

## KANSAS GROUNDWATER MANAGEMENT DISTRICTS\*

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## I. INTRODUCTION

Groundwater management districts (GMD's) are a new form of special district in Kansas designed to give some degree of local control over the groundwater depletion problems in western Kansas. GMD's are created through a statutory pro-

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cedure in which action is initiated by local residents and approval is finalized by a state official, the Chief Engineer of the Board of Agriculture's Division of Water Resources. After creation, the GMD's adopt management plans that must first be approved by the Chief Engineer. After approval, the GMD's implement their management plans and policies and generally manage the groundwater resources within their boundaries. Because the Chief Engineer may adopt rules and regulations requested by the GMD's, a continuing relationship exists between the GMD's and the Chief Engineer.

This Article will first present an overview of the Kansas groundwater management law—how the GMD's are created and what their powers are. Second, whether there are any constitutional or other apparent legal problems with the enabling statute itself will be discussed. Third, the Article will discuss the role of GMD's in lawsuits. Following this section, the relationship between the GMD's and the Chief Engineer—a subject by necessity already discussed in the section on lawsuits—will be explored. Last, the Article will examine the potential legality or illegality of some of the recently approved rules, regulations, policies, and standards.

## II. THE GROUNDWATER MANAGEMENT DISTRICT LAW

Kansas passed its first groundwater management district legislation in 1968.<sup>1</sup> No GMD's were established under this act, apparently because of confusion about who could initiate proceedings to organize a district.<sup>2</sup> This original law was replaced by a new act passed in 1972.<sup>3</sup> The basic purpose of both the original and the later act was to deal with the unique problems of the various areas in the state through local decision-making.<sup>4</sup>

The legislature declared that GMD's were being created "for the proper management of the groundwater resources of the state; for the conservation of groundwater resources; and for the prevention of economic deterioration."<sup>5</sup> Although local decision making is paramount, in several places the entire Act is made subject to existing water laws and policies of the state:

It is the policy of this act to preserve basic water use doctrine and to establish the right of local water users to determine their destiny with respect to the use of the groundwater insofar as it does not conflict with the basic laws and policies of the state of Kansas.<sup>6</sup>

The Act sets out a rigid procedure for establishing a GMD. The first step is for at least fifteen "eligible voters" to file with the Chief Engineer a declaration of intent to form a GMD and a map of the proposed boundaries.<sup>7</sup> "Eligible voter" is defined in the Act as an adult person who owns forty contiguous acres or uses at

<sup>1</sup> Act of Mar. 20, 1968, ch. 403, §§ 1-19, 1968 Kan. Sess. Laws 827 (previously codified at KAN. STAT. ANN. §§ 82a-1001 to -1019; repealed 1972).

<sup>2</sup> Governor's Task Force on Water Resources, Interim Report 45 (Dec. 1977).

<sup>3</sup> Act of Mar. 17, 1972, ch. 386, §§ 1-16, 1972 Kan. Sess. Laws 1416-30 (codified at KAN. STAT. ANN. §§ 82a-1020 to -1035 (1977) (amended 1978)).

<sup>4</sup> KAN. STAT. ANN. § 82a-1020 (1977); Act of Mar. 20, 1968, ch. 403, § 1, 1968 Kan. Sess. Laws 827 (repealed by Act of Mar. 17, 1972, ch. 382, § 17, 1972 Kan. Sess. Laws 1416, 1430 (previously codified at KAN. STAT. ANN. § 82a-1001)).

<sup>5</sup> KAN. STAT. ANN. § 82a-1020 (1977).

<sup>6</sup> *Id.*

<sup>7</sup> *Id.* § 82a-1022.

least one acre-foot<sup>8</sup> of water per year within the boundaries of the proposed GMD.<sup>9</sup> After a description of the lands in the GMD is certified by the Chief Engineer, perhaps with modifications, the statute provides a twelve month period for the petition to be circulated and signed.<sup>10</sup> The petition must be signed by not less than fifty "eligible voters or fifty percent (50%) of the eligible voters of the district, whichever is smaller."<sup>11</sup> This petition must contain the following information: a description of the lands involved, the proposed name of the GMD, a statement of the purposes for which the GMD is organized, a description of the organization of the board of directors, and a request for official status and incorporation of the GMD.<sup>12</sup> The petition is submitted to the Secretary of State, the official who passes on all new incorporations in the state.<sup>13</sup> After giving his approval, he transmits the petition to the Chief Engineer who passes on the petition.<sup>14</sup> If the Chief Engineer approves the petition, he sends a certified copy of his report to the Secretary of State and the GMD.<sup>15</sup>

After notice is given to all eligible voters of the GMD a meeting and election is held.<sup>16</sup> If a majority of the voters approve creation of the GMD, the Secretary of State issues a certificate of incorporation. At annual meetings thereafter, the GMD elects a board of directors, which is empowered to exercise all the powers given to the GMD by statute.<sup>17</sup> These powers are expressly stated in the Act. These include the power (1) to sue and be sued; (2) to purchase and sell land and water rights and to condemn land and interests in land; (3) the levy water user charges and land assessments, issue general and special bonds, and incur indebtedness; (4) to contract; (5) to install or require the installation of meters; and (6) to recommend to the Chief Engineer the initiation of proceedings for the designation of "intensive groundwater use control areas."<sup>18</sup> For the purposes of this Article, there are two other important powers:

- (n) to adopt, amend, promulgate, and enforce by suitable action, administrative or otherwise, reasonable *standards and policies* relating to the conservation and management of groundwater within the district which are not inconsistent with the provisions of this act or article 7 of chapter 82a of the Kansas Statutes Annotated, and all acts amendatory thereof or supplemental thereto;
- (o) to recommend to the chief engineer *rules and regulations* necessary to implement and enforce the policies of the board. Such rules and regulations shall be of no force and effect unless and until adopted by the chief engineer to implement the provisions of article 7 of chapter 82a of the Kansas Statutes Annotated, and all acts amendatory thereof or supplemental thereto. All such regulations adopted shall be effective only within a specified district.<sup>19</sup>

<sup>8</sup> An "acre-foot," a measure of water volume, is the amount that will cover one acre to a depth of one foot—43,560 cubic feet or 325,851 gallons of water.

<sup>9</sup> KAN. STAT. ANN. § 82a-1021(e) (1977).

<sup>10</sup> *Id.* § 1023(a).

<sup>11</sup> *Id.*

<sup>12</sup> *Id.* § 82a-1023(b).

<sup>13</sup> *Id.* § 82a-1023(c).

<sup>14</sup> *Id.* § 82a-1024(a).

<sup>15</sup> *Id.* § 82a-1024(d). The Chief Engineer does likewise if he rejects a petition.

<sup>16</sup> *Id.* § 82a-1025(a).

<sup>17</sup> *Id.* § 82a-1026 (Supp. 1980).

<sup>18</sup> *Id.* § 82a-1028.

<sup>19</sup> *Id.* § 82a-1028(n), (o) (emphasis added).

To date, five GMD's have been established, as shown in Figure I. All have had management programs and revised management programs approved by the Chief Engineer. Three GMD's have had their recommended rules and regulations adopted by the Chief Engineer and accepted by the Kansas Legislature; one GMD has proposed rules and regulations to the Chief Engineer who has approved them, and they will become effective on May 1, 1981, unless disapproved by the Kansas Legislature; and one GMD does not presently contemplate recommending rules and regulations for adoption by the Chief Engineer.

### III. CONSTITUTIONAL OR OTHER LEGAL PROBLEMS WITH THE GROUNDWATER MANAGEMENT DISTRICT LAW

A person who is aggrieved with the Act and involved in litigation would first want to question the Act itself. For example, one who is denied a well permit because of a GMD's policy concerning well spacing will not only contest the specific policy, but will want to attack the legality of the GMD's existence. There are at least three potential claims regarding the constitutionality or legality of the GMD's existence.

#### *A. Constitutionality*

Local subdivisions of a state government may be created by the state legislature, subject only to limitations imposed by the state constitution. The Kansas Constitution contains a section that reads as follows: "The legislature may confer powers of local legislation and administration upon political subdivisions."<sup>20</sup>

This section, at first glance, does not appear to limit the legislature's power to create a local unit of government. In fact, it appears to give constitutional sanction to what the legislature is thought to be able to do in the first place. A close reading, however, indicates a possible problem. The section says that the legislature may confer powers of *local* legislation on political subdivisions. Does this mean that only matters of truly local concern may be the subject of a subdivision created by the legislature? If so, then the legislature, in empowering GMD's to manage the groundwater resources within their boundaries and to "determine their destiny with respect to the use of the groundwater,"<sup>21</sup> may have violated article 2, section 21 by authorizing GMD's to control a statewide, indeed a regionwide problem—the depletion of groundwater from the large Kansas groundwater aquifers.<sup>22</sup>

The basis for raising this question is a Kansas case that arose in the dust-bowl days of the 1930s, *State ex rel. Perkins v. Hardwick*.<sup>23</sup> The local unit of government in that case was the county, and the old version of article 2, section 21 of the Kansas Constitution, then in effect, provided as follows: "The legislature may confer upon tribunals transacting the county business of the several counties, such

<sup>20</sup> KAN. CONST. art. 2, § 21.

<sup>21</sup> KAN. STAT. ANN. § 82a-1020 (1977).

<sup>22</sup> The Ogallala aquifer, for example, underlies six states. See Figure I for its location in Kansas.

<sup>23</sup> 144 Kan. 3, 57 P.2d 1231 (1936).



powers of local legislation and administration as it shall deem expedient."<sup>25</sup> The legislature had passed a law that empowered counties to devise methods of stopping soil drifting; to order owners to cultivate, plow, and ditch; to send persons upon the lands of non-complying owners to carry out the actions; and to charge the owners for these services.<sup>26</sup> Plaintiff was a non-complying owner who claimed that the act was an unconstitutional delegation of power by the legislature because soil blowing and drifting was a matter of wide concern, not limited to the State of Kansas, and certainly not one of purely local concern as required by the constitution.

The Kansas Supreme Court agreed. It held that although the legislature may delegate legislative powers under certain circumstances (for example, when there are conditions precedent attached to the legislative grant), it could not do so in this case because soil drifting was a matter of more than local concern: "It does not seem to need much consideration of the matter to perceive that the situation was not of local character in any respect, but affected a wide area, not limited even to the state of Kansas."<sup>27</sup> Thus, the attempted delegation of power to legislate violated the constitution.

The reasoning of the case has been criticized as being "as shallow as the Kansas topsoil in the dustbowl days of '36,"<sup>28</sup> and other kinds of special districts have been upheld in the face of attacks under this constitutional provision.<sup>29</sup> Yet the case has never been overruled by the Kansas Supreme Court and was actually cited with approval in the 1958 case of *State ex rel. Anderson v. Hodgson*.<sup>30</sup> *Hodgson* involved an attack on legislation that created a specific watershed district. The supreme court found the statute unconstitutional as a violation of the prohibition against special legislation, but the court stated that its conclusion "finds support in *State, ex rel., v. Harwick*."<sup>31</sup> Thus, it could be cited as support, if not precedent, for the proposition that the Groundwater Management District Act is unconstitutional because groundwater management problems, like soil drifting, are larger than a local or even a statewide problem. For example, the Ogallala aquifer, which underlies three of our GMD's, also underlies six of the high plains states. Thus, it could be argued that the problem cannot be delegated to local units of government simply by declaring in the enabling statute that the problem is best met at the local level.

### B. Statute of Limitations for Attacking the Establishment of a GMD

A second ground for attacking a GMD and its policies and management program might be that the method of establishing a particular GMD was not in strict compliance with the enabling statute. For example, perhaps the strict time provisions or some of the other procedural requirements were not followed in establishing the GMD. If a mistake were made in establishing a GMD, the GMD would not be a legally established body and thus, could not transact business.

<sup>25</sup> KAN. CONST. art. 2, § 21 (1859; repealed 1974).

<sup>26</sup> Act of Feb. 8, 1935, ch. 138, § 1, 1935 Kan. Sess. Laws 210 (codified at KAN. STAT. ANN. § 19-2611) (repealed 1937).

<sup>27</sup> 144 Kan. at 8, 57 P.2d at 1234.

