that the ground water right "was merely supplemental to the sewage source and would become void when and if such sewage source was eliminated."

The trial court had reversed the State Engineer's decision. The applications were granted on the grounds (1) that they would not impair existing rights, and (2) that the State Engineer's letter was an improper limitation on the applicant's water rights under New Mexico law. The Supreme Court stated that:

It will not be our purpose . . . to question plaintiff's ownership

\(^{210}\) 60 N.M. 16, 287 P.2d 221 (1955).

\(^{211}\) Id. at 21, 287 P.2d at 224: "We think there can be no doubt that under the plain language of this statute [75-11-7] the burden of proof in the respect mentioned rests squarely upon the plaintiff. . . ."
of the water rights claimed. We . . . assume for purpose of our decision his ownership of the water rights claimed. This eliminates . . . the burden said to rest on him of showing the nature and extent of his rights. It leaves with him, however, the unsustained burden, if it rests on him, of establishing that the granting of his application will not impair other existing rights.

We think there can be no doubt that under the plain language of this statute (75-11-7) the burden of proof . . . rests squarely upon the plaintiff. We are equally satisfied that, as claimed by defendant, the record is absolutely devoid of proof that existing rights are not, or will not be, impaired . . . such evidence as there is touching the issue would seem by implication to support an inference that such rights would be impaired.212

The hydraulic engineer for the state testified that in the move-from area there were "three wells in Mr. Spencer's northeast quarter of section 25 and lands having—lands totaling about 140 acres."213 In the move-to area the same witness testified: "I have plotted 11 wells within the one mile radius and then . . . three more that lie just outside of it . . ."214 On the water levels the same expert testified: "[F]or the year 1947, the water level declined about 13 feet in the move-to area. In the year 1948, the decline was about 4 feet. During 1949, it rose something like about five feet. During 1950, it rose about two feet. In the year 1951, it declined about 18 feet."215

Later the witness was asked:

Q. Would you say in your opinion that the move-to area is an area of higher concentration of irrigation as well as toward an area of greater decline in the water table?
A. It is certainly toward an area of greater intensification of pumps and farming equipment and it approaches the heavy declines south of that area.

Q. Do you know if the State Engineer has ever allowed a move of this sort toward where there is that much difference in decline toward a . . . heavier concentrated irrigation?
A. Well, I can't say that he has never. It certainly is against his policy to.

212. Id. at 21, 287 P.2d at 223, 224.
213. Id. at 21, 287 P.2d at 224
214. Id. at 22, 287 P.2d at 224.
215. Ibid.
Q. Will you state what his policy is in that regard?
A. Well, his policy is to not permit moves into more dense areas of
pumping or toward more—toward more dense areas of greater in-
tensity—density, in pumpage or diversion from ground water.216

On cross examination, the same expert testified that the decline in the water
level in the move-to area was due substantially to the pumpage. It was also
admitted by the State's expert that the wells in the move-to area had permits
subsequent in time to the applicants. The implication of the testimony, which
indicated that the State Engineer had allowed people with junior rights to drill
wells in the basin, was overcome by the court's reference to the published notice
of the State Engineer which stated that in the Carlsbad basin appropriation
could be made on lands with existing surface rights.217 The ground-surface
water interrelationship is therefore recognized in the Carlsbad basin.

Lea County Basin

The ramifications of the well spacing policy outlined in *Spencer v. Bliss*,218
are even more significant in the “mined” ground water areas of the state. The
Lea county basin in Lea, Chaves, and Eddy counties of eastern New Mexico lies
in the High Plains Region.219 The boundaries of the basin were delineated in
1931 and the basin was closed to appropriation in 1948. In 1951 the boundaries
were extended. The area covers some 2,183 sections and extends about 45 miles
along the Texas state line. In 1955 a study of the basin by Thomas of U.S.G.S.
resulted in the following comment:

Accordingly, the State Engineer extended the boundaries of the
declared basin to include the entire ground water reservoir in the
Ogallala formation in Lea County and set 40 years as a minimum
period for depletion of the reservoir. Applications for new wells are
now approved in townships where existing wells would not unwater
the formation within that period, and encouragement is given to trans-
fer of rights from areas of more concentrated pumpage into those rel-
atively undeveloped townships. Thus the factor of area has become a
criterion in appropriative water rights in Lea County, for new wells
can be drilled only in the parts of the reservoir where the water could
not be extracted by wells under prior permits.220

The State Engineer had set up procedures as a result of litigation out of which

---

216. *Id.* at 22, 23, 287 P.2d at 224, 225 (emphasis added).
217. *Id.* at 25, 287 P.2d 226 (1955) (emphasis the court's).
218. 60 N.M. 16, 287 P.2d 221 (1955).
219. See Harris, *Water Allocation under the Appropriation Doctrine in the Lea
County Underground Basin of New Mexico*, in *The Law of Water Allocation in
the Eastern United States* 155 (1958). See note 117 *supra*.
347, at 12 (1955) (emphasis added).
grew an extensive investigation of the Lea County basin. The report prepared had stated that:

Present authorized irrigation plus some of the major non-irrigational uses may be expected to prove about 96,000 acres of equivalent irrigational right. Assuming a period of 60 years to theoretically de-water the basin and disregarding recharge, it is found that some 218,750 acre feet of water annually is available for appropriation in 58 of the 71 townships of the basin.\(^{221}\)

In two decisions of the district court in Lea County\(^{222}\) the administrative procedures chosen by the State Engineer were approved. These procedures in effect implement the policy outlined by Thomas. In *State v. Alexander*\(^{223}\) which arose in the basin after the new regulations were imposed, no challenge was made to the new administrative procedures. The trial court and the Supreme Court assumed the procedures were correct. The action was for a declaratory judgment to determine the order of priorities of various applicants. The State Engineer had made a finding and published an order in 1952 to the effect that additional water was available in a particular township. Previously, in 1952, one Collier had filed an application to appropriate 480 acre feet for irrigation. An applicant named Young also filed a subsequent application. The court said:

Admittedly, prior applications not involved here will, at the consumptive use rate employed by the engineer, so exhaust the available water that there will remain only enough to grant either the Collier or the application of Appellee Young, subsequently filed, but not both.\(^{224}\)

The court concluded that Collier was entitled to priority and ordered the trial court to grant the priority. In a discussion of this decision and the general problems of the Lea County basin it has been stated that “there is no possibility of granting an appropriated right in perpetuity.”\(^{225}\) Thus, the administrative procedures designed with the physical conditions in mind, have resulted in a new dimension to the appropriation doctrine which has been called “allocation”\(^{226}\) and has been compared with methods for spacing wells in the oil fields.

Additional information and voluminous testimony were elicited regarding the Lea County basin, and policies of withdrawal in certain areas of the basin, in

---


\(^{222}\) Lawrence v. State Engineer, Lea County, Cause No. 9979. Cooper v. State Engineer, Lea County, Cause No. 9565.

\(^{223}\) 59 N.M. 478, 286 P.2d 322 (1955).

\(^{224}\) Id. at 479, 286 P.2d at 323.

\(^{225}\) Harris, *supra* note 219, at 158.

\(^{226}\) *Ibid.*
proceedings before the State Engineer at Lovington in February, 1960.\textsuperscript{227} Numerous protestants and intervenors were heard, including several municipalities, which were objecting to new appropriations for certain purposes in the basin. The hearing constituted a full re-examination of the procedures and policies devised on the basis of data available and with the help of technical studies. These policies were the ones approved by the district court in the \textit{Lawrence} and \textit{Cooper} cases. The administration of this important basin, and others also, is dependent upon these policies.

\textit{Portales Basin}

The Application of \textit{Brown},\textsuperscript{228} decided in 1958, arose in the Portales Basin of Roosevelt County. The case previously had gone to the Supreme Court on a question of appeal procedure that was answered in \textit{Plummer v. Johnson}.\textsuperscript{229} \textit{Brown} originated in the granting of an "emergency permit" by the State Engineer to change the location of a well which in fact had already been drilled in the new location. The permit was to be withdrawn if there was a protest. A protest was filed and the State Engineer restrained the use of the well. Thereafter, a hearing was held by the State Engineer on the propriety of the change and a permit was granted. The protestant then appealed to the district court and had summary judgment in his favor. Applicants and the State Engineer appealed. The court held that compliance with the statute \textit{after} the change in the location of the well was improper:

\begin{quote}
It is quite patent that the provisions of [the statute] contemplate application, notice, hearing and approval \textit{prior} to change in well location. The language can bear no other interpretation.\textsuperscript{230}
\end{quote}

The court went on to explain that the State Engineer:

\begin{quote}
\ldots needs a reasonable degree of flexibility and opportunity for the exercise of sound discretion in the performance of his duties. But his authority is no more than the legislature had granted, either expressly or by necessary implication.\textsuperscript{231}
\end{quote}

The court cited from the State Engineer's own Manual of Regulations\textsuperscript{232} and

\begin{footnotes}
\textsuperscript{227} See State Engineer files Application No. L-4174, L-4174X, L-4185, L-4185X through L-4185X10.

\textsuperscript{228} 65 N.M. 74, 332 P.2d 475 (1958).

\textsuperscript{229} 61 N.M. 423, 301 P.2d 529 (1956).

\textsuperscript{230} Application of Brown, 65 N.M. 74, 77, 332 P.2d 475, 476 (1958) (emphasis the court's).

\textsuperscript{231} \textit{Id.} at 77, 332 P.2d at 477.

\end{footnotes}
the writings of his attorney to the effect that the legislation clearly foreclosed the granting of any "emergency permit" in advance of the procedures prescribed by statute. The court then added:

It may be that the State Engineer should have the authority to issue emergency permits for changes in well locations. But . . . such authority does not exist under the general rule-making power delegated to him. . . . It is up to the legislature to grant such authority if it deems it necessary or desirable.

In 1959 the Legislature provided necessary and desirable emergency powers.

The Brown case actually decided that the subsequent hearing, at which it was found that the rights of others would not be impaired, had cured the original procedural defect. The court went to some length to point out that the opinion was

. . . in no way to be construed as condoning the practice of drilling a well at a new location without first obtaining a permit to do so. . . .

While the opinion did little more than clarify the matters discussed, and remanded with directions to dissolve the troublesome injunction, the statement about what constitutes an impairment of water rights has implications. In his motion for rehearing the protestant had stated that the findings of the State Engineer disclosed that the new well produced a drawdown of 3.9 feet at the protestant's well which, it was contended, amounted to an impairment. The court's opinion on the rehearing stated that:

Appellee has apparently misconstrued what he calls the "Rule" as to impairment. The lowering of a water table in any particular amount does not necessarily constitute an impairment of water rights of adjoin-appropriators. The amount that the water table is lowered is an important factor, but in addition all characteristics of the particular aquifer must be considered along with well locations. Hence we find nothing in the Hobson decision . . . that is inconsistent with our holding in this case.