<sup>28</sup> Clark, *State Control of Local Government in Kansas: Special Legislation and Home Rule*, 20 KAN. L. REV. 631, 647 (1972).

<sup>29</sup> See, e.g., *Water Dist. No. 1 v. Robb*, 182 Kan. 2, 318 P.2d 387 (1957).

<sup>30</sup> 183 Kan. 272, 281, 326 P.2d 752, 759 (1958).

<sup>31</sup> *Id.*

The defense to this attack is found in the statute itself, which establishes a ninety-day period in which to attack the legality of a GMD's incorporation.<sup>32</sup> Is this provision constitutional and otherwise legal? Except for article 2, section 21, there are no Kansas constitutional provisions dealing with special districts, so this part of the Act violates no Kansas constitutional provision. Apparently this kind of statute, which is really a short statute of limitations, is generally deemed valid. State courts have upheld a twenty-day attack period in Florida,<sup>33</sup> a sixty-day period in California,<sup>34</sup> and a thirty-day period in Colorado.<sup>35</sup> In the Colorado case, the argument that the thirty-day attack period was unreasonably short and therefore a denial of due process was rejected.<sup>36</sup> Although Kansas apparently has no case on point, the Act's ninety-day provision is longer than any of the three cases in which short statutes of limitation have been upheld and, therefore, would probably withstand attack.

### *C. Intensive Groundwater Use Control Areas*

The third potential problem inherent in the statute concerns the designation of "intensive groundwater use control areas" within the boundaries of existing GMD's. Intensive use control areas may be designated by the Chief Engineer upon recommendation of the GMD or upon a petition signed by at least three hundred (or not less than five percent) of the eligible voters of a GMD when

- (a) Groundwater levels in the area in question are declining or have declined excessively; or
- (b) the rate of withdrawal of groundwater within the area in question equals or exceeds the rate of recharge in such area; or
- (c) preventable waste of water is occurring or may occur within the area in question; or
- (d) unreasonable deterioration of the quality of water is occurring or may occur within the area in question; or
- (e) other conditions exist within the area in question which require regulation in the public interest.<sup>37</sup>

After a hearing, the Chief Engineer can designate an area as an intensive use control area if he finds that one of the above conditions is present and that the public interest requires adoption of corrective controls. These corrective controls include (1) closing the whole area to further appropriation permits; (2) apportioning the total withdrawal of water within the area among the groundwater right holders "in accordance with the relative dates of priority of such rights;" (3) "reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the intensive groundwater use control area;" (4) requiring a system of rotation within the area; or (5) "any one or more other provisions making such additional requirements as are necessary to protect the public interest."<sup>38</sup>

<sup>32</sup> KAN. STAT. ANN. § 82a-1025(d) (1977).

<sup>33</sup> *Boca Ciega Sanitary Dist. v. Florida*, 161 So. 2d 529 (1964).

<sup>34</sup> *Ventura Port Dist. v. Taxpayers of Ventura County*, 53 Cal. 2d 227, 1 Cal. Rptr. 169, 347 P.2d 305 (1959).

<sup>35</sup> *Burns v. District Court*, 144 Colo. 259, 356 P.2d 245 (1960).

<sup>36</sup> *Id.* at 268, 356 P.2d at 250.

<sup>37</sup> KAN. STAT. ANN. § 82a-1036 (Supp. 1980).

<sup>38</sup> *Id.* § 82a-1038(b). In its groundwater regulation statutes, Wyoming gives its administrator powers similar to those given to the Chief Engineer in Kansas, but stops short of giving him the power to reduce the permissible withdrawal of groundwater by one or more appropriators, which is the third control in the Kansas statute. For example, the Wyoming state engineer, if he finds that the underground water in that area is insufficient for all appropriators, may (1) apportion permissible withdrawal in accordance with relative dates of priority; (2) order certain junior appropriators to cease or reduce withdrawals

The troublesome control is the third one—reducing the permissible withdrawal of groundwater by any one or more appropriators. Although the second measure allows an “apportioning,” which sounds like sharing on a pro rata basis, the apportioning is done according to the dates of priority.<sup>39</sup> The third control, however, makes no reference to the date of priority. This is troublesome because a water right in an appropriation state like Kansas has two aspects, a *quantity* (both a rate per small unit of time and a maximum quantity per year) and a *priority date*, determined by the date on which the Chief Engineer receives the original permit application. This third control appears to allow the Chief Engineer, under the guise of the public interest, to reduce a right holder’s quantity without regard to priority dates. This power would conflict with the Water Appropriation Act’s requirement that the Chief Engineer enforce the laws “in accordance with the rights of priority of appropriation”<sup>40</sup> and the Groundwater Management District Act’s requirement that the Chief Engineer’s powers and duties be exercised in accordance with the Water Appropriation Act.<sup>41</sup> Arguably, such a reduction in the name of the public interest might be an unconstitutional taking of a real property interest without compensation.<sup>42</sup>

Under the traditional requirements of the prior appropriation doctrine, the Chief Engineer would have to shut off junior right holders completely before shutting off senior right holders in part.<sup>43</sup> Naturally, depending upon the distribution of the wells in an area, shutting down a junior well may or may not improve a given senior’s situation anyway. Viewed from the standpoint of the entire in-

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forthwith if he finds they materially and adversely affect the supply needed by senior appropriators; (3) order a system of rotation; or (4) simply curtail the granting of new permits. WYO. STAT. § 41-3-915 (1977). The appropriators themselves may also enter into an agreement for voluntary control or rotation. In South Dakota, however, the water rights commission may, in cases of groundwater shortage, require that the output of all large capacity wells be reduced equally, “without regard to priority of appropriation.” S.D. COMP. LAWS ANN. § 46-6-6.2 (Supp. 1980) (emphasis added).

<sup>39</sup> KAN. STAT. ANN. § 82a-1038(b)(2) (Supp. 1980). Kansas, like all the states west of and including the tier of states from North Dakota to Texas, is a “prior appropriation” state for surface water law. Unlike “riparian doctrine” states in the eastern United States, where water is more plentiful and where a water right is obtained by advantageous location of land to a water source, a water right in the western states is obtained by putting water to a beneficial use. See F. TRELEASE, WATER LAW 10-13 (3d ed. 1979). In Kansas, the rule of prior appropriation applies for both surface water and groundwater (some western states apply different doctrines to the two sources). Kansas passed the Water Appropriation Act, KAN. STAT. ANN. §§ 82a-701 to -730 (1977 & Supp. 1980), in 1945; prior to that time, Kansas was a riparian state for surface water and an “absolute ownership doctrine” state for groundwater.

The 1945 Act was a significant change in Kansas water law. The key section of the Act dedicated “[a]ll water within the State of Kansas . . . to the use of the people of the state, subject to the control and regulation of the state in the manner herein prescribed.” KAN. STAT. ANN. § 82a-702 (1977). The regulatory scheme in the Act required the person desiring to acquire a water right for any use, except domestic, to apply to the state for a permit to appropriate water. The Chief Engineer was designated as the regulatory official to pass on these applications. After receiving the permit, the applicant proceeds to build the diversion works and to divert and put the water to beneficial use. After completing the works, the user notifies the Chief Engineer who, after inspection, issues a “certificate of appropriation,” the document that evidences a perfected appropriation right. The “priority date” of the appropriation right, however, dates from the time of receipt of the original application in the Chief Engineer’s office. A person with a permit may enjoin a use by a person without a permit, and a person with a permit having an earlier priority date may enjoin a use by a person with a permit having a later priority date.

<sup>40</sup> KAN. STAT. ANN. § 82a-706 (1977).

<sup>41</sup> KAN. STAT. ANN. § 82a-1039 (Supp. 1980).

<sup>42</sup> The same argument, though less forcefully, could be made about the Chief Engineer’s right to require rotation, which is the fourth control listed. Requiring rotation would not necessarily be offensive to the appropriation doctrine, however, as long as a well owner is not limited to an amount less than his maximum annual right.

<sup>43</sup> A “junior” appropriator or right holder is one whose priority date is later than another appropriator’s date. The person with the earlier appropriation date is the “senior” appropriator.



tensive use control area, however, shutting down juniors would improve the mining problem.<sup>44</sup> On the other hand, cutting down a senior right holder the same amount as a junior right holder would appear to violate the Water Appropriation Act and perhaps be a taking by the state of at least a portion of that senior's right. It was held in an early Nebraska case concerning *surface* water that a person with a vested right to a given rate of water could not be limited by the state to a lesser amount imposed by a statute enacted *after* the appropriator's right was obtained. In *Enterprise Irrigation District v. Willis*<sup>45</sup> the water right holder had obtained in 1889 a right to 3.5 acre feet of water per irrigable acre of land from a surface water source. In 1911 and again in 1919, the state imposed new statutory limits of 3 acre feet per acre for appropriation. The state officials then attempted to limit the water right holder to 3 instead of his 3.5 acre feet per acre. The Nebraska Supreme Court held that while the state may enact regulatory statutes, those laws cannot operate to divest rights already vested at the time of enactment of the statute. The court emphasized that both the quantity and the priority date make up an appropriation right.<sup>46</sup>

In a more recent Idaho case concerning groundwater, *Baker v. Ore-Ida Foods, Inc.*,<sup>47</sup> the court respected the rights of senior holders. In that case, the area under question contained twenty irrigation wells developed in the late 1950s and early 1960s. The senior right holders sued to enjoin further pumping by the junior right holders. The court held that the Idaho statutes passed in the early 1950s had forbidden groundwater "mining" of an aquifer. Thus, the court had to curtail all pumping in the area in excess of an amount equal to annual recharge. It did so by ascertaining which (how many) junior wells created the mining situation and by enjoining their further use. Thus, it did apply the "first in time, first in right" notion of the prior appropriation doctrine, even though the Idaho statute does not appear to require this respect for senior rights.<sup>48</sup>

There are no Kansas cases that are directly on point. One could look to *Williams v. Wichita*,<sup>49</sup> however, for an idea of how the Kansas Supreme Court might treat the question of allowing the Chief Engineer to curtail water use without respecting priority dates in intensive groundwater use control areas. In *Williams* plaintiff owned land but was not putting groundwater to active use when the Kansas Water Appropriation Act was enacted. He contested Wichita's obtaining rights to groundwater in his vicinity by challenging the constitutionality of the Water Appropriation Act. Plaintiff claimed that the legislature's declaration that all waters of the state were for the use of the public was a taking without compensation of common law riparian and groundwater rights held by landowners. The Act protected only those landowners who were putting water to beneficial use on the date of enactment, not those who had water rights under the common law but were not using them.<sup>50</sup> Despite a strong dissent by Justice Schroeder, the court upheld the Act against this constitutional attack by affirming the state's power to regulate water usage in the

<sup>44</sup> "Mining" of groundwater occurs when the water table is lowered because the amount of water being withdrawn from the aquifer exceeds the amount of water replenishing the aquifer.

<sup>45</sup> 135 Neb. 827, 284 N.W. 326 (1939).

<sup>46</sup> *Id.* at ..., 284 N.W. at 330.

<sup>47</sup> 95 Idaho 575, 513 P.2d 578 (1973).

<sup>48</sup> See IDAHO CODE § 42-226 (1977).

<sup>49</sup> 190 Kan. 317, 374 P.2d 578 (1962).

<sup>50</sup> See KAN. STAT. ANN. § 82a-701(d) (1977).

state.<sup>51</sup> By analogy, the state can regulate groundwater usage now, even of those who have vested appropriation rights.

In addition to the *Williams* case, there is another argument for the validity of the Chief Engineer's powers in the creation of intensive use control areas. Kansas has no *constitutional* section that upholds the water appropriation doctrine. Unlike Colorado<sup>52</sup> and some other western states, the basic water law in Kansas is only statutory. Thus, the Chief Engineer's right to protect the public interest must be reconciled with the individual appropriator's right to have his water rights protected according to his priority date. One rule of statutory construction holds that a later-enacted statute controls the former if there are inconsistencies. Application of this rule of construction favors the Chief Engineer, since the intensive use area law was enacted later than the Water Appropriation Act.<sup>53</sup> Moreover, other types of regulatory statutes, such as zoning, that appear to take something away from a property owner's rights to his property have been upheld as public necessities.<sup>54</sup>

#### IV. GROUNDWATER MANAGEMENT DISTRICTS AS PARTIES IN LAWSUITS

GMD's certainly will and already have become involved in litigation. That the legislature visualized the GMD's involvement in lawsuits is clear from the enabling statute. In the section granting GMD's their powers, the legislature gave the GMD the power to "sue and be sued in its corporate name."<sup>55</sup> More specific evidence of this power is found in the GMD's power to acquire interests in land by eminent domain,<sup>56</sup> which necessarily includes the bringing of a lawsuit, and the power to enforce standards and policies through suitable action.<sup>57</sup> Beyond these statements, however, the legislature did not specify when and how GMD's might be involved in litigation.

The Kansas rules of civil procedure<sup>58</sup> provide general guidelines for determining when a person can or should be a party to a lawsuit. First, if a GMD is the complaining party and wants to prosecute a claim, assuming it otherwise has the right to bring the suit, that GMD must be the plaintiff and bring the lawsuit. The rules require that every action be prosecuted in the name of the "real party in interest."<sup>59</sup> Therefore, if the GMD has the power to bring the suit, it and not some other person or agency must do so. For example, if the GMD has a policy that is not being followed, the GMD must enforce it—not another irrigator and not the Chief Engineer. The converse, however, is also true. If the statute gives someone else the power to enforce a regulation or a statute, the GMD probably cannot be the prosecuting party. A GMD, for example, probably cannot bring a suit to enjoin a person from pumping from a well without a permit. The statutes give other parties that power: the

<sup>51</sup> 190 Kan. at 340, 374 P.2d at 595. The constitutionality of the Water Appropriation Act has also been challenged in more recent cases. See note 92 *infra*.

<sup>52</sup> See COLO. CONST. art. XVI, § 6.

<sup>53</sup> The intensive use statute was enacted in 1978, whereas the Water Appropriation Act was enacted in 1945.

<sup>54</sup> See 16A AM. JUR. 2d *Constitutional Law* § 365 (1979) (discussing the distinction between police power and other governmental powers).

<sup>55</sup> KAN. STAT. ANN. § 82a-1028(b) (Supp. 1980).

<sup>56</sup> *Id.* § 82a-1028(f).

<sup>57</sup> *Id.* § 82a-1028(n).

<sup>58</sup> KAN. STAT. ANN. §§ 60-201 to -269 (1976).

<sup>59</sup> *Id.* § 60-217.

Chief Engineer through a cease and desist order<sup>60</sup> and not through a lawsuit; the attorney general via a lawsuit;<sup>61</sup> and a person with a vested right or an appropriation right.<sup>62</sup>

The legislature also anticipated that the GMD's would be defendants when it provided that GMD's could be sued. The rules of civil procedure also allow a party to be *added* as a party defendant after the lawsuit is brought if that party is "contingently necessary."<sup>63</sup> A party is "contingently necessary" if (1) in its absence complete relief cannot be accorded those already parties or (2) it claims an interest in the subject of the action and disposition of the action in its absence may substantially impair its ability to protect that interest or may leave the other parties subject to the risk of incurring multiple or inconsistent obligations.<sup>64</sup> Another rule allows persons to be joined as parties, either plaintiffs or defendants, under certain circumstances.<sup>65</sup>

Are there situations when the GMD would want to become a party in a lawsuit, having been left out initially? If, for example, a permit application is denied by the Chief Engineer on the basis of a well-spacing regulation originally recommended by a GMD, the applicant will either appeal the Chief Engineer's decision through the statutory appeal procedure<sup>66</sup> or bring an injunction action against the Chief Engineer. In the pending case of *Leonard v. Southwest Kansas Groundwater Management District No. 3*,<sup>67</sup> plaintiff sued not only the Chief Engineer but also joined the GMD. This was probably unnecessary from plaintiff's standpoint because the Chief Engineer, not the GMD, enforces the rules and regulations. The question arises, however, whether the GMD could have successfully sought to be joined as a party defendant if it had not been named. The only conceivable reason for seeking joinder would be to insure proper enforcement and interpretation of the well spacing regulation as written by the GMD and approved by the Chief Engineer. This could probably be accomplished without becoming a party in the action through closely working with the Chief Engineer's office and providing expert witnesses for the Chief Engineer's use at trial. In any case a GMD, according to the standards given in the Kansas rules of civil procedure, could theoretically either voluntarily or involuntarily be joined as a party in future lawsuits. The best way to approach the question of the role GMD's will play in lawsuits is to examine concrete examples of situations that might arise.

#### *A. Can a GMD Become a Party During an Appeal of the Chief Engineer's Ruling?*

If the Chief Engineer denies a permit under his regular procedure, the Water Appropriation Act gives the applicant the right to appeal the decision<sup>68</sup> to the district court through a procedure set out in the Act.<sup>69</sup> The Act is ambiguous on the question of whether a de novo trial is mandated at the district court level. An

<sup>60</sup> KAN. STAT. ANN. § 82a-706b (1977).

<sup>61</sup> *Id.* § 82a-706d.

<sup>62</sup> *Id.* §§ 82a-716, -717a.

<sup>63</sup> KAN. STAT. ANN. § 60-219 (1976).

<sup>64</sup> *Id.*

<sup>65</sup> *Id.* § 60-220. A person may join as a plaintiff if he asserts a right to relief arising out of the same transaction or occurrence. He may be joined as a defendant for similar reasons.

<sup>66</sup> See KAN. STAT. ANN. § 82a-724 (Supp. 1980).

<sup>67</sup> No. 79-C-49 (Dist. Ct., Haskell County, Kan., Mar. 10, 1980) (order to proceed to trial).

<sup>68</sup> KAN. STAT. ANN. § 82a-711 (1977).

<sup>69</sup> KAN. STAT. ANN. § 82a-724 (Supp. 1980).

appeal to determine that question was dropped in 1980,<sup>70</sup> and an attempt by the Chief Engineer to clarify this section by amending the Act was unsuccessful in the 1980 session of the legislature.<sup>71</sup> In any case, the procedure allows new pleadings to be filed and further allows the district court to use a jury in an advisory capacity. Could the GMD become a party to this appeal and become involved either by filing pleadings or by seeking to be joined under the joinder statutes?

The answer is probably no, since the statute and the procedure envisage the involvement of only two parties, the Chief Engineer and the applicant. Allowing other "pleadings" in the appeal procedure does not necessarily translate to other "parties." In the *Leonard* case<sup>72</sup> the aggrieved applicant originally sued in the district court and named the GMD as a party. Leonard's petition, however, claimed the action was both an original proceeding *and* an appeal of the Chief Engineer's denial of a permit application.<sup>73</sup>

On the other hand, one could argue that other "pleadings" imply the possibility of bringing in other parties. Also, the procedural section states that the judge is to exercise the same general jurisdiction and power as though a proceeding had been commenced in such court and as though such court had original jurisdiction in the matter. The statute appears to say everything *except* (1) the trial should be de novo and (2) other parties could be joined. On balance, however, it seems that a GMD could not actually become a party to the appeal.

#### *B. If a GMD's Rules and Regulations Are Violated, Who Sues and Who Can Join?*

Even though GMD's have the power to sue, the GMD should have a clear statutory basis on which to bring the suit in order to have a cause of action. The Groundwater Management District Act, for example, specifically gives the GMD the power to enforce through suitable action the *standards and policies* formulated by the GMD.<sup>74</sup> With respect to *rules and regulations*, however, the statute gives the GMD only the power to recommend rules and regulations to the Chief Engineer who then may adopt them.<sup>75</sup> These rules and regulations are unique to each GMD, yet only the Chief Engineer can enforce them. This conclusion is based on a reading of the Water Appropriation Act in conjunction with the Groundwater Management District Act. The latter defers to the former in several places. First, the rules and regulations recommended by the GMD are adopted by the Chief Engineer to "implement the provisions of article 7 of chapter 82a of the Kansas Statutes Annotated,"<sup>76</sup> which is the Kansas Water Appropriation Act. The policy of the Groundwater Management District Act is to preserve basic water use doctrines in such a way as not to conflict with the laws and policies of the State of Kansas.<sup>77</sup> Most important is the following provision of the Act: "Nothing in this act shall be construed as limiting or affecting any duty or power of the chief engineer granted

<sup>70</sup> *Mid-West Underground Storage, Inc. v. Gibson*, No. 78-CV-1207 (Div. II, Dist. Ct., Shawnee County, Kan., Apr. 15, 1979) (appeal dismissed May 16, 1980).

<sup>71</sup> See S. 608, 68th Legis., Reg. Sess. (1980).

<sup>72</sup> *Leonard v. Groundwater Management Dist. No. 3*, No. 79-C-49 (Dist. Ct., Haskell County, Kan., Mar. 10, 1980) (order to proceed to trial).

<sup>73</sup> *Id.* Plaintiff's Petition.

<sup>74</sup> KAN. STAT. ANN. § 82a-1028(n) (Supp. 1980).

<sup>75</sup> *Id.* § 82a-1028(o).

<sup>76</sup> *Id.*

<sup>77</sup> KAN. STAT. ANN. § 82a-1020 (1977).

pursuant to the Kansas water appropriation act."<sup>78</sup> The Chief Engineer's power under the Water Appropriation Act is to adopt, amend, promulgate, and enforce the rules and regulations.<sup>79</sup> He does this by delivering directives to the violator to stop, shut down, close valves, or take other appropriate action.<sup>80</sup> If the violator does not comply, the Chief Engineer requests the Attorney General to sue to enjoin the action.<sup>81</sup> Possibly, the Attorney General would name the staff attorney of the Chief Engineer as an assistant attorney general for the purpose of bringing the lawsuit.

The role of the GMD in enforcing its rules and regulations is to inform the Chief Engineer of violations and to request enforcement. Once a lawsuit is filed by the Chief Engineer or the Attorney General, the GMD would assist the Chief Engineer or conceivably attempt to join the lawsuit as an additional party plaintiff under the rules of joinder.<sup>82</sup> It appears, however, that the GMD cannot in the first instance file the suit to enforce its rules and regulations.

If the Chief Engineer does not enforce the rule or regulation, is the GMD left without a remedy? The GMD probably has two options. First, if the GMD has a *standard* or *policy* that coincides with a regulation that is being breached, the GMD could sue to enforce the standard or policy. For example, assume that a GMD had recommended a regulation on waste that was approved by the Chief Engineer. Assume further that this subject was also a stated policy in the GMD's management program. If the Chief Engineer refused to enforce the regulation, the GMD could enforce the *policy* by filing a lawsuit. For this reason, the same basic provisions that the GMD has in its published rules and regulations should be stated as firm policies in the GMD's management program. If, however, the GMD had no such policy in its management program upon which to base a lawsuit, its alternative would be to bring a mandamus suit<sup>83</sup> against the Chief Engineer to compel him to do his duty. This kind of action can be avoided, however, through close cooperation between GMD's and the Chief Engineer.

### *C. If a GMD's Policies and Standards Are Violated, Who Sues and Who Can Join?*

The Act gives the GMD express authority to enforce its policies and standards, but not its rules and regulations.<sup>84</sup> Only if the two have the same content could the GMD in effect enforce a regulation that is supposed to be enforced by the Chief Engineer. On the other hand, the GMD could not shirk the responsibility for enforcing its policies by requesting policy enforcement by the Chief Engineer. The statute allows the Chief Engineer to enforce rules, regulations, and standards, but not the policies of the GMD's. Assuming there is some overlap in content, however, the Chief Engineer might actually be enforcing a GMD policy if that policy is the same as a regulation.

Could the Chief Engineer be joined, either voluntarily or involuntarily, in a lawsuit brought by the GMD against a violator of its policies? Joinder, as discussed

<sup>78</sup> KAN. STAT. ANN. § 82a-1039 (Supp. 1980).

<sup>79</sup> KAN. STAT. ANN. § 82a-706a (1977).

<sup>80</sup> *Id.* § 82a-706b.

<sup>81</sup> *Id.* § 82a-706d.

<sup>82</sup> See notes 63-65 and accompanying text *supra*.

<sup>83</sup> See KAN. STAT. ANN. §§ 60-801 to -803 (1976).