This statement of the court would seem to lead to the conclusion that on a retrial of the case the court would require the applicant to sustain the burden


237. Id. at 80, 332 P.2d at 479.
of proof and persuasion that his new well did not impair existing rights. The trial court would also have to make a determination as to "whether the findings and order of the State Engineer were arbitrary, capricious, unreasonable or not supported by substantial evidence" as suggested in the Brown opinion.\textsuperscript{238} However, the sequel to the decision gives no clear answers. The mandate was filed Dec. 18, 1958. On Sept. 5, 1959 the State Engineer filed an instrument entitled "Response," containing his findings which were before the trial court at the original hearing and in which the State Engineer found that the protestant's well had been in "imminent need of repair and deepening prior to the emergency drilling of applicant's new well."\textsuperscript{239} The State Engineer had also found that although the lowering of the level of the protestant's well was significant, it was not of such magnitude as to render the well useless for irrigation purposes. The protestant has taken no further action. This is understandable in view of the language of the court quoted above regarding the need for a determination of the arbitrary, capricious or unreasonable character of the State Engineer's order. Further action would obviously be of little help since the Supreme Court held that the well had been illegally drilled and pumped; that the State Engineer had no authority to allow such acts; \textit{but that the subsequent hearing had cured any defects of procedure}. Thus the decision stands alone and remains unreconciled with statements in \textit{Spencer v. Bliss}\textsuperscript{240} and \textit{Application of Hobson}.\textsuperscript{241}

\textbf{Roswell Basin}

\textit{Application of Hobson},\textsuperscript{242} decided in 1958, involved an application to change well locations and places of use in the Roswell Artesian Basin. The State Engineer denied the applications and was sustained by the district court. The Supreme Court affirmed on the ground that applicant had not shown that the proposed move would not impair existing rights: "Not only is there a failure of proof in this respect, but the evidence is all the other way. . . ." The proposed move-to area, about 20 miles away, was in the upper part of the basin. The movement of the water was from north to south and the upper area could not be replenished once the waters passed it. The evidence showed a decline of about 10 feet in the proposed move-to area and a decline of 50 feet in the move-from area during the period from 1940 to 1955. There was also a greater concentration of wells in the move-from area. The applicant contended that so

\begin{itemize}
  \item 238. \textit{Ibid.}
  \item 239. References to the sequel in this case are contained in correspondence with the trial judge, Hon. E. T. Hensley, Jr., dated Jan. 21, 1961.
  \item 240. 60 N.M. 16, 287 P.2d 221 (1955).
  \item 241. 64 N.M. 462, 330 P.2d 547 (1958).
  \item 242. \textit{Ibid.}
\end{itemize}
long as no more water was taken in one part of the basin than in the other there could be no impairment of existing rights. The court replied:

No doubt this position is based on the assumption that the waters of the basin fluctuate evenly throughout, but such is not the case. On the facts before us the position is untenable. All parties agree that the waters of the basin are over-appropriated and have been for many years; hence, it follows that the further use of waters of the moved-to area would most certainly impair rights of prior appropriators, particularly those of that area.248

This endorsement of an administrative decision emphasizes not only the protection on existing uses but is also a general conservation measure as shown by the fact that no more water would actually be withdrawn as a result of the move to a new area. This definition of property rights, within the hydrologic context, is important. The historic surface water analogy to the rule applied here is found in the cases which allow a change in the point of diversion along a stream provided it will not adversely affect existing rights. The courts have long held that a water right includes the right to change the point of diversion but not to a prior user’s detriment.244

*State ex rel. Reynolds v. Mitchell*245 is of primary interest as an adjudication proceeding. However, it re-emphasizes the rules laid down in the earlier enforcement and police power decisions. In *Mitchell* the State Engineer had filed a petition to adjudicate ground waters and for appointment of a special master. The master filed his report and made recommendations and the court entered an order approving the report. The Mitchells then moved to set aside the report. This motion was granted. Additional evidence was then taken on their alleged claim to additional water for irrigation of a 40 acre tract. On the basis of the additional evidence the master found an underground water right. The trial court upheld the finding and the State Engineer appealed. The Supreme Court remanded for a specific finding as to which particular well was used to irrigate the 40 acre tract. However, the clear conclusion of the court was that if it was irrigated from the well drilled after 1931, when the basin was closed, there was no water right. The testimony indicated it was being irrigated from two wells. The second well that was drilled and approved in 1935, after the basin was closed in 1931, had a permit conditioned upon use of water on a different tract. In 1937 a permit to appropriate for use on the 40-acre tract in question was

243. *Id.* at 463, 464, 330 P.2d at 548, 549.
denied. The testimony indicated that the original well on the tract in question had collapsed. Thereafter, the land was irrigated from the 1935 well. The court said:

The evidence presented is sufficient to establish that the tract did not lie idle for any consecutive four-year period.248

The "crucial question" was:

[W]hether the change in well location from Section 14 to Section 15 was accomplished prior to August 21, 1931, the date the Roswell Artesian Basin was declared. And on this question the trial court made no finding. The court simply determined that the well in Section 14 was abandoned sometime after 1927 and the tract in question was thereafter irrigated from a well located in Section 15.247

After 1931, the court pointed out, a change in well location in a declared basin could be done only in compliance with the statutes:

To hold that a person having a vested underground water right prior to the declaration of a basin could, with impunity, forever after change his well location at will without regard to whether the change would impair the existing rights of other appropriators would be eminently unreasonable. See Application of Brown.

The reasonable limitations on well location changes imposed by Section 75-11-7, supra, do not have the effect of confiscating vested rights. The owner of a vested right could, and can, continued to exercise his existing right based upon his previous application of water to beneficial use. What he could not, and cannot, do is change the location of a well used to irrigate a tract with a vested right without following the statutory procedure. Application of Brown, supra; Spencer v. Bliss, 60 N.M. 16, 287 P.2d 221.

An unauthorized change in well location is a misdemeanor. . . .

* * *

Irrigating from an unauthorized well must, insofar as forfeiture is concerned, be considered tantamount to not irrigating at all. As we stated in State ex rel. Bliss v. Dority, 55 N.M. 12, 19, 225 P.2d 1007, 1011:

No right to use of water from such sources was obtained by its use by defendants in violation of law, nor can it be.248

246. Id. at 214, 345 P.2d at 745.
247. Ibid.
248. Id. at 215, 345 P.2d at 745, 746.
Mitchell does not involve a change of location of an old well and the drilling of a new well but rather a change in the point of diversion from an abandoned well to an existing well. The existing well permit authorized a particular place of use and did not include the 40 acre tract. Mitchell is an unauthorized place of use case. No rights to divert water on the 40 acre tract existed. The well from which the land was being irrigated limited uses to a particular place of use and did not include the 40 acres. Not raised or answered in the case is the question of forfeiture of rights in an existing well, or point of diversion, because of improper use on another tract. In short the rights in the authorized well were not jeopardized even though it was held that the land on which some of the water was used had no valid water right.

State v. Fanning also arose out of the Roswell adjudication proceeding. The State Engineer had filed a petition for adjudication in the basin and for an injunction against illegal uses. The special master found that the irrigator had a valid water right to 88.7 acres; that the acreage involved had been irrigated prior to declaration of the basin from a “hand dug well.” The master also found that the shallow well in question had been abandoned and that sometime before 1943 a well was drilled in a new location without a permit. The master’s report was first approved by the district court and then disapproved upon hearing the State Engineer’s objections. The court then enjoined irrigation of the specific acreage. The special master had submitted the following conclusions of law:

2. That the shallow well located in the SW$\frac{1}{4}$SW$\frac{1}{4}$ of Section 13, and used by the defendants to irrigate the lands in question is an illegal well.

3. That no forfeiture of rights appurtenant to said lands resulted from the unlawful Change of Point of Diversion referred to in Conclusion of Law No. 2.

Citing the Mitchell case, the Supreme Court affirmed the trial court’s reversal of the master’s conclusion in No. 3 and held that the unauthorized change in the location of the well resulted in a forfeiture of any pre-existing water right which right, the court concluded, could not be revived by irrigation from an illegal well. The court said:

It is obvious that the special master’s conclusion of law number 3, hereinbefore quoted, is in direct conflict with our holding in State ex rel. Reynolds v. Mitchell, supra, which case, in fairness to the special

250. Id. at 315, 361 P.2d at 722.
master, was decided after he had submitted his findings of fact and conclusions of law.251

Thus the principles of Mitchell and Brown were strongly reaffirmed.
The appellant irrigator had claimed that he had done no improper act himself and that any unlawful diversion from the new well was the act of his predecessor in interest. In response to this the court stated:

Our answer to this is that appellant had lived near the land involved for forty-four years. He knew that the well from which he is irrigating the lands involved was drilled in 1942 or 1943, and he also knew at the time, or shortly after he purchased the land, that there was a lawsuit (pending) . . . . Also, it is the duty of the owner of a water right to comply with the law and the forfeiture of the water right occurred without regard to the intention of appellant or his predecessors in title. Appellant's contention is in the nature of an estoppel, which does not apply to a sovereign state where public waters are involved. State ex rel. Erickson v. McLean, 62 N.M. 264, 308 P.2d 983.252

State v. Mendenhall253 decided in June 1961 applies the relation back doctrine so as to preserve a water right which was initiated before the extension of the boundaries of the Roswell basin in 1950. Before the basin was extended the land owner had drilled an inadequate well. At that time the area was outside the State Engineer's administrative control. A subsequent effort produced a satisfactory well and coincided with the declaration of the new boundaries. The trial court held that the well owner had not acquired a water right because the water had not been put to beneficial use at the time of the declaration of the basin. The Supreme Court reversed and held that the first step in the acquisition of the water right dated from the time the work was commenced on the first well. The court framed the inquiry in this manner:

Does a landowner who lawfully initiates the development of an underground water right and carries the same to completion with reasonable diligence acquire a water right with a priority date as of the beginning of his work, notwithstanding the fact that the land involved were put into a declared artesian basin before work was completed and the water put to beneficial use on the ground? This is the only question presented in this appeal.254

After examining the legislation and previous decisions the court concluded:

251. Id. at 317, 361 P.2d at 723.
252. Id. at 317, 361 P.2d at 723 (emphasis added).
254. Id. at 468, 362 P.2d at 999.
We are convinced that appellants having legally commenced drilling their well on or before May 31, 1949, and having proceeded diligently to develop the water and place it to beneficial use on the 248.49 acres in the crop year 1950, they thereby acquired a good and valid water right therefor with a priority date of May 31, 1949, as found by the Special Master, and that the intervening order extending the Roswell Artesian Basin on February 6, 1950, in no way affected the legality or validity of the appropriation.

The facts of this case and other applications before the State Engineer obviously inspired several of the 1959 amendments to the ground water statutes.

**Rio Grande Underground Basin**

*State v. Myers* has already been discussed in connection with the exercise of the police power in declaring the Rio Grande Basin. The criminal sanctions of the statutes were invoked and the Supreme Court upheld their application against the land owner and the well driller on the theory that deepening a well constituted drilling a well within the meaning of the legislation and therefore compliance with the statutes was mandatory.

*Public Serv. Co. v. Reynolds* questioned the administrative authority and discretion of the State Engineer to approve and then limit withdrawals from supplemental wells serving the city of Santa Fe under an application to change the point of diversion to a new well. The application was made on the basis of rights claimed under an Old Declaration of Rights prior to 1907 and declarations between 1946 and 1951, all of which were on file in the State Engineer's office. Under these declarations a total of 5,040 acre feet per annum was claimed. Under these claims there were six existing wells used as supplemental supply for the city of Santa Fe. Each declaration stated when the water was to be used: "As and when needed to supplement the Company's main source of supply for City of Santa Fe..." At no time had water in excess of the total claimed or 5,040 acre feet ever been used. The pumping was coordinated with surface reservoir storage. The testimony showed that the existing wells had declined in production and could not meet the demand in the peak, April to October period, which was estimated to amount to 3,625 acre feet if the annual demand was 5,040 acre feet. The existing wells produced 1,415 acre feet less than that demand. The State Engineer approved the application, provided however, that

255. *Id.* at 475, 362 P.2d at 1004.
257. 64 N.M. 186, 326 P.2d 1075 (1958).
(1) the maximum rate of production would not exceed 1,000 g.p.m., and (2) the total amount appropriated under the declarations and permits (from all wells including the proposed new one) would not exceed 5,040 acre feet per annum.

In substance the Public Service Company contended that the State Engineer had by his imposed conditions tried to adjudicate water rights with no authority to do so. The court said:

Counsel for appellee concedes that appellee does not have the authority to adjudicate water rights in any proceeding. However, he argues that when an application to change a point of diversion is filed, the applicant has the burden of proving the nature and extent of all of its rights in order that appellee can determine that the change of point of diversion will not impair existing rights.