<sup>84</sup> See text accompanying notes 74-81 *supra*.

above, is always a possibility if the statutory requirements for joinder are met.<sup>85</sup> Would anyone ever want the Chief Engineer as a party in such a suit? It is not likely that the GMD would seek joinder of the Chief Engineer because it can enforce its policies independently. On the other hand, a disgruntled person within the district might feel that having the Chief Engineer as a party would inure to that person's benefit. Perhaps a party would want the Chief Engineer to be a party to insure that a later lawsuit would not be brought on a similar issue. Or a party may note a conflict between the Chief Engineer's stance and that of the GMD and would like to bring that point forcefully before the court. This could occur if the Chief Engineer failed to enforce a regulation, thus forcing the GMD to handle the problem by enforcing its policies.

*D. If a GMD Knows of a Violation of the Water Appropriation Act, Can the GMD Bring Suit Against the Individual Violator?*

As noted above,<sup>86</sup> the GMD can sue and be sued, and more specifically has the express power to enforce its own policies and standards. On the other hand, the Chief Engineer has the statutory responsibility to take the necessary steps, such as issuing directives (cease and desist orders) and requesting the Attorney General to bring suit, to stop violations of the Water Appropriation Act.<sup>87</sup> The GMD cannot bring suit against the individual violator of the Water Appropriation Act since the Act prescribes only that the Chief Engineer, the Attorney General, and the holder of an appropriation or vested right whose right is being impaired can enforce the Act.<sup>88</sup> Without express statutory authority, a GMD cannot bring such a suit despite its power to "sue and be sued."<sup>89</sup> Its recourse is to request the Chief Engineer to bring suit and if that fails, to sue the Chief Engineer in mandamus.<sup>90</sup>

*E. Can a GMD Be Named as Defendant in a Lawsuit?*

Since the GMD can be sued, it naturally can be named a defendant. Indeed, a GMD has already been named as a defendant in a suit. In the *Leonard* case,<sup>91</sup> the applicant whose permit application had been turned down by the Chief Engineer sued the Chief Engineer and the GMD seeking (1) an injunction against enforcing the well spacing requirement found in the GMD rules and regulations and, in the alternative, (2) money damages for loss of value in his farmland because of his inability to irrigate.<sup>92</sup> In another suit, the GMD was *not* brought in as a defendant even though the GMD had played an important part in the Chief Engineer's denial of the company's permit application.<sup>93</sup>

<sup>85</sup> See notes 63-65 and accompanying text *supra*.

<sup>86</sup> See notes 55-57 and accompanying text *supra*.

<sup>87</sup> See text accompanying notes 75-81 *supra*.

<sup>88</sup> See notes 60-62 and accompanying text *supra*.

<sup>89</sup> KAN. STAT. ANN. § 82a-1028(b) (Supp. 1980).

<sup>90</sup> See note 83 and accompanying text *supra*.

<sup>91</sup> No. 79-C-49 (Dist. Ct., Haskell County, Kan., Mar. 10, 1980) (order to proceed to trial); see text accompanying notes 67 and 72-73 *supra*.

<sup>92</sup> An appeal of the Chief Engineer's cease and desist order in another case which arose in Finney County is raising the same question, but the GMD is not a party in the action. Plaintiff is also challenging the constitutionality of the Water Appropriation Act. See *F. Arthur Stone & Sons v. Gibson*, No. 80-C-208 (Dist. Ct., Finney County, Kan., Oct. 17, 1980) (upholding constitutionality of the Act).

<sup>93</sup> See *Mid-West Underground Storage, Inc. v. Gibson*, No. 78-CV-1207 (Div. II, Dist. Ct., Shawnee County, Kan., Apr. 15, 1979) (appeal dismissed May 16, 1980). See text accompanying notes 124-25 *infra*.

*F. If a County Attorney Refuses to Enforce the Criminal Sanctions of the Water Appropriation Act, Can a GMD Become a Party and Enforce Them?*

A change in the Water Appropriation Act enacted in 1977 makes it a *criminal* offense to "appropriate or threaten to appropriate water" without first obtaining a permit from the Chief Engineer.<sup>94</sup> Although there are several exceptions such as domestic use and use in reservoirs with fifteen or less acre feet, a violation is a class C misdemeanor and each day of violation after the Chief Engineer gives notice of the original violation is a separate offense.<sup>95</sup> Thus, anyone who now drills a well without a permit from the Chief Engineer violates a criminal statute. Prior to this change, such a person was subject to being enjoined from further withdrawal of water and could not obtain a legally enforceable water right without seeking a permit, but he was not violating any *criminal* law by appropriating water.

What would happen, however, if the Chief Engineer or the GMD notified a county attorney that a violation was occurring and the county attorney either flatly refused to bring the action or, having filed it, simply dismissed the case through his prosecutorial discretion before trying it? There are several statutes under which the GMD could seek enforcement. In none of these, however, would the GMD actually be a *party* in the criminal case because the State of Kansas is always the plaintiff in a criminal action involving violations of state statutes.

First, the GMD could hire an attorney to "assist" the recalcitrant county attorney, in effect creating a "special prosecutor." Kansas law allows the prosecuting witness to do this *at the expense of the witness*.<sup>96</sup> The criminal action against the violator in these cases cannot be dismissed over the objection of the witness' lawyer "until the reason of the county attorney for such dismissal, together with the objections thereto of such associate counsel, shall have been filed in writing, argued by counsel, and fully considered by the court."<sup>97</sup> This statute is commonly used by victims in criminal cases who want to insure that the state is ably represented. A GMD could use the statute to enforce the Water Appropriation Act's criminal sanctions when the county attorney does not act. Naturally, the GMD would want to be sure of its case to avoid a "malicious prosecution" lawsuit by the violator, should he prevail in the criminal action.

Another possible means of insuring enforcement of the criminal statute is to ask the attorney general to hold an inquisition.<sup>98</sup> The attorney general could file a complaint using testimony from the inquisition, and the warrant could issue on the basis of this complaint. Of course, the GMD itself could sign the criminal complaint and request the county attorney to prosecute.<sup>99</sup> Another method, although rarely used, is to proceed through the judge in the first instance. A judge may force the county attorney to institute criminal proceedings against any person.<sup>100</sup> The GMD could also file a mandamus action against the county attorney, seeking to compel the county attorney to do his duty, but this would be a long way around the problem. Finally, through another method the GMD could enlist the aid of

<sup>94</sup> KAN. STAT. ANN. § 82a-728(b) (1977).

<sup>95</sup> *Id.*

<sup>96</sup> KAN. STAT. ANN. § 19-717 (1974).

<sup>97</sup> *Id.*

<sup>98</sup> See KAN. STAT. ANN. §§ 22-3101 to -3105 (1974 & Supp. 1980).

<sup>99</sup> See *id.* § 22-2301(1) (Supp. 1980) (by implication).

<sup>100</sup> *Id.* § 22-2301(2).

the Kansas Attorney General's office, although the Water Appropriation Act gives the attorney general only the power to seek an *injunction* against violators of the Act,<sup>101</sup> not the power to enforce the criminal sanctions.

## V. RELATIONSHIP OF THE GMD'S TO THE CHIEF ENGINEER

The legislative preamble to the Groundwater Management District Act includes the following as some of the purposes of the Act: proper management of the groundwater resources of the state; conservation of those resources; and establishment of the right of local water users to determine their destiny with respect to the use of the groundwater.<sup>102</sup> There are, however, clear modifiers to these statements of policy: preserving the basic water use doctrine in the state as well as avoiding conflicts with the basic laws and policies of the State of Kansas.<sup>103</sup> While the Act allows the establishment of GMD's and gives them certain powers, the Act also very clearly maintains the Chief Engineer's Division of Water Resources as the primary water rights agency in the state. The Act also expressly states this policy: "Nothing in this act shall be construed as limiting or affecting any duty or power of the chief engineer granted pursuant to the Kansas water appropriation act."<sup>104</sup> This interrelationship between the Groundwater Management District Act and the Water Appropriation Act will be crucial in analyzing the specific powers of the GMD's and the Chief Engineer. This section of the Article will explore the relationship of the Chief Engineer and the GMD's in various areas of managing the groundwater resources.

### A. Rules and Regulations

The Kansas Water Appropriation Act requires the Chief Engineer to adopt, amend, promulgate, and enforce rules, regulations, and standards for achieving the purposes of the Act.<sup>105</sup> The Act itself does not define rule, regulation or standard, but "rule and regulation" is defined elsewhere in the Kansas statutes as follows: "'Rule and regulation,' 'rule,' 'regulation' and words of like effect mean a standard, statement of policy or general order . . . of general application and having the effect of law, issued or adopted by a state agency to implement or interpret legislation enforced or administered by such state agency . . . ."<sup>106</sup> There are several important parts to this definition. First, rules and regulations have the effect of law, so even though they were not promulgated by elected legislators, they may be enforced as if they were. Second, rules and regulations are promulgated by *state agencies*, which are defined as "any officer, department, bureau, division, board, authority, agency, commission, or institution of this state . . . which is authorized by law to promulgate rules and regulations concerning the administration, enforcement or interpretation of any law of this state."<sup>107</sup>

These definitions are consistent with the treatment of the Chief Engineer and the GMD's in the Groundwater Management District Act. In this Act, the power

<sup>101</sup> See KAN. STAT. ANN. § 82a-706d (1977).

<sup>102</sup> *Id.* § 82a-1020.

<sup>103</sup> *Id.*

<sup>104</sup> KAN. STAT. ANN. § 82a-1039 (Supp. 1980).

<sup>105</sup> KAN. STAT. ANN. § 82a-706a (1977).

<sup>106</sup> KAN. STAT. ANN. § 77-415(4) (Supp. 1980).

<sup>107</sup> *Id.* § 77-415(1).



of the GMD's is only to *recommend* rules and regulations to the Chief Engineer. The Chief Engineer then adopts and enforces them. The Chief Engineer falls within the above definition of a state agency, while a GMD does not.

Although the Chief Engineer has the final say, it is important to note that the GMD's initiate the process by recommending the rules and regulations "necessary to implement and enforce the policies of the board."<sup>108</sup> Thus, each set of rules and regulations is unique to each GMD. A potential legal problem with this aspect will be discussed under the section on particular rules and regulations.<sup>109</sup> Since the rules and regulations are meant to implement GMD policies, there theoretically should not be any conflict between an express *policy* of the GMD and a regulation adopted by the Chief Engineer. In a 1977 Attorney General's Opinion, then Attorney General Curt Schneider opined that (1) the Chief Engineer has no authority independently to adopt rules and regulations for GMD's, without the recommendation of a GMD; and (2) the Chief Engineer cannot, under his powers in the Water Appropriation Act, adopt general statewide rules and regulations that would preempt conflicting rules and regulations already promulgated for particular application within the GMD's.<sup>110</sup> According to the opinion, "Although the former are of smaller territorial application, they have equally the force and effect of law as do other lawfully adopted regulations."<sup>111</sup> The opinion further suggests that the likelihood of conflict is not substantial since the same authority issues both sets of regulations.

On the other hand, there could be a conflict if the Chief Engineer refuses to enforce an existing regulation. It was concluded in section III of this Article that if this situation arose, the GMD would probably be powerless to enforce the rule and regulation unless one of its policies was breached or a mandamus action was brought against the Chief Engineer.<sup>112</sup>

### *B. Management Programs*

One of the GMD's first duties after incorporation is the preparation of a "management program."<sup>113</sup> The management program is defined as

a written report describing the characteristics of the district and the nature and methods of dealing with groundwater supply problems within the district . . . [including] . . . information as to the groundwater management program to be undertaken by the district and such maps, geological information, and other data as may be necessary for the formulation of such a program.<sup>114</sup>

The program must be approved by the Chief Engineer after a finding that it is compatible with the Water Appropriation Act and all other state laws and policies.

One question that might arise is the relationship between the rules and regulations and the management program. It is unlikely that the program would be directly inconsistent with a GMD's rules and regulations because the Chief Engineer

<sup>108</sup> KAN. STAT. ANN. § 82a-1028(o) (Supp. 1980).

<sup>109</sup> See notes 130-36 and accompanying text *infra*.

<sup>110</sup> Op. Kan. Att'y Gen. 77-184 (June 7, 1977) (addressed to Mr. Kenneth M. Wilke, Counsel, State Board of Agriculture).

<sup>111</sup> *Id.* at 4.

<sup>112</sup> See text accompanying notes 84-85 *supra*.

<sup>113</sup> See KAN. STAT. ANN. § 82a-1029 (1977).

<sup>114</sup> *Id.* § 82a-1021(h).

has to pass on both of them. On the other hand, a program could have a suggested management tool not contained in the rules and regulations. This is the situation currently, for example, with GMD No. 2. Its program<sup>115</sup> contains a safe yield policy, meaning that the GMD wants to maintain a balance between recharge and withdrawals—in other words, no mining of groundwater is allowed. Could this policy be enforced by the GMD although it is not even a regulation? The answer is probably “yes,” especially when, as in this case, the safe yield is expressly stated in the program as a *policy* of the GMD. The Act allows the GMD to adopt and enforce “policies and standards” that are not inconsistent with the Water Appropriation Act.

On the other hand, a GMD might have something in its management program that is not part of a regulation and is not clearly specified as a “policy and standard” in the program. Could the GMD enforce that part of the plan? The Act gives GMD’s the power to sue and to enforce “standards and policies;”<sup>116</sup> it does not give them the power generally to enforce their respective management programs. The GMD could argue that the management program embodies its policies, whether or not they are expressly labeled as such. Furthermore, it would argue that the Chief Engineer’s approval of the program gives it legal sanction and gives the GMD the power to enforce it. This latter argument is difficult to accept in light of the clear language of the statute that gives the GMD’s the power to enforce only policies and standards, but not rules and regulations or management programs.

One reason for keeping something out of the regulations and including it only in the management plan is that the rules and regulations have to be approved, at least tacitly, by the legislature.<sup>117</sup> The management plans need be approved only by the Chief Engineer, and the policies and standards, unless contained in the management plan, need be approved only by the GMD. The safest way for the GMD to proceed would be to enact its policies in the management plan *and label them as policies*. That way, the GMD knows the policies have the approval and blessing of the Chief Engineer and that the GMD itself can enforce them.

### C. Standards and Policies

The one area in which GMD’s appear to have some *independent* clout is found in the Groundwater Management District Act section giving the GMD’s power to “adopt, amend, promulgate, and enforce by suitable action, administrative or otherwise, reasonable *standards* and *policies* relating to the conservation and management of groundwater within the district which are not inconsistent with the provisions of this act or [the Kansas Water Appropriation Act].”<sup>118</sup> “Standards and policies” are not defined in the Act, nor is the phrase defined anywhere else in the Kansas statutes. The term “standard” is defined along with “rules and regulations,”<sup>119</sup> but in that context refers to standards promulgated by state agencies like the Chief Engineer’s office.

<sup>115</sup> Equus Beds Groundwater Management District No. 2, Revised Management Program 18 (Jan. 24, 1979) (approved by the Chief Engineer, Feb. 5, 1979) [hereinafter cited as GMD No. 2, Program].

<sup>116</sup> KAN. STAT. ANN. § 82a-1028 (1977).

<sup>117</sup> See KAN. STAT. ANN. §§ 77-415 to -437 (1977 & Supp. 1980); *id.* § 82a-1028(o) (Supp. 1980). See also Op. Kan. Att’y Gen. 77-184 (June 7, 1977).

<sup>118</sup> KAN. STAT. ANN. § 82a-1028(n) (Supp. 1980) (emphasis added).

<sup>119</sup> KAN. STAT. ANN. § 77-415(4) (Supp. 1980).

While the standards and policies must be consistent with state law, they apparently do not have to be approved by the Chief Engineer. Naturally, if the policies are included in the management program, they will have been approved by him. There would be good reason to have his approval, especially when the GMD wants to enforce them in court and asks the assistance of the Chief Engineer and his staff. On the other hand, not requiring his approval could possibly give the GMD's a degree of independence. This might be desired when a GMD would seek to cover in a policy some aspect of regulation that is either inconsistent with the Chief Engineer's practices or in an area theretofore shunned by the Chief Engineer.

An example or two might illustrate this point. What if the GMD wanted to limit water diversion quantities in new appropriation rights to an amount that is less than the amount the Chief Engineer generally grants for a given region of the state? The historical practice has been for the Chief Engineer to grant 2 acre feet per year per acre of irrigated land in the west, 1.5 acre feet per year per acre in the central part of the state, and 1 acre foot per year per acre in the east, although these figures are not required by statute or by the rules and regulations of the Chief Engineer. Could GMD No. 3, located in the extreme southwest part of the state, pass a policy limiting new permits within the boundaries of the GMD to only one acre foot per year? This could happen if the Chief Engineer, on the basis of his historical practice and a wish to maintain consistency across the state, refused to promulgate a regulation to that effect when recommended by the GMD.<sup>120</sup>

The Chief Engineer might argue that since no policy can be established if that policy violates the Water Appropriation Act, this policy would be illegal because the Act gives *him* the power and duty to issue water right permits. Furthermore, issuing the permit necessarily involves determining not only the priority date but also, and more importantly, the quantity<sup>121</sup> of the right. Such a policy would be imposing a quantity limit that would therefore limit the Chief Engineer's discretion in granting water rights.

On the other hand, the GMD could argue that this policy does not violate any *express* provision of the Water Appropriation Act or any of the Chief Engineer's rules and regulations because neither the Act nor any rules and regulations state a quantity limit on water rights. Indeed, the only limitation in the Act is that "appropriation rights in excess of the reasonable needs of the appropriators shall not be allowed."<sup>122</sup> Also, the GMD is not trying to substitute itself for the Chief Engineer as the permit issuer. Furthermore, perhaps the GMD could show recent scientific data indicating that less water is needed to grow various crops than was previously thought. Last, the GMD could argue that the policy of the Groundwater Management District Act is to establish the local water users' right to determine their destiny, and what better way to do this than to further limit withdrawals.

This issue would be a close one to resolve. It could arise if the Chief Engineer granted a permit for an amount exceeding the amount stated in the GMD policy, and the GMD sought to enforce the policy by suing the well owner when he begins

<sup>120</sup> GMD No. 5 has imposed a water quantity limit on applications for permits. That limit, found in the rules and regulations for GMD No. 5, *see* KAN. ADMIN. REG. art. 5-25-3 (Supp. 1980), and thus supported by and recommended by GMD No. 5, is 1.5 acre feet per year, which does conform with the Chief Engineer's unwritten policy for amounts in the central part of the state.

<sup>121</sup> The quantity of a water right is the rate of withdrawal and total annual output.

<sup>122</sup> KAN. STAT. ANN. § 82a-707(d) (1977).

to use an amount in excess of that stated in the policy. On balance, the Chief Engineer's argument would appear to outweigh that of the GMD because of the duty and discretion given to the Chief Engineer by the Water Appropriation Act.

More characteristically, administrative and ministerial chores or requirements imposed by GMD's in their policies, however, might be enforceable. For example, a GMD might require each well owner to provide water samples or water sample results every few months to monitor salt water intrusion or other water quality problems. This might be enforceable even though the Chief Engineer does not currently require such stringent monitoring. This requirement not only would *not* violate an express statutory duty or power of the Chief Engineer, but also does not go to the essence of the Chief Engineer's primary duty—issuing water right permits. Another acceptable policy might be the imposition of more extensive "well measurement tests" in a GMD's policies than is currently being done by the Chief Engineer. These tests to monitor the lowering of the static water level are usually done in January after the irrigation season is over and the wells and static water level have reached points of equilibrium. Whereas the Chief Engineer's office might do testing on only one well in every fifteen square miles, the GMD could probably require all wells within the boundaries of the GMD to be subject to these readings. This would be permissible because this conflicting requirement does not go to the heart of the Chief Engineer's powers and duties under the Water Appropriation Act.

#### *D. General Cooperation*

The above comments should not overshadow the actual cooperation that has existed between the Chief Engineer and the GMD's to date. There must have been a close working relationship to have come to agreement on all of the management programs and rules and regulations approved by the Chief Engineer. Beyond this there is more. For example, most of the GMD's have included in their management programs a provision that allows their review of all water appropriation permit applications received by the Chief Engineer for points of diversion within the GMD. The GMD, after review, may make a recommendation. The Chief Engineer may hold a hearing on the application, especially if the GMD has recommended denial, at which the GMD can testify.<sup>123</sup> An example of this procedure occurred in the application of Mid-West Underground Storage, Inc.<sup>124</sup> The company wanted to obtain a water appropriation permit in McPherson County, and within the confines of the Equus Beds Groundwater Management District No. 2. The purpose of the proposed appropriation was to wash out large underground chemical deposits to create caverns for storage of natural gas liquids. Pursuant to the GMD Management Program provision that allowed the GMD to consider all permit applications, the Chief Engineer forwarded a copy of the application to the GMD. The GMD recommended a public hearing for public comment. That hearing was held and the GMD made recommendations concerning the application, including a waiver of the GMD one fourth mile well spacing requirement, a meter requirement, and a rate limit on certain wells. The conclusions of the Chief Engi-

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<sup>123</sup> See KAN. ADMIN. REG. arts. 5-7-3, 5-3-4a (1978 & Supp. 1980).

<sup>124</sup> See note 93 and accompanying text *supra*.

neer regarding this application indicate that the recommendations of the GMD were taken into account.<sup>125</sup>

## VI. LEGAL PROBLEMS WITH THE RULES AND REGULATIONS

Under the Groundwater Management District Act, a GMD first passes a management program that must be approved by the Chief Engineer. Approval of the program is followed by the GMD's recommending rules and regulations to the Chief Engineer who then adopts them, after which they are published in the official Kansas Administrative Regulations. To date, there are three sets of rules and regulations officially published: Western Kansas GMD No. 1, Equus Beds GMD No. 2, and Big Bend GMD No. 5.<sup>126</sup> The Southwest Kansas GMD No. 3 has proposed rules and regulations that have been approved by the Chief Engineer, and they will become effective on May 1, 1981, unless disapproved by the legislature. The Northwest Kansas GMD No. 4 currently has no plans to recommend rules and regulations to the Chief Engineer.

The rules and regulations, whether in force now or proposed, all contain the same basic matters. Each has, for example, a definitions section in which terms of art such as "well" and "waste of water" are defined.<sup>127</sup> Each GMD has some definitions, however, that others do not have. GMD No. 3 and GMD No. 1 define the term "tailwater re-use systems."<sup>128</sup> GMD No. 5 must define "safe yield" since its well spacing rules are framed in terms of safe yield.<sup>129</sup> Other sections common to all three sets of rules are shown on Table I, which summarizes the general content of the various rules and regulations. The same subject may be under different titles for the different sets of rules and regulations. For example, the proposed regulations for GMD No. 3 have an aquifer depletion formula under the title of "Aquifer Depletion." GMD No. 5 has the same subject under "Safe Yield" since the Big Bend GMD No. 5 will not allow depletion. GMD No. 1 has its depletion formula incorporated into its general section on "Well Spacing" since the well spacing itself depends on the amount of historic depletion of the aquifer.

This Article will not attempt to analyze each and every rule and regulation in detail to determine under what factual situations legal problems could arise. It will, instead, focus on three potential problems that are readily apparent in the rules and regulations. These problems, stated as questions, are as follows:

A. Are rules and regulations that are applicable only within the boundaries of each GMD in violation of the Kansas constitutional prohibition against special legislation?

B. Do the rules and regulations prescribing procedures to follow in case of non-compliance conform to state law?

<sup>125</sup> See *Mid-West Underground Storage, Inc. v. Gibson*, No. 78-CV-1207 (Div. II, Dist. Ct., Shawnee County, Kan., Apr. 15, 1979) (appeal dismissed May 16, 1980).

<sup>126</sup> KAN. ADMIN. REG. arts. 5-21-1, -22-1, -25-1 (Supp. 1980).

<sup>127</sup> *Id.* arts. 5-21-1(i), (j), -22-1(c), (d), -25-1(e), (f) (Supp. 1980); Southwest Kansas Groundwater Management District No. 3, Proposed Rules and Regulations 5-23-1(k), (l) (to be codified at KAN. ADMIN. REG. art. 5-23-1(k), (l)) [hereinafter cited as GMD No. 3, Proposed Rules]. See note 117 and accompanying text *supra* for a discussion of the requirements for codification of GMD rules and regulations.