We cannot agree. . . . As to the nature of appellant's claimed water rights, they are a matter of record. . . . As to the extent thereof . . . under the declarations and by virtue of which appellant drilled its six wells, appellant frankly states that it does not know what rights, if any, they have under said six wells and will not know until an adjudication is made by a court of competent jurisdiction. 2

The court held that this was not an application for a new diversion or appropriation and therefore applicant had no burden of showing that there were unappropriated waters available. No more than a request for a change in the point of diversion was involved. The State Engineer had found that the proposed changes would not impair existing rights. The district court's judgment denying the Public Service Company an appeal from the State Engineer's decision that purported to limit the water rights of Public Service Company from all sources to 5,040 acre feet, was reversed. In the opinion there was a reference to the companion case on appeal which involved the persons protesting the decisions of the State Engineer granting the Public Service Company application. This case, Clodfelter v. Reynolds, 261 arose over the same facts. The cases had been consolidated on appeal for the purpose of filing one transcript and "for the further purpose of taking further testimony and trial on the medits if that stage of the proceedings is reached in both cases, and for no other purpose." 262 The appellants protested the granting by the State Engineer of the permit described in Public Serv. Co. v. Reynolds. They feared impairment of their rights. The first contention of the protestant-appellants was that the State Engineer had:

260. Id. at 59, 358 P.2d at 625 (emphasis added).
262. Id. at 63, 358 P.2d at 627.
[N]o statutory authority for the granting of an application such as involved in this case . . . apparently on the theory that statutory authority is necessary for a change of the point of diversion from surface waters to underground waters. . . . 263

The court quoted the relevant surface and groundwater statutes,264 Application of Brown265 and Lindsey v. McClure266 to demonstrate that statutory authority and precedent existed. The court emphasized that the right to change the point of diversion is an incident of property ownership and existed before statutes were passed. The only limitation on such a right is that other water rights may not be injured.267

Protestants also contended that the Public Service Company did not have a perfected water right to 5,040 acre feet. However, the court upheld the trial court's finding based on substantial evidence that such rights existed under an ancient water right prior to 1907 and under later declarations made pursuant to law.

As a third contention the appellants said that the Public Service Company had the burden of proving (1) that there were unappropriated waters available, and (2) that pumping from the new proposed well would not impair existing rights. The court answered (1) by pointing out that this was not an application for a new appropriation, and (2) by recognizing that the burden of proof is on the applicant and that this burden was met in the hearing before the State Engineer about whom the court said:

[1]s a highly qualified, able and competent engineer. . . . He heard the evidence and found that the diversion proposed . . . will not impair . . . rights. . . . The district court also found that no prior existing rights will be impaired by the pumping of the proposed well. . . . [The] findings are supported by substantial evidence.268

In answer to the fourth point raised on appeal which questioned the State Engineer's authority, the court said there was no merit in it. But the court quoted the district court's conclusion of law as follows:

It is the function and duty of the State Engineer to regulate and supervise the appropriation, measurement and distribution of the pub-

263. Id. at 65, 358 P.2d at 628, 629 (emphasis added).
264. Id. at 65, 358 P.2d at 629.
265. 65 N.M. 74, 332 P.2d 475 (1958).
266. 136 F.2d 65 (10th Cir. 1943.)
267. Id. at 70: "[A] water right is a property right and inherent therein is the right to change the place of diversion, storage, or use of the water if the rights of other water users will not be injured thereby."
lic waters of the State and the apportionment thereof in accordance with the law, so as to prevent waste, prevent the improper location and drilling of wells and diversion of surface waters, to the end that said waters be conserved and be put to beneficial use as contemplated by law, and so as to protect the rights therein of appropriators in accordance with their priorities.\textsuperscript{209}

The Clodfelter decision affirmed the trial court holding that the Public Service Company application did not attempt a new appropriation and that there was therefore no burden on the utility to show that unappropriated waters were available.\textsuperscript{270} The court upheld the finding that the new diversion would not impair existing rights. The companion Public Service Company case was reversed only insofar as was necessary to correct the attempt of the State Engineer to limit or adjudicate the utility’s water rights.\textsuperscript{271}

The recent Albuquerque case\textsuperscript{272} arose out of the application of the municipality for permits to appropriate underground waters in the Rio Grande Underground Basin. The State Engineer, after a hearing, denied four applications on the ground that such waters constitute a base flow of the stream and that all of the flow of the Rio Grande has been fully appropriated. On appeal to the district court no further evidence was offered on the question of any unappropriated supply, “but, over the objection of the state engineer, the court did receive evidence relating to the city’s claimed pueblo water right.”\textsuperscript{273} Thereafter the district court held that the city, under claim of a pueblo water right, had an “absolute right to appropriate and apply to beneficial use such underground waters of the Rio Grande Underground Water Basin as it may need from the four wells in question.”\textsuperscript{274} On appeal to the Supreme Court the State Engineer contended “that the powers and duties imposed upon him are administrative in character and that he therefore had no jurisdiction to adjudicate the claim of the city that it is the owner of a pueblo water right,”\textsuperscript{275} and the district court had no greater jurisdiction on appeal than did the State Engineer. The Supreme Court held that the State Engineer had no jurisdiction to adjudicate the question of a pueblo water right; that the findings and conclusions of the district court relating to a pueblo right included issues not properly before the court, and that such findings and conclusions should be stricken. The court returned the case to the district court for further proceedings.

\textsuperscript{269} Id. at 68, 358 P.2d at 631.
\textsuperscript{270} Ibid.
\textsuperscript{271} 68 N.M. 54, 358 P.2d 621 (1960).
\textsuperscript{272} City of Albuquerque v. Reynolds, State Engineer, decided December 14, 1962. See note 11 \textit{supra}.
\textsuperscript{273} Ibid.
\textsuperscript{274} Ibid.
\textsuperscript{275} Ibid.
A second part of the decision deals at length with the interrelationship of *surface* and *ground* waters in the basin, the methods and procedures for appropriation and the plan adopted by the State Engineer pursuant to the statutes. The court concluded that the State Engineer had performed his functions according to law and that he “adopted the only known plan to avoid impairment to existing rights” and that the plan was within his “lawful power and authority.”


*State v. King* was a successful action by the State Engineer to enjoin withdrawals from the Roswell shallow ground-water basin. However, the actual decision of the Supreme Court, which upheld the State Engineer, is tangential to the central problem of classifying waters as *private* and *public* or as *surface* or *ground* water. The irrigator had drilled a well in 1946 without a permit. He used the waters to replace or supplement waters from Lake Prichard, the landowner’s private lake. The lake received waters from the surplus flow of the Hagerman Irrigation Canal. The irrigator contended that since these waters in his lake were private they remained private even when they percolated downward and contributed to the Roswell underground shallow basin. Therefore, he contended, he was entitled to pump the same waters from the shallow ground-water basin, less losses due to evaporation and seepage. In response to this claim the court said:

> The contentions cannot be sustained . . . the waters used by appellant were not being diverted from his lake. As to the latter question (storage in the shallow basin), it has no legal sanction. We find no law permitting the storing of private waters in established underground water basins. When waters, either artificial surface waters or natural surface waters, reach an established underground basin by percolation, seepage or otherwise, they become public waters as defined by 75-11-1. . . .

The court also added that:

> The waters in controversy being public waters, the statutory manner of acquiring rights thereto is exclusive. State ex. rel. Bliss v. Dority, 55 N.M. 12, 225 P.2d 1007.

The court dismissed appellant's reliance on an important case as follows:

278. *Id.* at 427, 428, 321 P.2d at 201 (emphasis added).
279. *Id.* at 428, 321 P.2d at 201 (emphasis added).
Appellant relies strongly on Hagerman Irr. Co. v. East Grand Plains Drainage Dist. 25 N.M. 649, 187 P. 555. The case lends no material assistance. There the court was dealing with surface waters.\textsuperscript{280}

This statement is a clue to the uncertain, and perhaps, arbitrary distinction between surface and ground waters on which the classification of private and public waters depends in several cases. King held that waters which were private on the surface of the ground, or in a lake, became public waters when they entered the shallow ground water basin. Two other recent cases involve similar problems of classification.\textsuperscript{281} The Hagerman decision cited above is the source of questionable doctrine in all of these cases.

Hagerman was decided in 1920. The specific holding was that an irrigation district could not appropriate drainage water in the defendant's drainage ditches because "artificial water," as then defined, was not subject to appropriation under the general statute.\textsuperscript{282} The suit had been brought by the irrigation district to enjoin the drainage district from diverting the drainage water which had flowed into the irrigation district canal. The drainage district planned to sell the water to users beyond the canal of the irrigation district. The case had been tried on the theory of an appropriation of the drainage water by the irrigation district. A theory of prescriptive rights had been alleged but was later abandoned at the trial. In affirming the trial court the Supreme Court said:

\begin{quote}
It is conceded by appellant (irrigation district), that if the landowners upon which the artificial flow is developed desire to utilize the water, as against them it would have no right, but it does not insist that the drainage ditch, the corporate entity under the statute, has no power to sell water, and the fact that it desires to carry water beyond its line for the purpose of selling it to other parties gives it a right to prevent the carrying of the drainage ditch further. . . . Unless appellant owns the water or a right to the use of the same, as we have
\end{quote}

\textsuperscript{280} Ibid. (Emphasis added).

\textsuperscript{281} Applications of Langenegger, 64 N.M. 218, 326 P.2d 1098 (1958); Templeton v. Pecos Valley Artesian Conservancy Dist., 65 N.M. 59, 332 P.2d 465 (1958). See Federici, Some Legal Aspects Regarding Ground Waters, 1941 Proceedings N.M. State Bar 66, for a discussion of existing and proposed methods of classification in New Mexico.

\textsuperscript{282} Hagerman Irrigation Co. v. East Grand Plains Drainage Dist., 25 N.M. 649, 187 Pac. 555 (1920). The 1915 Code, § 5654 (now N.M. Stat. Ann. § 75-1-1 (1953)), simply specifies what waters are subject to appropriation. Vanderwork v. Hewes & Dean, 15 N.M. 439, 110 Pac. 567 (1910) had held that "seepage" water was not subject to the State Engineer's jurisdiction and had held that an artesian well was not "constructed works" within the meaning of the statute (N.M. Stat. Ann. § 5712 (1915), as amended, N.M. Stat. Ann. § 77-525 (1941), now N.M. Stat. Ann. § 75-5-25 (1953)) which gave to the owner of works the first right to claim "seepage water from constructed works."
stated, it is not concerned with the disposition which the drainage commissioners may see fit to make of the same; and, as it has not right . . . to the use of the water, prior to its discharge into its canal, and and has no right to a continuation of the discharge, the court properly refused to grant the injunction.283

The court relied on the doctrine “that the creator of an artificial flow of water is the owner of the water so long as it is confined to his property.”284 In support of this rule, the court cited English cases and American mining cases from Utah, Nevada and Colorado and also the New Mexico non-mining case of Vanderwork v. Hewes & Dean.285 The latter case was questioned by Hutchins because the court categorized the waters as “seepage or percolating waters from an unknown source.”286 Hutchins commented: Vanderwork “involved water originating from seepage but diffused over the ground, which the court called seepage or spring water from some unknown source, and which was treated in the case as percolating water,” i.e., ground water.287 Vanderwork emphasizes the artificiality of the ground-surface water classification. The court said: “The main question for our consideration is, whether or not the water involved in this controversy is public water,”288 and therefore subject to statutory appropriation procedures. The court reached the conclusion that the water was private water by starting with the premise that it was percolating, i.e., ground water. The Supreme Court concluded that “the lower court, correctly held, that the Territorial Engineer had no jurisdiction over such waters and no power to grant appellant a permit to appropriate them.”289 The courts’ classification of the water as “seepage or percolating water from an unknown source” led to the conclusion that it was part of the landowner’s property and therefore private. There was some testimony about its probable origin:

It is true, that one witness was of the opinion that the water came from a dynamited artesian well, three fourths of a mile away. This, of course, was only a speculative opinion of the witness. Even if true, it would be immaterial, as this well would not be constructed works, within the act. [The statute, 75-5-25, as it was enacted before amendment in 1951].290

284. Id. at 656, 187 Pac. at 558.
285. Id. at 654-56, 187 Pac. at 557, 558.
289. Id. at 445-46, 110 Pac. at 569.
290. Id. at 445, 110 Pac. at 569.
The fact is the water had actually appeared as surface water but was not within any of the categories named in the statutes and over which the Territorial Engineer had jurisdiction. The waters were not "natural waters flowing in streams or water courses" and they were not "artificial surface waters" as defined by statute prior to 1941. However, the landowner still had first claim on such waters since they did not flow in a defined water course and were not therefore subject to appropriation. Vanderwork could have been decided on that basis and without first classifying the supply as percolating ground water which led to the conclusion that the supply was private water. The confusion generated by Vanderwork was exposed by Hutchins who pointed out that:

[T]he decision . . . apparently leans toward the strict English or common-law rule of absolute ownership of small flows from unknown sources, although it indicates a question in the mind of the court as to whether a surplus over the landowner's needs might be subject to non statutory appropriation by an outside party.

Yeo v. Tweedy and Bliss v. Dority plus the 1953 amendment to the ground water statutes have clarified the doctrine of public ownership of unappropriated ground waters in New Mexico. But the conceptual apparatus left by the early cases remains.

Vanderwork was decided in 1910. Hagerman Irrigation Co. v. East Grand Plains Drainage Dist. was decided in 1920. The later case contains an important summary of the physical conditions at the time in the Roswell area. These seem to have been overlooked in recent cases. These physical conditions also draw attention to the unreality of the ground-surface water distinctions. Hagerman arose out of conditions in the Roswell area, some of them not unlike the conditions described in Vanderwork, where irrigation uses from artesian waters greatly increased after passage of the Reclamation Act. The physical

291. Under the pre-1941 statute (the original 1907 law) the State Engineer had power to grant permits for appropriation of seepage water from "constructed works." Under the same statute the owner of constructed works was given first right to the use of the seepage water upon filing an application with the State Engineer within one year after completion of the works or appearance of the seepage. Thereafter, anyone could appropriate the seepage water upon application to the State Engineer and upon the paying of reasonable compensation for storing or carrying the water. The 1941 amendment (N.M. Stat. Ann. § 75-5-25 (1953)) in substance defines seepage waters as any dependent for their continuance upon the acts of man.

292. Hutchins, supra note 287, at 52.

293. 34 N.M. 611, 286 Pac. 970 (1930).


296. 25 N.M. 649, 187 Pac. 555 (1920).

effects were the raising of the water table in the Valley Fill and the water logging of valuable lands until drainage became necessary. In *Hagerman*, the court reviewed these conditions:

The appellee herein (the drainage district) was organized by the landowners of the East Grand Plains neighborhood in Chaves county for the purpose of draining the lands owned by certain individuals within the limits of the district. The district in question was organized in 1915, and began the construction of a system of drainage to reclaim the lands within the limits of the district. The drains were constructed of tile laid beneath the surface of the earth. . . .

Irrigation and drainage problems are related. The Roswell-Artesia-Carlsbad area is an example of the many problems involved and the technical success achieved in meeting them.299 The Roswell Basin itself is divided and administered as three units: the Artesian Basin, the Shallow Ground Water area of the Valley Fill, and the surface diversions and returns from the Pecos and its tributaries.300 In the early period of the basin the drainage problem was not apparent. Later, however, the Grand Plains Drainage District was organized for the purpose of reclaiming lands.301 The tile drains were laid below the surface. Water flowing into the open drains were the subject matter of the litigation in *Hagerman*. The court found that these waters were private and therefore not subject to appropriation.

In 1958, in *Applications of Langenegger*,302 the applicant was denied the right to drill wells in the Shallow Basin to replace a supply formerly taken from the drainage flow in the Lake Arthur Drainage District which had constructed drains in 1923. The Supreme Court stated that "The source of the waters as found by the trial court is the public underground waters."303 In reviewing physical conditions in the area the court said:

---


300. And often administration has not been able, within the framework of the legislation, to interrelate fully the sources of supply. See *Templeton v. Pecos Valley Artesian Conservancy Dist.*, 65 N.M. 59, 62, 332 P.2d 465, 466 (1958): "There are two underground bodies of water in this area." See also, *Applications of Langenegger*, 64 N.M. 218, 219, 326 P.2d 1098, 1099 (1958): "The basin contains two bodies of public underground water known as artesian and shallow water. . . . The artesian and the shallow underground water are administered as two bodies of water."


302. 64 N.M. 218, 326 P.2d 1098 (1958).

303. *Id.* at 220, 326 P.2d at 1099 (emphasis added).
For several years enough water was intercepted by the drainage system to irrigate the entire farm. During this time there was very little development of the shallow ground water in the basin. But increasingly until 1937, when the basin was closed to new appropriations, there was a considerable development of such water. Due to this factor and decreased rainfall, the level of the ground water basin gradually became lower and lower. In 1947, according to the first recorded measurement, only enough water was carried in the “A” drain to irrigate 122 acres of land. In 1950, there was water only for the irrigation of 50 acres. The flow was even less in 1952, the year that applicant purchased the farm and water right, and at the time application was made for the drilling of wells the drain had no longer intercepted and diverted water in usable quantities for the farm.\(^{304}\)

Prior to this time the applicant's predecessor had been granted a permit by the State Engineer, under the old statute questioned in *Vanderwork*, to use all of the water carried in the “A” drain. The State Engineer denied the applicant's request to drill wells for the reason that the applicant had not previously been appropriating public underground waters on the lands. The Supreme Court summarized the lower court's findings:

[I]t found that it is and has been the practice of the state engineer to permit shallow underground water appropriators to deepen existing wells or drill additional wells in order to supplement the supply of water to the existing appropriative right when it is not satisfied by the original means of diversion. It further found that the customary method of appropriating the shallow underground waters of the basin has been by the drilling of vertical pumping wells, while applicant's appropriation was by a constructed system of ditches; that the ditches could be deepened to intercept more water, but the expense of such an operation would be prohibitive, while the drilling of wells for the purpose would be economically feasible. The court also found that if the wells applied for were drilled, the result would be a lowering of the water table on the farm and on the land to the west of it, which would retard the encroachment of salt cedars and other phreatophytes, and diminish loss of water through evapo-transpiration and reduce the non beneficial consumption of water in the area.\(^{305}\)

One conclusion of law by the trial court set out in the Supreme Court opinion should be emphasized:

\(^{304}\) *Id.* at 220, 221, 326 P.2d at 1099.

\(^{305}\) *Id.* at 221, 326 P.2d at 1100.
3. That the waters provided by the "A" drain line were at all times material hereto private artificial waters and did not constitute a part of the public waters of the state.  

But in its opinion the Supreme Court had already said that "The source of the waters as found by the trial court is the public underground waters." The court expressly relied on the Hagerman case and held that the applicant had no appropriative rights:

The rule that these drainage waters are private has become a rule of property, and it is now too late to change it, even if we were inclined so to do.

We again hold drainage waters are private and further the use of the drainage water for irrigation of lands by the applicant and his predecessors may not be made the basis for a right to appropriate public waters of this state, although the drainage waters are now depleted.

In view of the limited supply available, the allocation problems and the recognition of priorities and existing uses, the decision is probably correct. However, the weakness of the ground-surface water classification is made more obvious by the decision. Langenegger indicates that waters in open drainage ditches are artificial surface waters and therefore private waters. But the same waters pumped from shallow wells would be public ground waters. This is the obvious implication of Hagerman.

When these and other implications are examined against the physical facts in Templeton v. Pecos Valley Artesian Conservancy Dist. also decided in 1958, the confusion grows over what is ground and what is surface water. In Templeton the court allowed a change in the point of diversion from the Rio Felix to wells. The Rio Felix is an intermittent stream into which waters of the Valley Fill are discharged. The court described the general conditions as follows:

The Rio Felix channel passes across this Valley Fill and at places is as deep as twenty-five feet or more into the Valley Fill. The water flow of this river, except for flood waters, rises into the channel from the Valley Fill wherever the waters of the Shallow Basin are higher than the bed of the river.

It is not a continuous stream except in flood times. The waters that fall on the headwaters of the stream run for a distance and then they lose

---

306. Id. at 222, 326 P.2d at 1100 (emphasis added).
307. See text at note 303 supra. (emphasis added).
308. Id. at 222, 326 P.2d at 1101.
themselves in the ground. In other words, the headwaters of the Rio Felix sink and become a part of the Valley Fill except for times when the stream is in flood stage.

The Court further found that the appropriations of water by the applicants from the Felix river were in effect appropriations from the Valley Fill.

Until the year 1952, the flow of the Rio Felix supplied enough water for the irrigation of the lands involved, but about that time the water table began to lower materially, and thus decreased the amount of water [in the Felix]. . . . This decrease in the water table was due to the pumping of water from irrigation wells which have been drilled into the Shallow Water Basin in later years, aggravated by several years of drouth [sic].

The water which makes up the Shallow Water Basin comes from precipitation, leakage from the artesian basin, return water from irrigation, and a small amount of leakage from irrigation canals.\textsuperscript{310}

The Supreme Court also stated that:

The Court concluded that the water of appellees appropriated from the natural flow of the Rio Felix included the waters in the Valley Fill that would have naturally reached the river, except for the acts of subsequent appropriators. The Court further concluded that the restoration to the appellees of the quantity of water originally appropriated by means of wells sunk into the Valley Fill at the locations designated by appellees, cannot and does not impair any other water right.\textsuperscript{311}

\textsuperscript{310} Id. at 62, 332 P.2d at 466-67 (emphasis added).

See appeals to the District Court for Bernalillo County, Nos. 18634, 18663-66. These five cases were consolidated, all involving water rights in the Cottonwood Creek area. The District Judge, in his Findings and Conclusions, decided that the cases were governed by Templeton:

Finding No. 8. While the Cottonwood Creek, as distinguished from its neighboring tributary to the north, the Rio Felix, has a much less extensive drainage and tributary system and in that, in geological times, an upheaval or uplift cut off its reach into the Sacramento and Guadalupe mountain ranges to the west with its consequent ability to pick up water from these sources, nevertheless, in other respects the situations are identical, and the present sources of water for both the Felix and the Cottonwood are otherwise the same.

The court concluded as a matter of law that all five applicants had vested water rights; that restoration of original supply by means of wells sunk into the Valley Fill would not impair existing water rights; that no statutory authority is required for changing the point of diversion of surface water to a shallow well supplied from the same source and that "All water, whether 'artificial' or not, that finds its way into the Valley Fill, designated as the Roswell Shallow Water Basin, is public water and all prior claims to it are lost." (Conclusion No. 6). The court further held that the water rights of the Carlsbad Irrigation District were not impaired by the withdrawals of the five applicants.

There is some indication that there will be an appeal in these cases.

\textsuperscript{311} Id. at 63, 332 P.2d at 467.
The court went to some length to show that the State Engineer's real claim was that the applications were in effect requests for new appropriations out of the underground basin to supplement surface rights; that these applications were actually a request for a change from a river or surface right to a ground water right:

The appellants have tried the case and make their contentions on the theory that the waters of the Rio Felix are surface waters and they are distinct and separate from the underground waters of the Roswell Shallow Water Basin referred to as the waters of the Valley Fill. On the other hand the appellees tried the case and make their contentions on the theory that the source of their water, except flood water, is the Valley Fill and that they have the right to pursue it by drilling wells into the Valley Fill provided it does not impair existing rights therein.\(^{312}\)

The expert testimony clearly indicated that the Rio Felix was supplied, except during floods, with discharge from the Valley Fill. One witness stated:

> In a natural state, the shallow ground water is discharged into the Felix, as described by prior witnesses, because the Felix is cut down below the ground water table. When the first shallow wells were drilled and pumped, the effect of withdrawal of water from the shallow wells was to intercept the ground water that was migrating towards the Felix, so it reduced the discharge into the Felix, but as the wells were pumped, and the levels of the ground water were lowered, the water level in the wells got down to where they were below the bed of the Felix. . . .\(^{313}\)

On the contention of the District and the State Engineer that the proposed change in the point of diversion amounted to a new appropriation in a fully appropriated basin the court said:

> This proposition is based on the assumption that there is no connection between the surface flow of the Rio Felix and the underground water basin. . . . The lower court found that the headwaters of the Rio Felix sank into the ground and became a part of the Valley Fill and then rose again into the river and that the appropriations made by the appellees amounted to appropriations out of the Valley Fill.\(^{314}\)

The court then made several references to cases which recognize the hydro-

\(^{312}\) Id. at 64, 332 P.2d at 468.

\(^{313}\) Id. at 65-66, 332 P.2d at 469 (emphasis added).

\(^{314}\) Id. at 67, 332 P.2d at 470 (emphasis added).
logic cycle and demonstrate the interrelationship of surface and ground water. This conclusion of the court follows:

Applying the foregoing principles to this case would lead to the conclusion that the appellees are entitled to the waters of the Valley Fill that flowed into the Rio Felix at the time of their appropriation. . . . In other words, their applications do not amount to a request for a new appropriation in the underground water basin, but merely a request to follow the source of their original appropriation.