<sup>128</sup> KAN. ADMIN. REG. arts. 5-21-1(h) (Supp. 1980); GMD No. 3, Proposed Rules, *supra* note 127, 5-23-1(i).

<sup>129</sup> See KAN. ADMIN. REG. art. 5-25-1(d) (Supp. 1980). "Safe yield" is defined as that quantity of groundwater withdrawn from a given area that approximately equals the average annual recharge to that same area.

TABLE I  
*Summary of Contents of Rules and Regulations of GMD's.*

	GMD No. 1 W. Kan.	GMD No. 2 Equus Beds	GMD No. 3 S.W. Kan. (proposed)	GMD No. 5 Big Bend
1. Definitions .....	*	*	*	*
2. Tailwater Control and Waste .....	*		*	
3. Well Spacing .....	*	*	*	*
4. Aquifer Depletion .....			*	
5. Waste of Water .....		*		*
6. Capping of Open or Uncovered Wells ....			*	
7. Metering (Well equipment) .....		*	*	*
8. Check Valves .....			*	
9. Water Use .....		*	*	*
10. Abandonment of Wells .....			*	
11. Procedures for non-compliance .....		*	*	*
12. Water Quality Tests .....				*
13. Allowable Appropriation .....			*	*
14. Safe Yield .....				*

C. Are there statutory, scientific or other problems with the well spacing, depletion, and safe yield requirements that would lead to claims of unfairness by a person whose permit application is rejected on the basis of these requirements?

#### *A. Rules and Regulations as Special Legislation*

The Kansas Constitution has long prohibited special legislation, which is legislation aimed at particular individuals or arbitrary classes. The constitutional provision, prior to its amendment in 1974, stated that "[a]ll laws of a general nature shall have a uniform operation throughout the state; and in all cases where a general law can be made applicable, no special law shall be enacted."<sup>130</sup> In 1974, the second clause, referring to making general laws, was removed from the section.<sup>131</sup> The policy behind the constitutional prohibition against special legislation is to avoid creating preferences and to force the legislature to concentrate on passing laws that concern the whole state, not small parts of the state. In the past the Kansas Supreme Court struck down several statutes that were deemed special legislation.<sup>132</sup> During the same period, the legislature has also improved its methods of circumventing this prohibition. For example, the legislature commonly limits the effectiveness of a given statute to cities or counties within a given population range, thus making a statute that appears to be of general applicability actually applicable to only one city.<sup>133</sup> In the present inquiry, the question is whether the rules and regu-

<sup>130</sup> KAN. CONST. art. 2, § 17 (1859, amended 1906, 1954, 1974).

<sup>131</sup> See KAN. CONST. art. 2, § 17.

<sup>132</sup> See discussion in Clark, *State Control of Local Government in Kansas*, 20 KAN. L. REV. 631, 633 (1972).

<sup>133</sup> The most recent example of this type of legislation occurred in the revision of Kansas Statutes Annotated section 82a-619 by the 1980 session of the Kansas Legislature. That section has provided that, *inter alia*, rural water districts could condemn land within their boundaries. Revised section 82a-619 allows condemnation outside district boundaries in counties with populations of between 65,700 and 67,000. Riley County is apparently the only Kansas county in that category.

lations promulgated by the Chief Engineer could be deemed "special legislation" since each set of regulations is applicable only to the specific GMD that recommended those rules and regulations. Since "rule and regulation" is defined in the Kansas statutes as a "statement of policy or general order . . . of *general application* and having *effect of law*,"<sup>134</sup> one could argue that they are tantamount to special legislation.

They are probably not in violation of the rule against special legislation, however, despite the language in the definition. This conclusion is based on two points. First, the constitutional prohibition was directed only at legislation that *could be* made general in nature. The Kansas Constitution has never flatly barred special legislation; it has barred it only "where a general law can be made applicable." In the constitution, the framers recognized and supported the situation where a local need was unique, necessitating special legislation.<sup>135</sup> The groundwater problems of western Kansas present such unique situations. Since each of the GMD's encompasses lands that have some hydrologic homogeneity, each also has unique problems that should be treated differently. For example, the ample recharge of the aquifers in the Equus Beds and Big Bend GMD's allows them to impose prohibitions against groundwater mining within the confines of their boundaries. In contrast, the three westernmost GMD's, having less recharge and different geological characteristics, allow mining at some prescribed rate.

Second, the rules and regulations may be safe from a special legislation attack because of the 1974 amendment to the constitutional section. That amendment appears to take away from the strength of the old section in prohibiting special legislation by removing the operative language "no special law shall be enacted." Although the committee reports would indicate that the legislature did not necessarily intend to do away with the special legislation prohibition entirely,<sup>136</sup> the new section no longer *expressly* prohibits it.

### *B. Enforcement of Rules and Regulations by the GMD's*

Three GMD's have essentially identical provisions that provide an enforcement procedure in case of non-compliance with the rules and regulations. The procedure is as follows: (1) someone (the GMD, its board or manager or any eligible voter) files a written complaint with the GMD alleging a violation; (2) within thirty days the GMD investigates the complaint; (3) if a violation is found, the GMD issues a written directive to the violator to comply with the rules and regulations; (4) if

<sup>134</sup> KAN. STAT. ANN. § 77-415(4) (Supp. 1980) (emphasis added).

<sup>135</sup> See Clark, *supra* note 132, at 634.

<sup>136</sup> The study of revision of the Legislative Article of the Kansas Constitution was assigned to the Legislative Budget Committee by the Legislative Coordinating Council.

For some time it has been recognized by many legislators and other persons knowledgeable about the Legislative Article that it contains obsolete, overly detailed, and too restrictive provisions. Certain of these provisions have hindered the legislature in attempts to carry out effectively its responsibilities as the policy-making branch of state government.

7. The present section dealing with uniform operation of laws of a general nature, special laws, and urban areas has been reduced to a single sentence, namely, "All laws of a general nature shall have a uniform operation throughout the state." . . . It is the Committee's opinion that this change would not fundamentally alter what the legislature can or cannot do under the present section. It could, for example, still designate "urban areas" by means of a rational classification.

KANSAS LEGISLATIVE COORDINATING COUNCIL, LEGISLATIVE BUDGET COMMITTEE, COMMITTEE REPORT, PROPOSAL No. 35—LEGISLATIVE ARTICLE (1972).

the violator fails to comply the GMD may either (a) *sue to enjoin further use of the water* or (b) seek the assistance of the Chief Engineer and the Attorney General in enjoining use of the water.<sup>137</sup> Troublesome from a legal standpoint is the power given to the GMD by these rules and regulations to bring suit to enforce the rules and regulations. It was concluded earlier that under the Kansas Water Appropriation Act, only the Chief Engineer and the Attorney General can enforce rules and regulations and that the GMD may only recommend the enactment of these rules and regulations, not enforce them.<sup>138</sup> Now, through the rules and regulations themselves, the GMD's and the Chief Engineer have provided a mechanism for enforcement of rules and regulations by the GMD.

If sued by the GMD in the district court, an alleged violator would probably claim that the GMD has no legal power to bring the suit because the statute gives the exclusive authority to bring such suits to another body. Strictly speaking, only the Chief Engineer has been given express authority<sup>139</sup> to enforce rules and regulations. Moreover, with respect to unlawful diversions, the Water Appropriation Act seems to reserve the power of bringing suit to the Attorney General—the Chief Engineer can only issue directives to the violator.<sup>140</sup> In further support of his argument, the violator can show that the Groundwater Management District Act repeatedly expresses the intent of respecting the Water Appropriation Act and the duties of the Chief Engineer under that Act.<sup>141</sup> The violator would argue that had the legislature intended to give the GMD's the power to enforce rules and regulations in lawsuits, the legislature would have expressly stated so in the Act. Last, he would point to another statute<sup>142</sup> that gives the Chief Engineer the authority to delegate his duties or functions to members of his staff. That statute gives him no authority to delegate enforcement powers to GMD's.

The GMD and Chief Engineer, on the other hand, would argue that the power granted to the Chief Engineer in the Water Appropriation Act gives him the power to designate the GMD as the enforcing party. First, the statute gives him the power to adopt reasonable rules and regulations. The regulation giving the GMD the power to sue is reasonable because the GMD is in the best geographic position not only to find the violator, but also to enjoin the use via a lawsuit. After all, the stated purpose of the Groundwater Management District Act is to establish the right of local users to determine their destiny with respect to use of the groundwater. Therefore, the GMD is the real party in interest. Second, the Chief Engineer would argue that the power to adopt and enforce rules and regulations includes the authority to designate the power to bring the lawsuit. If nothing else, designation of his power to the GMD's would relieve the Chief Engineer, his attorney, and his staff from the burden of traveling to participate in the pretrial motions and trial.

On balance, resolution of this question appears to be on the side of the violator arguing that the GMD cannot bring a suit to enforce rules and regulations, particularly in light of the statutory language. A simple solution to the problem would

<sup>137</sup> KAN. ADMIN. REG. arts. 5-22-6, -25-9 (Supp. 1980) (GMD's No. 2 and No. 5); GMD No. 3, Proposed Rules, *supra* note 127, 5-23-11.

<sup>138</sup> See text accompanying notes 75-81 *supra*.

<sup>139</sup> See KAN. STAT. ANN. § 82a-706a (1977).

<sup>140</sup> As stated earlier, the Attorney General may simply name the Chief Engineer as his special or assistant attorney general to bring the suit. See text accompanying note 81 *supra*.

<sup>141</sup> See notes 103-04 and accompanying text *supra*.

<sup>142</sup> See KAN. STAT. ANN. § 74-510a (Supp. 1980).



be a legislative amendment that would give the Chief Engineer the authority to allow GMD's to enforce rules and regulations. This could be done in either the Water Appropriation Act or the Groundwater Management District Act. Alternatively, resolution of the question could be left to the courts.

### C. *Legal Problems with the Well Spacing and Safe Yield/Depletion Regulations*

#### 1. *A Synopsis of the Requirements*

As shown in Table I, all four GMD's with either active or proposed rules and regulations have requirements for well spacing in new well permits. In addition, all GMD's either (1) incorporate a safe yield or a depletion formula that further defines well spacing or, in some cases, would prohibit the issuing of a new permit, or (2) have separate sections on depletion or safe yield. The following summarizes the well spacing, safe yield and depletion formulae of the four GMD's:

##### a. *GMD No. 1 Western Kansas*

Well spacing and depletion are combined in one section. If the permit application is for other than domestic use and is for water from the Ogallala formation, the following well spacing is required:<sup>143</sup>

<i>Percent Depletion Since 1950</i>	<i>Minimum Spacing</i>
0 to 10	1320 feet [ $\frac{1}{4}$ mile]
11 to 25	1650 feet
26 to 40	1980 feet
41 to 50	2640 feet [ $\frac{1}{2}$ mile]

If the application is for the Dakota formation, well spacing is 2640 feet ( $\frac{1}{2}$  mile).<sup>144</sup>

##### b. *GMD No. 2 Equus Beds*

One section of the regulations has a flat  $\frac{1}{4}$  mile (1320 feet) well spacing requirement for all permit applications except domestic wells.<sup>145</sup> The safe yield requirement is found not in the rules and regulations, but in the management program under a section called "Policy Statements of the Equus Beds Groundwater Management District No. 2."<sup>146</sup> The safe yield policy is found in the statement that "a balance will be maintained between recharge to the Equus Beds and total groundwater withdrawals (discharge) from the Equus Beds."<sup>147</sup> To accomplish safe yield, the GMD bases its recommendation for approval or denial of an application permit on a two-mile radius formula as follows: (1) a circle with a radius of two miles is drawn around the proposed well, and within the circle all of the existing wells as shown on prior applications for permits, certificates of appropriation, or vested rights are totalled as to annual quantity; (2) that annual quantity is added to the quantity of water requested in the application; (3) if the total quantity found by the addition in (2) is less than 4025 acre-feet, approval of the application will be recommended if it meets other criteria; if the total is greater than 4025 acre-feet,

<sup>143</sup> KAN. ADMIN. REG. art. 5-21-3 (Supp. 1980).