[Appellees] are not seeking a new appropriation but merely seeking a change in the point of diversion. Previously the water flowed from the Valley Fill into the Rio Felix and was then lifted on to the land by means of dams and pumping plants. The appellees now intend to lift the water directly out of the Valley Fill, due to the fact that the water table has been lowered . . . merely a change in the method of extracting the water from the Valley Fill.\(^\text{315}\)

The court's disposal of the problem of laches raised by the appellants goes to the same question implicit in Langenegger: Could Langenegger or his predecessor have made timely protest to the issuing of well permits in the shallow ground water area in which his drainage water was eventually dried up? In Templeton the court said the appellees were not now estopped to claim their rights even though they had not previously protested the drilling of the shallow wells that were drying up the Felix.

Thus, we see in Templeton that the water in the Valley Fill which in large measures originates as surface waters, i.e., (using the language of the court) "the headwaters of the Rio Felix" and then "sank into the ground and became part of the Valley Fill," became public ground water subject to appropriation and remained public ground water even though it discharged into the Rio Felix "because the Felix is cut down below the ground water table." However, if such water had been carried out of the Valley Fill by constructed drains the water from the same source would be artificial surface water and private water and not subject to appropriation as indicated by Hagerman and Langenegger. There are factual and physical differences in these cases that distinguish the conclusions of each. However, the fabric of ground-surface water classifications upon which the court's rationalizations rest is weak and unreal. The terms public water and private water are obviously used as major or minor premises and thus produce logical conclusions. The same is true of the classes of surface and ground water. The real inquiry here should be: At what precise point is moisture classified as ground water?

\(^{315}\) Id. at 68-69, 332 P.2d 471 (emphasis added).
water and when is it *surface* water? To ask the question is to expose the problem in all of these cases. In *Hagerman*, water flowing through drains "constructed of tile laid beneath the surface of the earth" and then into open ditches is not *ground* water in the Valley Fill, even though it originates there. It is *private* artificial *surface* water. But Valley Fill waters that have the same origins but discharge as a stream, or into a stream, is *public ground* water, i.e., Valley Fill water subject to appropriation. To a geologist or hydrologist this classification must appear arbitrary. By the human eye test, water from the same source, discernible or not by the same test, is labeled as two different kinds of water: If it is an intermittent or wasting stream but below the level of the ground water table it is *ground* water. If it is water drained from land in which the water table has very nearly reached the surface of the earth, and is purposely drained for that reason, it is *surface* water until it sinks below the point of visibility as in *Langenegger*. The depth of the drain or the stream seems to be the real test. If the water is *drained* by an open ditch (no matter how infeasible it may be to dig one deeper as pointed out in *Langenegger*) the supply retains the classification of *surface* water but if wells are used then it is *ground* water. Obviously, if the Langenegger situation had developed differently we may have seen water in a ditch deeper than the Rio Felix classed as *surface* water while the Rio Felix supply from the same valley fill would be *ground* water.

More confusing doctrine should not be generated on an artificial classification of *ground-surface* water which is scientifically unsound and in practice hinders overall management of a limited total supply. The interrelationship of ground and surface water was recognized long ago in the Roswell area in *El Paso & R. I. Ry. v. District Court*. In this Bonito Stream adjudication suit the Roswell Artesian Basin appropriators were held to be proper parties since they were claiming waters from the same source. The relationship is also recognized in the Carlsbad Basin. The Rio Grande Basin declaration is also based on the theory of interrelationship.

Adherence to an unscientific and outmoded method of *surface-ground* water classification will not aid in the establishment of sound legal measures for

---

316. 36 N.M. 94, 8 P.2d 1064 (1932).

The State Engineer of New Mexico evidently adopted this theory of correlation of surface and ground water insofar as the waters of the Carlsbad Underground Basin are concerned. In that area he has closed the basin to further appropriation except to owners of water rights to the waters of the Pecos River who may obtain permits to supplement their surface rights with ground water. The rationale of this procedure is based upon the idea that these waters are part of the base flow of the Pecos River and that all of the water of the Pecos River has been appropriated.

318. Order No. 65, State Engineer dated Nov. 29, 1956.
interrelating an increasingly more valuable water supply. Nor will problems of water management and economic development be clarified.

III

ADJUDICATION

As stated in Public Serv. Co. v. Reynolds,319 decided in 1960, the adjudication of water rights in New Mexico, *i.e.*, rights *vis a vis* individuals, is a function of the courts. This has always been the rule.320 However, ever since New Mexico enacted water legislation in 1907 and charged the State Engineer with administrative responsibility, he has been empowered to make initial determination of rights as against the state, *i.e.*, the public, in applications for unappropriated waters. Nothing in *State ex rel. Hovey Concrete Products Co. v. Mecham*321 undermines that proposition:

We repeat, the right to determine controversies between individual litigants stems from Section 1, Article 6 of New Mexico Constitution. This power rests alone with the courts. . . .322

The statutory provision since 1907 has provided for appeals *de novo* to the district courts323 and has furnished applicants, protestants and intervenors with the requirement of judicial due process. While there can be no question about the actual and final adjudicatory function being one for the courts, it is also clear that the State Engineer is charged with making the *initial and factual determinations* upon which, in large part, any adjudication will rest.324 As a practical

---

319. 68 N.M. 54, 358 P.2d 621 (1960); see also Clodfelter v. Reynolds, 68 N.M. 61, 358 P.2d 626 (1960).

320. In Plummer v. Johnson, 61 N.M. 423, 427, 301 P.2d 529, 532 (1956), which held that there had been compliance with the statutory requirements in an appeal from the decision of the State Engineer to the district court, the Supreme Court stated:

It must be borne in mind that the appeal provided is a creature of the statute and the word "appeal" does not mean that judicial power has been conferred on the state engineer or that the appeal is from one judicial tribunal to another. Quite the contrary; as thus used, it merely denotes the review by a judicial tribunal of the acts of an administrative officer, the state engineer.


322. *Id.* at 254, 316 P.2d at 1072.


324. See N.M. Stat. Ann. § 75-2-9 (1953); "The state engineer shall have the supervision of the apportionment of water in this state according to the licenses issued by him and his predecessors and the adjudication of the courts." (Emphasis added). See also N.M. Stat. Ann. §§ 75-5-1 to -6 (1953). In a 1909 case in Idaho, Speer v. Stephenson, 16 Idaho 707, 717-18, 102 Pac. 365, 369 (1909) the court said:

It will thus be seen that the state engineer is given power and jurisdiction to determine certain matters before the permit is issued. . . .

If, under the Constitution, the Legislature may regulate the manner and means of appropriating the public waters of the state, and give to the state
matter this means that a very large number of water "rights" in New Mexico have been and are being passed on at the administrative level. This adminis-
tative decision is normally the only "determination" that is ever made of such rights. The essence of judicial adjudication in western water rights matters is the fixing of priorities\(^{325}\) and this question is not ordinarily raised until the supply is no longer adequate to provide for existing uses. The comprehensive stream system adjudication procedure set up by statute,\(^{326}\) by which priorities are fixed, may not be invoked for years after the source is threatened by exces-
sive diversions or withdrawals.

The major economic and other community developments turn upon the initial decisions of the State Engineer. These developments may occur in or be planned for areas of the state where there never has been a comprehensive adjudication of water rights, as for example in the Albuquerque area of the Rio Grande basin. Until recently "rights," i.e., permits, acquired after 1931 in the Roswell basin were based on administrative determinations only. The formal adjudication of the basin was commenced a short time ago. In speaking of the Roswell basin in 1951 and in referring to plans for adjudication, the State Engineer estimated that 10% of the basin in the years 1947 and 1948 was irrigated illegally.\(^{327}\)

The holder of a permit from the State Engineer, and persons who have properly declared old water rights on file, have legal rights\(^{328}\) even though

---


\(^{328}\) In *Arizona v. California*, now pending before the Supreme Court of the United States, the State Engineer of New Mexico explained the documents filed in his office as "licenses," "permits" and "declarations" as follows:

A license is issued by the State Engineer when an application for the right to appropriate ground waters has been perfected by placing the water to beneficial use. The permit is a stage in this perfection of a right. The permit is granted by the State Engineer after application has been made if, in the State Engineer's judgment, permission of the appropriation would not impair valid rights, existing rights. . . .

A declaration is a document filed in accordance with the statutes to make a matter of record a right that the appropriator may have acquired prior to the
the quantum and priority of each right may not be determined until an eventual adjudication. This was pointed out in Public Serv. Co. v. Reynolds which involved ancient surface rights and also recent permits to withdraw ground waters. In referring to these permits to pump ground water the court said:

We do not pass upon the question of what rights, if any appellant has under the above mentioned six wells, as that question is not before us and will have to be passed upon in a proper proceeding before a court of competent jurisdiction.\(^{329}\)

The Public Service Company had frankly admitted that it did not know what its rights were. However, the decision did not turn on obtaining new rights or adjudicating old ones. The application was for a change in the point of diversion under whatever total rights the Public Service Company had and the Supreme Court held that the State Engineer could not limit these rights to 5040 acre feet annually as he proposed:

Appellant . . . contends that no issue was tendered as to what rights, if any, appellant has in the six . . . wells, and that when appellee limited appellant's application to 5,040 acre feet per year the appellee, in effect, adjudicated appellant's water rights.

Counsel for appellee concedes that appellee does not have the authority to adjudicate water rights in any proceeding. However he argues that when an application to change a point of diversion is filed, the applicant has the burden of proving the nature and extent of all of its rights in order that appellee can determine that the change of point of diversion will not impair existing water rights.

We cannot agree with appellee's contentions. As to the nature of appellant's claimed water rights, they are a matter of record in appellee's office. As to the extent thereof, and particularly as to appellant's water rights, if any, under the declarations and by virtue of which appellant drilled its six wells, appellant frankly states that it does not know what rights, if any, they have under said six wells and will not know until an adjudication is made by a court of competent jurisdiction.\(^{330}\)

---


\(^{330}\) Public Serv. Co. v. Reynolds, supra note 329, at 63, 358 P.2d at 624-25.
Since 1907 the statute has provided that determinations by the State Engineer on applications filed become "final and conclusive" if not appealed to the district court within 30 days. This surface water statute was incorporated into the early ground water legislation: "The decision of the State Engineer shall be final in all cases unless appeal be taken to the district court within thirty [30] days after his decision as provided by . . . [75-6-1]." In 1959 the provisions of the old surface water statute were enacted as Section 75-11-33 and include the same language on "decision, act or refusal to act" as appears in the old 1907 statute.

The procedures for reaching the final stage of adjudication, i.e., the judicial proceeding, are specified in the statutes. There may also be appeals over specific water rights to the district court, and then ultimately to the Supreme Court. In other situations there may be a stream system adjudication as provided by statute. The latter procedures under the old surface water statutes were recently upheld in the Roswell ground water adjudication in State ex rel. Reynolds v. Sharp. The applicability of the surface water statutes was the principal challenge to the court's jurisdiction. The court held that the old 1907 statutes applied and relied on El Paso & R. I. Ry. v. District Court, stating that:

In Re El Paso R. I. Ry. Co. v. District Court of Fifth Judicial District, supra, this Court clearly held that all rights in the system, both underground and surface, were within the contemplation of the statute, and from this holding we are not prepared to depart.

The court also quoted from El Paso to the effect that the statute was "'all embracing and includes claimed rights of appropriators from [an] artesian basin' within a stream system." No mention was made of the comment in State ex rel. Bliss v. Dority, where the court said: "We will assume for the purposes of this case that the 1907 water code . . . has no application to under-

335. This was the situation, for example, in Cartwright v. Pub. Serv. Co., 66 N.M. 64, 343 P.2d 654 (1959), and this is also involved in State ex rel. Reynolds v. W. S. Ranch Co., 69 N.M. 169, 364 P.2d 1036 (1961).
337. 66 N.M. 192, 344 P.2d 943 (1959).
338. 36 N.M. 94, 8 P.2d 1064 (1932).
340. Id. at 194, 344 P.2d at 944.
341. 55 N.M. 12, 225 P.2d 1007 (1950).
ground waters, but see El Paso R. I. Ry. Co., 36 N.M. 94, 8 P.2d 1064.\textsuperscript{342} The doubts still apparent when Bliss v. Dority was decided have been removed by \textit{Sharp}. The appellants in \textit{Sharp} contended that the old stream system adjudication sections applied only to \textit{surface} waters “and to hold otherwise is judicial legislation.”\textsuperscript{843} The court found a “sufficient answer” by quoting the above from the \textit{El Paso} case.

In \textit{Sharp}, it was also contended that the piecemeal approach “township by township, as hydrographic surveys are completed, and adding parties as their identity becomes known is such a departure from the statutory procedure as to be jurisdictional.”\textsuperscript{844} The court explained that in \textit{El Paso} the question of the rights of “unknown owners” and “unknown claimants of interests” were examined.\textsuperscript{845} In the \textit{El Paso} case the court concluded that the statutory procedure could not be defeated by a failure to serve, or even implead, all parties. The implication clearly was that parties not served or impleaded would not be bound by the decree. In \textit{Sharp} the court’s conclusion was:

That the term “stream system” as used in the statute does not necessarily require the inclusion of every possible right both underground and surface must also have been recognized in that case [\textit{El Paso}] as the Rio Bonito is a small stream tributary to the large stream system of the Pecos River. It was never considered or asserted that all claimants in the entire Pecos River System had been made parties. . . .\textsuperscript{846}

The last statement was made in response to the contention that the water rights in the same area of the Pecos River had been previously adjudicated in \textit{United States v. Hope Community Ditch}.\textsuperscript{847} The court also quoted from \textit{Bounds v. Carney}\textsuperscript{848} which had considered the implications of the \textit{Hope} decree and had concluded that:

[\textit{T}he fact that all of the persons entitled to the use of the water from the Pecos River Stream System were not made parties to the Federal suit does not invalidate the decree. It is binding on all who were parties.\textsuperscript{849}

\begin{itemize}
\item \textsuperscript{342} \textit{Id.} at 18, 225 P.2d at 1011 (emphasis added).
\item \textsuperscript{343} State \textit{ex rel.} Reynolds v. Sharp, 66 N.M. 192, 194, 344 P.2d 943, 944 (1959).
\item \textsuperscript{344} \textit{Id.} at 194, 344 P.2d at 944.
\item \textsuperscript{345} \textit{Id.} at 197, 344 P.2d at 946.
\item \textsuperscript{346} \textit{Id.} at 196, 344 P.2d at 945 (emphasis added).
\item \textsuperscript{347} \textit{United States v. Hope Community Ditch}, Equity No. 712, United States District Court for New Mexico, 1933.
\item \textsuperscript{348} 53 N.M. 234, 205 P.2d 216 (1949).
\item \textsuperscript{349} State \textit{ex rel.} Reynolds v. Sharp, 66 N.M. 192, 196, 344 P.2d 943, 945 (1959).
\end{itemize}
The court in *Sharp* admitted that no decree could be entered in compliance with the "priority, purpose, periods and place of use" provisions of the statute until:

... hydrographic surveys have been completed and all parties impleaded, at which time it is contemplated a further hearing to determine the relative rights of the parties, one toward the other, will be held. We cannot say that when this is done, and a decree entered pursuant to [75-4-8] ... all of the statutory requirements will not have been met. 350

This conclusion raised the obvious question of whether this appeal was from a final order. The court said:

that insofar as it covers the matters included therein, namely, the amount, purpose, periods of use and specific tract of land to which it is appurtenant, it was final and nothing remained for the final decree except to incorporate the same and fix the priority. 351

The priority and quantum of the water right are of course the main private property interests. These are subject to minimum administrative judgment although discovering the "purpose, periods and place of use" of the supply are within the State Engineer's ministerial chores.

On the merits in *Sharp* the court upheld the findings with respect to the acreage involved. Reliance was placed on the substantial evidence rule, but the court also added an evaluation of its own: "... if we add our own appraisal of said evidence, we can say it clearly preponderates in favor of the findings as made by the court." 352

*State ex rel. Reynolds v. Massey* 353 raised the same jurisdictional questions disposed of in *Sharp*. In *Massey* the court also upheld the acreage findings of the lower court on the basis of the substantial evidence rule.

*State ex rel. Reynolds v. Mitchell* 354 arose in the same Roswell Basin adjudication suit. The implications of the decision with respect to illegal irrigation have been discussed. 355 However, *Mitchell* also exemplifies the flexibility permitted in adjudication procedures. The water right claimant had objected to the master's report and recommendations in an early stage of the adjudication.

350. Id. at 196, 344 P.2d at 945.
351. Id. at 196-97, 344 P.2d at 945 (emphasis added).
352. Id. at 198, 344 P.2d at 947.
355. See text at notes 245-48 supra.
These had been approved by the district court. A motion to set aside the report was heard, and the report was set aside so additional evidence could be taken. The special master thereafter recognized in the claimant an additional water right which became the subject matter of the appeal. The trial court made no finding as to which particular well irrigated the land in question, a well in existence before 1931 when the basin was closed, or a well from which irrigation was authorized on another tract. The Supreme Court remanded for a factual determination as to the particular well. This case demonstrates the effective controls found in the administrative process to assure proper use on specified land rather than the existence of a water right in gross. This comports with the general policy in New Mexico of making a water right appurtenant to land from which it may be severed with the consent of the land owner and through the prescribed statutory procedures.

State ex rel. Reynolds v. Fanning reaffirmed the principles of the Mitchell and Brown cases. The case also arose in the Roswell basin adjudication and resulted in an injunction against irrigation uses on 88.7 acres of land. The court held that a change from a “hand dug” well and a new well drilled without a permit resulted in a forfeiture of water rights and that a subsequent purchaser of the land who lived nearby and knew the facts was bound by the consequences of the prior illegal uses.

State ex rel. Reynolds v. Mendenhall settled the question of the effect of the 1950 extension of the Roswell basin on inchoate water rights. The lower court had held that since no water was put to beneficial use at the time the boundaries were extended, the claimant had no water rights. The Supreme Court reversed and applied the doctrine of relation back so as to date the water right from the time work was commenced to bring in a well. The court said:

We are convinced that appellants having legally commenced drilling their well on or before May 31, 1949, and having proceeded diligently to develop the water and place it to beneficial use on the 248.49 acres in the crop year 1950, they thereby acquired a good and valid water right therefor with a priority date of May 31, 1949, as found by the Special Master, and that the intervening order extending the Roswell Artesian Basin on Feb. 6, 1950, in no way affected the legality or validity of the appropriation.

On May 10, 1961, the court handed down an important decision in State

358. See text at notes 245, 354, 228 supra.
360. Id. at 475, 362 P.2d at 1004.
ex rel. Reynolds v. W. S. Ranch Co. The case arose out of an attempt by the State Engineer to have the defendant company enjoined from diverting surface flows above Costilla Reservoir. The district court dismissed for lack of indispensable parties, i.e., the other water users on the stream system. The Supreme Court affirmed with leave to reinstate the action when the water users below the reservoir were made parties. The court said that it would:

... not construe the statute [75-2-9] to authorize the state engineer either in the exercise of the state's police power, or as a representative of other water users, to seek an adjudication of other water rights of one making a bona fide claim thereto which would affect the rights of others, without the joinder of those persons whose rights may be affected.

In addition to raising questions about fundamental distinctions between adjudication and an injunction proceeding and between necessary and indispensable parties, the case casts doubt on the pragmatic, piecemeal adjudication procedure approved in ground water matters in State ex rel. Reynolds v. Sharp. It would seem that the court's previous conclusion in Pecos Valley Artesian Conservancy Dist. v. Peters, that an injunction proceeding is not an adjudication, is no longer clear.

IV

JUDICIAL REVIEW AND APPEALS

The surface and ground water statutes provide for appeals to the district court within 30 days from the "decision, act or refusal to act" of the State Engineer. The statutes also provide for an appeal within 60 days to the Supreme Court "governed in all respects as now provided by law relating to appeals taken from final judgments of the district courts" and the Supreme Court Rules [Section 21-2-1].

Several recent decisions involved appeals from the State Engineer to the district court. The statute provides that such appeals:

362. Id. at 173, 364 P.2d at 1038-39 (emphasis added).
366. 50 N.M. 165, 173 P.2d 490 (1946); 52 N.M. 148, 193 P.2d 418 (1948).
shall be de novo, except evidence taken in hearing before the state engineer may be considered as original evidence, subject to legal objection the same as if said evidence was originally offered in such district court, and the court shall allow all amendments which may be necessary in furtherance of justice, and may submit any question of fact arising therein to a jury, or to one [1] or more referees at its discretion.\textsuperscript{370}

The 1959 amendment\textsuperscript{371} to the ground water statute made the provisions of the surface and ground water sections dealing with appeals from the State Engineer almost identical. The 1959 amendment appears to have superseded the old ground water section\textsuperscript{372} on that subject without having repealed it.

Before an appeal may be taken from the "decision, act or refusal to act" of the State Engineer, his action must be "final" in the sense of having notified the applicant of a final disposition of the matter. \textit{State ex rel. Bliss v. Alexander}\textsuperscript{373} held that a letter from the State Engineer informing the applicant of any intention to deny said application and which stated that the applicant could present his position before the State Engineer took final action, did not meet the test of finality. The court said:

[T]he letter, does it have the finality as to put Collier on notice that an appeal was available to him; we think not. There was no denial of the application. The letter was simply a form letter sent by the engineer to all applicants for permits filed after the basin was closed. \textsuperscript{374}

\textit{Plummer v. Johnson}\textsuperscript{375} held that taking an appeal from the State Engineer did not require the filing of a formal application for such appeal. Nor is allowance by the State Engineer of the district court of such appeal necessary. All that is required is the service of the notice of the appeal on the State Engineer and interested parties within 30 days after his decision and the making of proof of service in the district court within 30 days of completed service and payment of the docket fee. Apparently the statutory requirement\textsuperscript{376} is satisfied if the service is on the State Engineer via the district court, or by filing the notice in his office which was done in an early surface water case.\textsuperscript{377} This conclusion

\textsuperscript{372} N.M. Stat. Ann. § 75-11-10 (1953) (refers to § 75-6-1).
\textsuperscript{373} 59 N.M. 478, 286 P.2d 322 (1955). 
\textsuperscript{374} Id. at 480, 286 P.2d at 324.
\textsuperscript{375} 61 N.M. 423, 301 P.2d 529 (1956).
\textsuperscript{376} N.M. Stat. Ann. §§ 75-6-1, 75-11-10 (1953).
\textsuperscript{377} Orosco v. Gonzales, 19 N.M. 130, 141 Pac. 617 (1914).
seems to conflict with an interpretation of a similar statute about which the court in 1920 said: "[I]t was the intention of the Legislature to require notice of the appeal to be given within 30 days from the decision." However, Plummer has settled the matter.

Once the appeal is taken the nature of the de novo proceeding in the district court and the effect to be given the previous decision of the State Engineer are the important questions. The answers are not entirely clear. A literal reading of the statute indicates that a complete and new hearing is contemplated. An early water case decided under the original statute of 1907 indicates that this is the proper view. Until 1923 when the Board of Water Commissioners was abolished an appeal would lie from the Board and Engineer to the district court and evidence taken in the original hearing could be considered as original evidence. When the board was abolished the statute was changed to its present form. In a case decided under the old statute the court said:

Section 66 provides for certifying to the District Court, in causes appealed, the record of all proceedings in the matter by the Board of Water Commissioners, and also provides for a hearing de novo in the District Court, 'except that evidence which may have been taken in the hearing before the Territorial Engineer and said board and transcribed, may be considered as original evidence in the District Court.'