<sup>144</sup> *Id.*

<sup>145</sup> *Id.* art. 5-22-2.

<sup>146</sup> GMD No. 2, Program, *supra* note 115, at 17, 18.

<sup>147</sup> *Id.* at 18.

denial of the application will be recommended, unless it is the quantity of the proposed well that puts the total over 4025 acre-feet, in which case the GMD may recommend a quantity that would make the withdrawals equal 4025 acre-feet.<sup>148</sup>

The 4025 acre-feet is the average amount of recharge within an average two-mile radius circle in the GMD. This amount is calculated by assuming that out of an average rainfall of thirty inches, twenty percent or six inches returns to the aquifer as recharge.<sup>149</sup>

*c. GMD No. 3 Southwest Kansas (Proposed Rules and Regulations)*

Well spacing and depletion are treated in separate sections of the proposed regulations. All non-domestic use applications for withdrawals from the Ogallala aquifer or an alluvial aquifer must meet the following requirements: (1) if the diversion rate is 51 to 400 gallons per minute with a maximum pump column diameter of 6 inches, the well spacing is 1300 feet; (2) if the diversion rate exceeds 400 gallons per minute or a pump column diameter exceeds 6 inches, the well spacing is 2300 feet. Wells located in the Dakota aquifer, except domestic wells, must conform to spacing requirements of 2300 feet.<sup>150</sup>

Instead of a safe yield formula, GMD No. 3 has a depletion formula that would also determine whether a well permit will be recommended by the GMD. The formula is stated as follows:

The proposed appropriation, when added to the vested rights, prior appropriation rights and earlier priority applications shall not exceed a calculated rate of depletion of more than forty percent (40%) in twenty-five (25) years of the saturated thickness underlying the area included within a two (2) mile radius (approximately 8,042 acres) [circle] whose center is the location of the proposed well.<sup>151</sup>

The formula is then shown in mathematical form containing variables and constants for the *area under consideration* (area within a two-mile radius), *the average saturated thickness* (to be determined from maps developed by the United States Geological Survey, the Kansas Geological Survey, or from other reliable information), the *storage coefficient* or specific yield (to be twenty percent "unless additional hydrological information indicates differently"); and *average annual recharge* (to be two inches per year).<sup>152</sup>

*d. GMD No. 5 Big Bend*

Well spacing and safe yield are required by this GMD, but they are stated in separate sections of its rules and regulations. The well spacing regulation is 1320 feet (¼ mile) for all non-domestic wells, except for wells in the Dakota aquifer, which require one-mile spacing.<sup>153</sup> The safe yield requirement is not specifically set out in the rules and regulations. One section states that "based upon the safe

<sup>148</sup> *Id.* at 19-21.

<sup>149</sup> Average Recharge  $\times$  Area = Total Recharge  
 Area =  $3.1416 \times 2 \text{ miles}^2 = 12.57 \text{ square miles} = 8044 \text{ acres}$   
 Average Recharge = 6 inches = ½ foot  
 Total Recharge = ½ foot  $\times$  8044 acres = 4022  $\cong$  4025 acre feet

<sup>150</sup> GMD No. 3, Proposed Rules, *supra* note 127, 5-23-3.

<sup>151</sup> *Id.* 5-23-4.

<sup>152</sup> *Id.*

<sup>153</sup> KAN. ADMIN. REG. art. 5-25-2 (Supp. 1980).

yield of the principal aquifers within the district as determined by the best hydrologic data available, the board may adopt guidelines within its management program pertaining to the maximum allowable appropriation of groundwater."<sup>154</sup> "Safe yield," however, is defined in the rules and regulations as "that quantity of groundwater withdrawn from a given area which approximately equals the average annual recharge to that same area."<sup>155</sup>

GMD No. 5 sets up its safe yield requirement in its management program, following a statement that "[t]he following *policies* are hereby adopted to help accomplish this objective."<sup>156</sup> This safe yield formula, like that of GMD No. 2, uses a two-mile radius circle around a proposed well to test any new well permit. That formula assumes a five inch annual recharge from precipitation (approximately twenty percent of the average twenty-four inches of precipitation). Additionally, it assumes a three to four inch annual recharge from the irrigation system itself. Together, this recharge is translated into an average of 6000 acre feet for an area contained in a circle of two-mile radius. As is done in the formula for GMD's No. 2 and No. 3, the procedure here is to total the quantity of diversions from existing applications, permits, certificates, or vested rights within the circle. If that total added to the quantity requested by the applicant exceeds 6000 acre feet, the application should be denied.<sup>157</sup>

With these well spacing, depletion or safe yield requirements in mind, can an applicant whose permit is denied by the Chief Engineer on the basis of a GMD's recommendation substantively attack that decision? This question goes to the statutory as well as the scientific validity of these rules and regulations.

## 2. *The Statutory Standard*

The statutory standard that the Chief Engineer must follow in passing on a water right application must be examined because if any rules and regulations were clearly violative of the statutory standard, those regulations would necessarily be illegal. The statutory standard is found in the Water Appropriation Act, which, in relevant part, provides:

If a proposed use neither will impair a use under an existing water right nor prejudicially and unreasonably affect the public interest, the Chief Engineer shall approve all applications for such use . . . . In ascertaining whether a proposed use will prejudicially and unreasonably affect the public interest, the chief engineer shall take into consideration . . . the area, safe yield and recharge rate of the appropriate water supply, the priority of existing claims of all persons to use the water of the appropriate water supply, the amount of each such claim to use water from the appropriate water supply, and all other matters pertaining to such question. With regard to whether a proposed use will impair a use under an existing water right, impairment shall include the unreasonable raising or lowering of the static water level . . . .<sup>158</sup>

<sup>154</sup> *Id.* art. 5-25-4.

<sup>155</sup> *Id.* art. 5-25-1(d).

<sup>156</sup> Big Bend Groundwater Management District No. 5, Revised Management Program 11 (1978) (approved by Chief Engineer Jan. 5, 1979).

<sup>157</sup> *Id.* at 13-14. This safe yield formula, although currently contained only in the management program, is being proposed as an addition to the rules and regulations.

<sup>158</sup> KAN. STAT. ANN. § 82a-711 (Supp. 1980).

Thus, there are two general statutory considerations, the public interest and impairment of existing water rights. Presumably, the well spacing requirements found in the regulations would be directed to the requirement prohibiting the impairment of existing rights, although it could also be directed to the public interest. The safe yield or depletion formulae, on the other hand, would be directed primarily to the public interest requirement. Do the rules and regulations described above meet at least the statutory standard found in the Act?

### 3. Well Spacing

An aggrieved applicant whose permit is denied because his proposed well is too close to an existing well under the spacing requirements of a GMD could hardly argue that the Chief Engineer cannot use some well spacing scheme as a means of insuring no impairment of an existing right. Elementary hydrology, based on empirical data, teaches that wells placed too closely to each other will affect and influence each other. The pumping of a well causes a drawdown of the water table in the vicinity of the well. "[A] circular depression in the water table must develop when a well is pumped since no flow could take place without a gradient toward the well. This depression is called a *cone of depression*, and the [overall] decrease in water level . . . is called the *drawdown*."<sup>159</sup> Looking at the cross section of a well, the hydraulic grade line, which is the top of the water table sloping toward the well, is called the drawdown curve. The area of influence is the area, when looked at from above, covered by the drawdown curves of a given pumping well or combination of wells at a particular time.<sup>160</sup> If well spacing is great enough, the areas of influence are separate from each other; if well spacing is not great enough, the discharge and drawdown of individual wells are affected by neighboring wells. Complex mathematical formulae have been developed to determine drawdown, area of influence, and other hydraulic phenomena in wells. The modified Theis equation is an important formula that determines the drawdown at any distance away from a pumping well and thus, the influence of one well on another. That equation considers factors such as pumping rate, transmissibility of the aquifer, coefficient of storage, distance from the well, and the time of pumping.<sup>161</sup>

The specific question is whether the various well spacing regulations help the Chief Engineer determine whether there might be impairment of an existing right or unreasonable effect on the public interest. Are these well spacing requirements based on scientific data that would be supportable and explainable if attacked by a disgruntled applicant in court?

It is doubtful that the GMD's conducted any field tests or scientific tests or plugged figures into the Theis equation to determine if the well spacing requirement, when applied to an average well, would prevent impairment of an existing right. Even if they had determined that, for example, under a one-fourth mile

<sup>159</sup> R. LINSLEY & J. FRANZINI, *WATER-RESOURCES ENGINEERING* 83 (1964).

<sup>160</sup> See S. BUTLER, *ENGINEERING HYDROLOGY* 110-15 (1964).

<sup>161</sup> "Transmissibility" is a measure of the flow capacity of an aquifer in gallons per day per foot width, equal to the product of permeability times the saturated thickness of the aquifer. "Permeability" refers to the ability of a material to transmit fluid through its pores. "Coefficient of storage" denotes storage capacity of porous materials. "Porosity" of a material like the underground sands and gravels that hold groundwater, refers to the amount of void spaces in that material. See BUTLER, *supra* note 160, at 110-48, 337-44. See also C. CORKER, *Groundwater Law, Management and Administration* ch. II, reprinted in NATIONAL WATER COMMISSION, *LEGAL STUDY #6*, at 37-98 (1972).

spacing requirement a new well would cause a drawdown in a neighbor's well of one foot over sixty days of consecutive pumping, would that amount of drawdown necessarily be impermissible? In other words, is there an "impairment" if one's well is affected by a neighbor's well  $r$  feet away over  $t$  days of pumping at  $Q$  rate of pumping? This question brings us to the heart of the problem in determining whether the well spacing requirements are satisfactory. What is permissible cannot be determined because neither the statutes nor the Kansas cases define "impairment." The statute prohibits an "unreasonable . . . lowering of the static water level,"<sup>162</sup> and the Chief Engineer, in determining reasonableness, must consider "the economics of . . . pumping water for the uses involved."<sup>163</sup> If a GMD's well spacing regulation were challenged, the GMD would simply have to argue that the lowering of the water level by a new well under its well spacing requirements would be a "reasonable" lowering, but that a closer well spacing would produce "unreasonable lowering" of the static water level.

There is some authority for a one fourth mile minimum well spacing requirement. Apparently, that is the figure the Chief Engineer has historically used.<sup>164</sup> Also, the fact that 1300 to 1320 feet minimum spacing requirements were arrived at by each of the GMD's may give that figure some credence. Even if this distance were not arrived at by using equations or actual field tests for impairment, the fact that all agree on roughly the same figure shows some unity of thinking on proper distances. Last, although there have been no Kansas Supreme Court cases defining "impairment," there are several Kansas district court cases that addressed the question. One case, for example, *File v. Solomon Valley Feedlot, Inc.*,<sup>165</sup> involved a claim by plaintiff that his domestic and irrigation wells with early priority dates were being impaired by domestic, irrigation, and industrial wells of several de-

<sup>162</sup> KAN. STAT. ANN. § 82a-711 (Supp. 1980).

<sup>163</sup> KAN. STAT. ANN. § 82a-711a (1977).

<sup>164</sup> Interview with Thomas Bell, Manager of GMD No. 2, in Halstead, Kansas (Aug. 12, 1980).

<sup>165</sup> No. 8831 (Dist. Ct., Mitchell County, Kan., Feb. 9, 1973). There are three other cases from the same era. In each of these, the petition was filed by a person claiming that there was an impairment of plaintiff's prior water right by defendant's irrigation use. In each case, the district court judge, under Kansas Statutes Annotated section 82a-725, referred the matter to the Chief Engineer for an investigation and report and ultimately adopted the Chief Engineer's report as the court's findings of fact, thus holding for defendants and against plaintiffs.

In *Adams v. Casterline Grain & Seed, Inc.*, No. 20831 (Dist. Ct., Ford County, Kan., Nov. 29, 1971), plaintiffs sued to enjoin defendant's irrigation use on the ground that plaintiff's vested domestic rights were being impaired. Defendant's well was located at distances ranging from 340 feet to 703 feet from plaintiff's wells. The Chief Engineer's report, which was adopted by the district judge, concluded that the water level in plaintiff's wells would drop 7.5 to 8 feet after 30 days of 1430 gallons per minute pumping of defendant's well, and 7 to 9 feet after 80 days of pumping. The Chief Engineer's final conclusion was that there was an adequate water supply available, and plaintiff's could obtain that supply by installing suitable pumping equipment on the domestic wells.