The act in question, as shown by the above excerpts, clearly shows that in each instance, where a hearing is provided for, or required, the same shall be de novo, or an original hearing, where the engineer, Board of Water Commissioners or the court hears such competent proof as may be offered by the parties interested in the proceeding and forms his or its own independent judgment relative to the issues involved. The Board of Water Commissioners does not, nor is it called upon, to review the discretion of the engineer. Upon appeal to it, it determines for itself, the question as to whether the application should be approved or rejected. It is not bound, controlled or necessarily influenced, in any way, by the action of the engineer. It hears, or may hear, additional evidence, and upon the record and such evidence as is properly before it, it decides the question presented. Likewise in the District Court, the hearing is de novo. The court may consider such evidence as has been introduced before the board and engineer, and transcribed and filed with it, but it also hears additional evidence, and is not called upon to determine whether the engineer or the Board of Water Commissioners erred in the action taken and order entered,

380. See Farmer's Dev. Co. v. Rayado Land Irrigation Co., 18 N.M. 1, 133 Pac. 104 (1913).
but must form its own conclusion and enter such judgment, as the proof warrants and the law requires. It does not review the discretion of the engineer or the board, but determines, as in this case it was required by the issue presented, whether appellee's application to appropriate water should be granted. The court, in order to form a conclusion upon the issues, was necessarily required to determine, for itself, whether there was unappropriated water available; whether the approval of the application would be contrary to the public interest, and all other questions which the engineer was required, in the first instance, to determine. . . .

Another example of the same interpretation of de novo is found in Young & Norton v. Hinderlider, a still earlier case, where the Supreme Court of the Territory took a broad view of the administrative process. The court found the Territorial Engineer's authority and judgment were adequate to sustain his conclusions even though a de novo hearing before the Board of Water Commissioners had overturned his earlier decision. In the Rayado case, quoted above, the court examined the statute only and raised no constitutional issues. However, many years later in examining a statute which provided for a trial de novo on appeal from the decision of the chief of the liquor division, the court referred specifically to the separation of powers doctrine. The court asserted that in order for the statute to be constitutional under the separation of powers theory the appeals were limited to questions of whether the actions of the administrator were unlawful, unreasonable, arbitrary, capricious and not supported by evidence. An inference from this would be that de novo meant a new trial that could reverse the administrative decision only if the administrator's decision was arbitrary, capricious and unreasonable. No mention was made of the Rayado case. In the recent Brown case the court on rehearing commented:

This argument [that the order disclosed an impairment of the protestant's rights] is premature in this Court inasmuch as the trial court has not yet determined whether the findings and order of the State Engineer were arbitrary, capricious, unreasonable or not supported by substantial evidence. . . .

However, the State Engineer's findings did show that a drawdown of 3.9 feet existed at protestant's well after the applicant drilled and pumped his well. Yet

---

383. 15 N.M. 666, 110 Pac. 1045 (1910).
386. Id. at 80, 332 P.2d at 479 (emphasis added).
the court sustained the State Engineer's finding that the drawdown did not reveal an impairment of protestant's well.

One New Mexico attorney expresses the view that the actions of the State Engineer are not reversible unless they are unlawful, unreasonable and arbitrary and not supported by the evidence. This conclusion is in accord with general administrative law principles and with the views expressed in other New Mexico decisions. The method often used by state courts which limits review in the face of an explicit de novo statutory provision, avoids constitutional attacks upon the statute under the separation of powers theory. An observation by the court in Plummer v. Johnson also supports the view expressed above:

[T]he appeal provided is a creature of the statute and the word 'appeal' does not mean that judicial power has been conferred on the state engineer or that the appeal is from one judicial tribunal to another. Quite the contrary; as thus used, it merely denotes the review by a judicial tribunal of the acts of an administrative officer, the state engineer.

Spencer v. Bliss, decided in 1955, contains the most relevant statement on de novo appeals in water cases. The court considered the Rayado and Yarbrough decisions saying:

Apparently, the decision in the Rayado Land and Irrigation case went unnoticed when we were considering Yarbrough v. Montoya. To say the least, it was not cited. And there was even a hint in the latter case that to hold otherwise than we did on the question at issue would subject the statute involved to serious question of its constitutionality.

However, without appraising Yarbrough v. Montoya, supra, as a modification of our decision in the Rayado case, as it may well be deemed, we can see room within the full scope of the holding in the latter case . . . for the district court to give weight to a merited finding of the State Engineer.

While the holding in Spencer was limited to the conclusion that the applicant had not sustained the burden of showing that existing water rights would not be impaired, the dicta are compelling. These statements may indicate that the de novo review contemplated by the statute is not unlimited. Although the court was aware of the importance of the question of the effect to be given the decision

389. 61 N.M. 423, 427, 301 P.2d 529, 532 (1956).
391. Id. at 27-28, 287 P.2d at 228 (emphasis added).
of the State Engineer in a *de novo* proceeding, no direct answer was given. But the dicta are significant on the questions of the *type* and *effect* of the *de novo* hearing and also with respect to administrative policy:

The administration of the public waters of the state, especially the underground waters is a task requiring expert scientific knowledge of hydrology of the highest order. The administration of surface waters alone, where the trained and experienced engineer may see and observe what he does, or should do, and what the agency he administers is doing, is beset by difficulties enough. But when the administration is turned to underground waters the engineer's troubles are multiplied a hundredfold.

* * *

We think we have demonstrated, however, it will be an unfortunate day and event when it is established in New Mexico that the district courts must take over and substitute their judgment for that of the skilled and trained hydrologists of the State Engineer's office in the administration of so complicated a subject as the underground waters of this state.392

One might infer from these statements that the district courts may properly "give weight to a merited finding of the State Engineer." This conclusion is borne out by the decision in *Heine v. Reynolds*393 where it appears that a *de novo* proceeding as outlined by the statute is greatly modified if not abolished.

In 1960 in *Pettet v. Reynolds*394 the court disposed of an appeal by the State Engineer on a jurisdictional point. The court held that the appeal was not timely because not taken thirty days from the date of the original decree by the trial court which was later amended on motion of the protestant. The State Engineer had not been a party to the amended decree. An appeal taken thirty days from the date of the modified decree was not timely.

V

MICROSCOPIC DECREES AND INTERSTATE MATTERS

*Darr v. Eldridge*395 was an action to cancel a lease on premises upon which a *mineral water* well was located. The lease provided for royalties based on the quantity of water taken from the well. Originally the water was used for drinking purposes only but the lessee built baths and used the water for that purpose. He paid royalties to the lessor on the basis of each bath rather than the quantity

392. *Id.* at 28, 287 P.2d at 228.
393. 367 P.2d 708 (N.M. 1962); see note 163 supra.
394. 68 N.M. 33, 357 P.2d 849 (1960).
of water used. The lessor filed suit for the royalties and the matter was later settled. However, the lessee then piped in city water and discontinued use of the mineral water. The Supreme Court reversed the trial court and held that the lessor could cancel the lease on the theory of "an implied covenant to use reasonable diligence to market the mineral water." 396 Darr thus indicates that for some purposes mineral water in the ground may be like oil and gas. This, of course, would raise additional questions of ownership. A recent Texas case 397 has held that a reservation in a mineral lease in "oil, gas and other minerals" does not include subsurface water. The Texas court said there was no doubt "about water being technically a mineral" but "we do not think water is a thing of like kind to oil and gas" 398 so as to be included in the reservation.

United States v. Ballard, 399 in the United States District Court, arose out of an action by the United States Park Service against eleven individuals. The New Mexico State Game Commission intervened. The United States sought an injunction against pumping which was alleged to be depleting Rattlesnake Spring, the source of supply for Carlsbad Cavern National Park. The court denied the specific relief and instead entered an order entitling the parties to reopen the judgment at a later time. The court required the parties to take steps to measure the flow, examine the various uses and "work out a practical plan in this regard. Accurate measurement should be continued for one year, at a minimum. If the parties are unable to agree as to the method for this measurement of the flow from Rattlesnake Spring to all the parties hereto, the Court will be constrained to, itself, formulate such a program." 400

Natress v. United States, 401 also in the United States District Court, was brought under a private law passed by Congress in 1956. The action was for the taking of plaintiff's property by the flooding of the town of San Marcial, New Mexico, in 1929. The theory of the case was that the erection and operation of Elephant Butte Dam and Reservoir caused the flooding of San Marcial. The court held that the plaintiff had not sustained the burden of proof on proximate cause.

In 1955, while Texas v. New Mexico 402 was still pending in the United States Supreme Court, the United States District Court at El Paso handed

396. Id. at 264, 346 P.2d at 1044.
398. Id. at 851-52.
400. Id. at 13.
down an opinion which concluded that in view of the Rio Grande Compact among the states of Colorado, New Mexico and Texas, and in view of the appropriations and contracts made by the United States, the City of El Paso was not entitled to further appropriations from the Rio Grande. The decision was modified on another point by the court of appeals in 1957. But the district judge's examination of the facts and the law was fully approved:

The district judge, in his general grasp of the issues involved and of the law relating thereto, and in the accuracy and precision of his statement of the facts, out of which the issues arise, has done a thorough and workmanlike, indeed a monumental job of setting the case forth in its particulars and as a whole.

In this view, it becomes unnecessary for us to discuss many of the matters dealt with in the briefs. This is particularly so as to plaintiff's contention, that the waters of the Rio Grande were committed to the primary service of the Rio Grande Project prior to the effective date of the Rio Grande compact between Colorado, New Mexico and Texas, and the district judge erred in not definitely so declaring. It is sufficient for the purpose of this appeal to say: that the district court, on grounds sufficient to support the finding, adjudged that they were committed to such primary service; that the water supply contracts of Feb. 18, 1941 and December 1, 1944, between the United States, the District, and the City of El Paso "are valid in all parts"; that the contract of August 10, 1949, between the City and the District "is for use in delivery of water to the defendant; and that, in our opinion, it is valid in all its aspects."

The court of appeals held specifically that the United States was not bound to do all reasonable rebuilding of bridges and make repairs in anticipation of traffic needs under a prior agreement with the City of El Paso by which bridges were maintained over a canal.

The district court's opinion had explored the implications of the Rio Grande Compact:

The Rio Grande is the only international stream bordering on Texas, and since that brings into play interests and relations between nations, much of the control over the river and its waters must, necessarily, be left in the hands of the United States. The Republic of Mexico, as well as the United States, has interests at stake. The Rio Grande

405. Id. at 929.
has been the subject of Conventions and Treaties between these nations. It is seen in this lawsuit that a portion of the waters of the river, in the upper part of its boundary segment, have been allocated to Mexico and the United States is pledged to make delivery thereof at a point opposite the defendant City. The International Boundary Commission of the United States and Mexico is entrusted with a measure of continuing supervision and cooperation in questions and plans pertaining to the Rio Grande. In short, Texas does not and cannot have a free hand with this particular river. The welfare of the people living in the valleys along the Texas side of the Rio Grande may be more closely tied to an agricultural economy dependent so wholly on irrigation than along any other river of Texas. This is enough to suggest, no so much that the statute was well advised, but that, at least, it is not irrational. The article in question is held constitutional.

The strongest bulwark of the plaintiffs' suit, in the present respect, is the Rio Grande Compact between Colorado, New Mexico and Texas. The relevant articles have already been quoted in a preceding footnote. This Compact has a number of peculiar provisions. For example, the water New Mexico must pass to Texas is delivered not where the two States meet, but at San Marcial, New Mexico, more than 100 miles above the point where the Rio Grande leaves New Mexico. This delivery is made into the reservoir of the Elephant Butte Dam, the principal structure of the Rio Grande Project. Some of this water eventually goes to Mexico. The Compact, instead of leaving the Texas share of the water open for disposition under the general water statutes of Texas, plainly directs same for irrigation in the Project. A large part of the Project lands are in New Mexico and, consequently, this water delivered to Texas goes to irrigate not only Texas lands, but also New Mexico lands in the Project. The apparent reason for all this is that when the Compact was negotiated, the Rio Grande Project, in all of its far flung works and physical properties was, and for some time had been, superimposed on the Rio Grande and its adjoining valleys all the way from the Elephant Butte Reservoir in New Mexico, to a point below Fabens in Texas and that fait accompli colored the whole Compact as between New Mexico and Texas. Perhaps the problem was handled in the only practicable way.

In any event, an analysis of the Compact shows convincingly that the water belonging to Texas is definitely committed to the service of the Rio Grande Project. This Compact is binding on Texas and the defendant City and, for that matter, is binding on the inhabitants and citizens of Texas.

The Territory of New Mexico put in force the water appropriations made under its laws years ago for the intended use of the incipient Rio Grande Project, which, from the standpoint of New Mexico, meant more particularly what later became the Elephant Butte Irriga-
tion District, and, naturally, New Mexico had no intention in the Compact that the water delivered at San Marcial should, in any event, all go downstream to Texas, with the result of leaving said local District waterless. Just as plainly, the United States never supposed that its physical works and facilities were to be put in service to handle that part of the water destined for Texas, only to have the Project lands deprived of it in favor of other uses under the law of Texas, thus, perhaps, imperiling the repayment program between the Project and the United States.\textsuperscript{408}

Early in 1957, before the court of appeals reached its decision in the \textit{El Paso} case, the Supreme Court of the United States dismissed \textit{Texas v. New Mexico} in these words:

\textit{Per Curiam:} The motions to amend the bill of complaint are denied. The motion to dismiss is granted and the bill of complaint is dismissed because of the absence of the United States as an indispensable party.\textsuperscript{407}

The Master's Report submitted to the Supreme Court had listed and examined separately the\textsuperscript{408} installations, constitutional and other obligations and properties of the United States along the upper Rio Grande. Although Indian rights were listed in the Master's Report, the Court's opinion is not authority for the statement that the suit was dismissed because of Indian rights. The other interests of the United States were equally relevant to the indispensability question.

Although the Rio Grande Joint Investigation had included some ground water examinations in parts of the upper valley,\textsuperscript{409} the Rio Grande Compact contains no reference to ground water. However, November 29, 1956, pursuant to the New Mexico statutes, the State Engineer of New Mexico declared the Rio Grande Underground Water Basin\textsuperscript{410} extending from the Colorado Line to Elephant Butte Dam. The Order is based on a theory of inter-relationship of

\textsuperscript{407} 352 U.S. 991 (1957).
\textsuperscript{409} See National Resources Committee, Regional Planning, Part VI, Upper Rio Grande (Feb. 1938) vol. 1, at 13 \textit{et seq.} This report followed the extensive Rio Grande Joint Investigation.
\textsuperscript{410} Order No. 65, State Engineer of New Mexico, Nov. 29, 1956. See Bjorklund \& Maxwell, \textit{Availability of Ground Water in the Albuquerque Area, Bernalillo County and Sandoval County, New Mexico}, U.S.G.S. (Open File Rep., Jan. 1961), in cooperation with the State Engineer and the City of Albuquerque.
ground and surface water. This Order has been challenged and upheld in criminal proceedings.\textsuperscript{411}

On December 5, 1960, the Special Master in \textit{Arizona v. California},\textsuperscript{412} to which New Mexico is a limited party, submitted his final report to the Supreme Court of the United States. Although the Colorado Compact says nothing about ground waters, the claim of New Mexico encompassed consideration of ground water withdrawals in Virden Valley.\textsuperscript{413} Moreover, the New Mexico State Engineer has, since the litigation began, declared basins in nearby areas.\textsuperscript{414}

\textit{Cartwright v. Pub. Serv. Co.},\textsuperscript{415} the so called Pueblo Rights Case, in 1959, has large and foreseeable implications. The Supreme Court held that the city and town of Las Vegas were entitled to historical pueblo rights and thus had a superior claim on waters for municipal uses for the enlarged population. The court said:

\begin{quote}
\[T\]he settlers who founded a colonization pueblo, in the process of growth and expansion, carried with them the torch of priority, so long as there was available water to supply the life blood of the expanded community. There is present in the doctrine discussed [pueblo rights] the recognizable presence of \textit{lex suprema}, the police power, which furnishes answers to claims of confiscation always present when private and public rights of claims collide. . . . So, here, we see in the Pueblo Rights doctrine the elevation of the public good over the claim of private right.\textsuperscript{416}
\end{quote}

Although the case involved surface waters, the court made no distinction between its application to surface or ground waters in importing and applying the California doctrine which encompasses ground waters:

It is an admitted fact that the doctrine of Pueblo Rights as we understand and all the parties argue it is well recognized in the State

\begin{footnotes}
\textsuperscript{411} State v. Myers, 64 N.M. 186, 326 P.2d 1075 (1958).
\textsuperscript{412} 344 U.S. 919 (1953) (motion for leave to file a bill of complaint against the State of California was granted); 364 U.S. 940 (1961) (Master's Report dated Dec. 5, 1960, was filed).
\textsuperscript{413} See Master's Report, p. 76, on claims of New Mexico and see p. 354 of the Report (the Recommended Decree), and p. 355, where specific reference is made to ground water sources and the Globe Equity Degree No. 59 (United States v. Gila Valley Irrigation Dist., United States District Court for Arizona, June 29, 1935).
\textsuperscript{414} See, e.g., Orders numbered 81, 82, 83, of the State Engineer in 1960, which affect the Gila-San Francisco, San Simon, and Virden Valley areas.
\textsuperscript{415} 66 N.M. 64, 343 P.2d 654 (1958); see also Cause No. 6828, June 8, 1961, which is a sequel to the first case. The Supreme Court sustained the order dismissing the complaint. See Clark, \textit{The Pueblo Rights Doctrine in New Mexico}, 35 N.M. Historical Rev. 265 (1960); Hutchins, \textit{Pueblo Water Rights in the West}, 38 Texas L. Rev. 748 (1960).
\end{footnotes}
of California. The parties agree that the question has not been determined in the State of New Mexico. . . .

We are unable to avoid the conclusion that the reasons which brought the Supreme Court of California to uphold and enforce the Pueblo Rights doctrine apply with as much force in New Mexico as they do in California. . . .

The implications of the Cartwright decision with respect to ground water withdrawals by a municipality were tested in the Albuquerque case in which the district judge held that the city had a pueblo grant. Although the Supreme Court reversed on procedural and jurisdictional grounds, the decision indicates approval of the inter-relationship theory of ground and surface waters in the Rio Grande Valley which supports the declaration of the underground basin. The court stated that "We feel constrained to hold that the State Engineer adopted the only known plan to avoid impairment of existing rights. . . ." But on the matter of the existence of a pueblo right the court held that the question and the evidence submitted were not properly before the district court and "should be stricken." A motion for rehearing was filed in the matter as this article was prepared for the printer.

A change in the Supreme Court's attitude on rehearing, or recognition of the pueblo right, would mean that the city would be entitled to what water it needs "for the Pueblo and its inhabitants, including the future growth and expansion of said Pueblo" in the words of the court in Cartwright. Such an application of the pueblo theory to ground water would allow Albuquerque to drill for and pump large supplies from storage. It should be noted that under Spanish and English law the landowner owned the water in and under his land although this is not the law in New Mexico today. The early colonization grants did not contemplate ground water uses.

The applicable interstate compacts make no mention of ground waters. The

417. Id. at 80, 85, 343 P.2d at 665, 668.
418. See note 11, supra. See Albuquerque Journal A-8, Dec. 10, 1960, for comment on district judge's comments from the bench.
419. The City of Albuquerque filed the motion for rehearing on January 3, 1963. Other cases involving Reynolds, State Engineer, are now pending before the court:
No. 6820 McGee v. Reynolds (submission stayed)
7064 Kelley v. Reynolds (submitted March 19, 1962)
6618 Reynolds v. Guadalupe County (pending on rehearing)
7133 Durand v. Reynolds (not at issue)
7096 Cross v. Reynolds (not at issue)
7204 Interstate Streams Comm'n v. Reynolds (not at issue)
effects of recognition of a pueblo right along the Rio Grande on interstate relations and project developments are not hard to anticipate. Moreover, the implications to be reckoned with in plans for the Upper Colorado Basin and the San Juan-Chama development are obviously far reaching.

CONCLUSIONS

Recent legislative changes in both the surface and ground water statutes represent substantial improvements. Still others may be needed. Amendments have been made through the traditional, pragmatic approach. This method has limited usefulness in bringing together surface and ground water law and policy. An opportunity exists for clarification and simplification. The present statutory structure could be culled and woven into one clear and comprehensive act. The need for additional improvements in some areas of the law is urgent. For example, the State Engineer should be required to promulgate his administrative rules and regulations at regular intervals. Also, there should be statutory recognition of the State Engineer's power to make initial determination of rights as the first step in the adjudicatory process. The State Engineer is in fact granting, transferring, conditioning and terminating "rights," yet the claim is made that adjudication is entirely a matter for the courts. This Janus attitude needs examination and exposure. A new type of adjudication procedure expressly applicable to stream systems and ground water basins is needed. This conclusion is obvious from a reading of State ex rel. Reynolds v. Sharp 422 and State ex rel. Reynolds v. W. S. Ranch Co.423

The present administrative-adjudicatory process is unclear and inadequately relates ground and surface water rules and policies; it is unnecessarily cumbersome because of the gaps between the statute law and case law which, in the long run, may prove detrimental to the economic development of the state.

New procedures for adjudicating established rights or for granting new rights should obviate subsequent claims as much as possible and minimize conflicts over prior decrees. State v. W. S. Ranch Co. makes it abundantly plain that provision should be made for the State Engineer to stand in the shoes of claimants who do not appear in an adjudication that affects a large area, reservoir rights or interstate allocations.

The whole matter of publication or advertisement procedures for new applications, and particularly with respect to transfers of old rights to different locations or changed uses, is in need of overhaul. Any new amendments should consider the effect of publication on the rights of others such as lien holders and creditors of persons with water rights.

422. 66 N.M. 192, 344 P.2d 943 (1959).
The precise nature of the *de novo* appeal to the district court should be clarified by the legislature. At the present time the proceeding seems to be somewhere between an original proceeding and an appeal on the record with evidence admissible and merited weight given to the State Engineer’s decision. This is not what the statute specifies and is not what good administrative and judicial practice recommends.

The recent decisions have raised as well as settled several problems. The *Templeton* decision does not entirely conceal larger and more abstract problems involving rights to static head or pressure levels or to the form of diversion. These problems cannot be resolved in terms of traditional appropriation doctrine. Other states are recognizing this. *Templeton* indicates that in New Mexico there is no “right” to the static level of water at a given level. However, that conclusion is modified by the State Engineer’s discretion to determine when a well has been impaired by pumpage from other wells. In one case an increased drawdown of 3.9 feet was not of sufficient magnitude to be called impairment. This problem is related to the general policy of well spacing which is accepted in some areas of the state and may be necessary in many others. An express statutory grant of authority may be appropriate even though such well spacing is presently done under the general powers of the State Engineer. Rational controls which protect existing uses and the public interest in economic and general social development will have to be devised with respect to greater control of well sizes and the possibility of metering wells. The licensing powers in the present legislation may already allow for additional control and inventory devices.

The legislation and the decisions still do not furnish adequate criteria or recognizable norms for such constantly applied notions as “public interest” and “beneficial use.” The former is largely what the State Engineer determines it to be in a given instance with no more standards to guide him than memory, technical skill and some economic and political sensitivity. While these are large endowments to hope for in any public official they may not be sufficient in difficult areas of decisions, as, for example, where oil and gas discovery and exploration may conflict with agricultural potential, or where municipal and industrial growth conflicts with agriculture and the traditional “public interest” in certain recreational and wildlife values. Beneficial use in the West is generally defined in terms of an historical framework that has shifted drastically in the past 20 years. For example, during this time the New Mexico court has found that recreational uses are beneficial.

The early history of and the abolition in 1923 of the Board of Water Commissioners in New York should not prejudice reconsideration of the question of separating policy making from administrative efficiency and enforcement

---

practices. This matter deserves attention with respect to the State Engineer's policy making and policy enforcing functions and with respect to his membership on the Interstate Stream Commission. The State Engineer should not be forced to be defensive or political about matters of science, technology and administration. He should fully advise a Board and the Commission but he should never be their alter ego or be required to act in their stead, or influence, if not control, their decision by his equal status as a voting member. And neither he nor members of his staff should be Interstate Compact commissioners in which capacity all of their accumulated technical skills and competence may be wasted, and political and institutional problems merely commence. Two heads add up to more wisdom than one in this situation as in many others. The State Engineer's advice and recommendations should be a matter of record so that when they are not followed or when they are approved posterity may know at least who was deficient in judgment. The management of several large river basins is not primarily a task for which engineers are notably more equipped than others. For the wise use of natural resources is only incidentally a matter of engineering and technology. The heart of the problem "lies in the social order." 425