A similar conclusion was made in the Chief Engineer's report filed in *Dasenbrock v. Stauth*, No. 20,880 (Dist. Ct., Ford County, Kan., Jan. 31, 1972). In that case, plaintiff's domestic well was located 1130 feet from defendant's irrigation well. The Chief Engineer's report found that with defendant's well pumping at 840 gallons per minute, there was a lowering of the water level in plaintiff's domestic well of 4.4 feet after 10 days of pumping, 6.5 feet after 30 days, and 8.6 feet after 80 days. The report concluded that an adequate water supply was available for plaintiff's domestic purposes.

In *Buck v. Dierks*, No. 3716 (Dist. Ct., Wichita County, Kan., June 19, 1972), the Chief Engineer's and the district court judge's conclusions were again similar to the decisions in the earlier cases. In *Buck*, plaintiff's irrigation well lay three sixteenths of a mile from one of defendant's irrigation wells and one eighth of a mile from another. The Chief Engineer's report concluded that plaintiff's pumping rate decreased from 158 gallons per minute in February 1971 to 134 gallons per minute in July 1971 (a 15% reduction), due in part to plaintiff's own pumping and in part to defendant's two wells. The report further concluded, however, that defendant's influence was not enough to be an "unreasonable impairment" of plaintiff's water right.

defendants pumping from the same groundwater aquifer near Beloit in the Solomon River Valley. In a separate report filed with the court, the Chief Engineer found that two irrigation wells located over 1¼ miles from plaintiff's well had a water lowering effect of ½ foot on plaintiff's wells when the two irrigation wells were pumped at 300 and 400 gallons per minute respectively, for 45 days of pumping. Several other wells within one mile from plaintiff's wells had much greater effects. One well, for example, would cause a 3.4 foot lowering of the water table after 10 days of pumping. The combined effect of all the wells in the vicinity would lower the water table by 6.5 feet in 10 days and 11.1 feet in 45 days. Also, this lowering caused plaintiff's pumping rate to drop from 800 to 580 gallons per minute after 10 days and to 423 gallons per minute after 45 days. The district court made similar findings and concluded that the wells located over 1¼ miles away *did not* impair plaintiff's rights, but that the wells within 1 mile *did* impair plaintiff's rights. The court's basis for this conclusion was that "there is impairment of plaintiff's prior water appropriation right when plaintiff's authorized diversion *rate* is decreased by at least 20 percent in addition to the rate reduction caused by the pumping of plaintiff's irrigation well."<sup>166</sup> Thus, the court determined what an impairment was in terms of lessening the *rate* at which a well can pump, but not in terms of the amount of the lowering of the water table. The decision was not supported by any case law or scientific authority in the opinion, and the record is bare as to how the court might have drawn its twenty percent rate reduction conclusion.

A person whose application has been denied because of well spacing requirements could point to *statutes* of at least two states that impose well spacing requirements of lesser distances. New wells in Colorado outside its "designated ground water basins," are allowed so long as they will not materially injure vested rights and are placed at a distance of more than 600 feet from an existing well.<sup>167</sup> Nebraska's new statutory well spacing requirement is that no new well may be placed less than 1000 feet from existing wells.<sup>168</sup> The general hydrologic conditions in Nebraska and Colorado are probably not that different from those in Kansas where the GMD's are requiring more stringent well spacing.

Moreover, the person seeking closer well spacing might be able to show on an individual basis that his well will not impair an existing well, particularly if he can show that he is in an area of high recharge, high porosity, and low permeability<sup>169</sup> and that his proposed pumping rate is low or of short duration. Even then, however, the question arises as to how much influence amounts to an "impairment." Resolution of the question may depend on who has the burden of proof. If the burden rests with the GMD or the Chief Engineer, they may be unable to meet the burden unless they have solid scientific evidence showing the actual impairment and a solid legal basis for concluding that the influence should be deemed an impairment. Contrariwise, if the burden is on the applicant, then he will find it difficult to meet the burden of proof. Since the Chief Engineer has the duty to pass on all applications after considering both impairment of existing uses and the public interest, it seems that any well spacing requirement that appears reasonable,

<sup>166</sup> File v. Solomon Valley Feedlot, Inc., No. 8831, para. 5 (Dist. Ct., Mitchell County, Kan., Feb. 9, 1973).

<sup>167</sup> COLO. REV. STAT. § 37-90-137(2) (1974).

<sup>168</sup> NEB. REV. STAT. § 46-651 (Supp. 1979).

<sup>169</sup> For a definition of these terms, see note 161 *supra*.

even though not based on solid scientific reasoning, would be acceptable to a court. This means that the applicant probably would have the burden of showing that the well spacing requirement is arbitrary and capricious. The statutory language supports this conclusion concerning burden of proof.

#### 4. *Safe Yield and Depletion Formulae*

Whether a GMD adopts a safe yield instead of a depletion formula depends on the location of the GMD. The two eastern-most GMD's (No. 2 and No. 5) have adopted safe yield requirements in order to prohibit "mining" of groundwater within their boundaries. The reason for this requirement is that the geology of the area within these boundaries coupled with a higher precipitation rate<sup>170</sup> than that found in extreme western Kansas provides plentiful recharge of the groundwater aquifers.

The two western GMD's that have depletion formulae (No. 1 and No. 3), in contrast, have different soils and much less precipitation.<sup>171</sup> Thus, these GMD's must assume that there will be depletion; their job is to determine an acceptable figure for the rate of depletion. GMD No. 1 has simply set its well spacing requirements based on historic depletion of the aquifer, using a 1950 base year.<sup>172</sup> GMD No. 3, on the other hand, has adopted a rule under which a proposed well will not be allowed if it would create a depletion (when combined with existing withdrawals), within twenty-five years, of greater than forty percent of the saturated thickness underlying a two-mile radius circle around the proposed well.<sup>173</sup>

An applicant who is denied a permit because his proposed well will either create a mining situation or exceed the allowable depletion will probably attack these rules and regulations. As with well spacing requirements, the aggrieved applicant's success will depend on the statutory and scientific validity of the regulations. Any cases that have ruled on the legality of similar regulations should also be considered with these questions.

As previously noted, the safe yield and depletion formulae are probably aimed at protecting the public interest, rather than at testing whether there is an impairment of an existing water right. The statutory standard states that the Chief Engineer, in testing whether an application will prejudicially and unreasonably affect the public interest, shall consider (1) the *area*, (2) *safe yield* and *recharge rate* of the appropriate water supply, (3) the *priority* of existing claims, (4) the *amount* of each such claim, and (5) all other matters pertaining to this question.<sup>174</sup> To be valid, any safe yield or depletion formula must somehow take these factors into account.

The safe yield requirements of GMD's No. 2 and No. 5 appear to consider these factors. Each uses a two-mile radius circle formula to determine whether the new

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<sup>170</sup> The estimated average annual recharge from precipitation is six inches in the Equus Beds area of GMD No. 2, GMD No. 2, Program, *supra* note 115, at 19, and five inches in the Big Bend area of GMD No. 5, Big Bend Groundwater Management District No. 5, Revised Management Program 13 (1978) (approved by Chief Engineer Jan. 5, 1979).

<sup>171</sup> GMD No. 3, for example, uses a figure of just two inches per year for combined precipitation and return flow from irrigation as its average annual recharge. GMD No. 3, Proposed Rules, *supra* note 127, 5-23-4.

<sup>172</sup> See KAN. ADMIN. REG. art. 5-21-3 (Supp. 1980).

<sup>173</sup> GMD No. 3, Proposed Rules, *supra* note 127, 5-23-4.

<sup>174</sup> See text accompanying note 158 *supra*.

well would create a mining situation. They both factor in an average recharge rate as well as the total amount of existing claims, which of course are of higher priority since they are prior in time. Thus, at least on the surface, these two safe yield methods appear to meet the statutory requirements the Chief Engineer faces each time he passes on an application.

The depletion formula of GMD No. 3 (forty percent in twenty-five years) also factors into its determination the items listed above. The question that arises with respect to GMD No. 3, however, is whether the "safe yield" factor the Chief Engineer must *consider* is one that must be *adhered to*—that is, can the Chief Engineer even allow depletion or must he require safe yield? The statute does not state that he must require safe yield; it merely lists this as one of the factors in determining the public interest. On the other hand, the Chief Engineer may declare an area within or outside of a GMD as an "intensive groundwater use control area" if groundwater levels in the area are declining or have declined excessively or "the rate of withdrawal of groundwater within the area in question equals or exceeds the rate of recharge in such area."<sup>175</sup> This language seems to allow discretion in the Chief Engineer and does not force him to adhere to rigid safe yield requirements across the state. Of course, a disappointed permit applicant would not argue that the Chief Engineer has to adhere to a safe yield instead of a depletion formula, since such a requirement in the western-most GMD's would *reduce* the number of permits that would be approved. A protester to an application, however, would make this argument. Cases in other states have generally held that where there is a non-rechargeable basin, the basin can be given an economic life for purposes of depletion and there need not be a safe yield rule applied to the aquifer.<sup>176</sup> If this were not the case, any subsequent appropriator would necessarily impair the use of the senior, at least to some degree.<sup>177</sup> Thus, if one accepts the premise that the Chief Engineer has the discretion to allow the lowering of the groundwater table in the state, then the Chief Engineer and a GMD may allow depletion to occur at some prescribed rate over a certain period of time.

On the other hand, in contrast to GMD No. 3, the well spacing requirements of GMD No. 1 are based only on *historic* depletion, not anticipated future depletion. GMD No. 1's formula expressly includes the area and implicitly includes the amount and priority of existing claims.<sup>178</sup> It does not explicitly recognize the recharge rate. Perhaps it indirectly factors in safe yield by recognizing that withdrawals have exceeded recharge. Thus, although this formula does not as clearly incorporate the factors required by the statute, it probably does so indirectly. A potential weakness in this formula, however, is that while it indirectly accounts for existing users since they must have existed for the water table to have dropped a given percentage since 1950, it does not directly account for what is actually being pumped when the new well application is made. Thus, a person might apply for permits for two wells in an area where there is historic depletion of a given percentage, but there may no longer be an existing well in the vicinity. Yet according to the well-spacing depletion formula of GMD No. 1, the applicant might have to space his wells farther:

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<sup>175</sup> KAN. STAT. ANN. § 82a-1036 (Supp. 1980); see discussion under section III C *supra*.

<sup>176</sup> See, e.g., Mathers v. Texaco, Inc., 77 N.M. 239, 421 P.2d 771 (1966).

<sup>177</sup> See *id.* at 241, 421 P.2d at 773.

<sup>178</sup> KAN. ADMIN. REG. art. 5-21-3 (Supp. 1980).



apart than he wants. In the case of greater than fifty percent depletion since 1950, he might be denied a permit entirely, even though there are no *existing* wells in the area and he is willing to dig the well deep enough to obtain his water.

Assuming that the safe yield and depletion formulae are *prima facie* satisfactory from a statutory standpoint, this does not end the inquiry. There are several other objections that might be made by unsuccessful permit applicants.

*a. Validity of the Safe Yield Formulae*

One objection would be that a GMD or the Chief Engineer cannot require the safe yield criteria, even in the two GMD's that have large recharge capabilities, because this inhibits economic growth and full utilization of the state's water resources. It could be further argued that the statutory section requiring the Chief Engineer to consider the safe yield of the source is just one factor to be considered and does not mean he can actually impose a safe yield requirement on a whole GMD or any other area. One of the basic legislative policies on water resources is that "the state of Kansas will encourage, promote, and secure the maximum beneficial *use*, control, and *development* of the water resources of the state."<sup>179</sup> The legislature further directed the Kansas Water Resources Board to consider the following policy in developing the State Water Plan: "Maximum economic development of the water resources of the state for the benefit of the state as a whole."<sup>180</sup> The Plan contains development of sufficient supplies of water for beneficial purposes, including municipal, irrigational, and agricultural, as a specific goal and objective.<sup>181</sup> The State Water Plan does not include a specific policy of conservation. Indeed, in 1980 the Water Resources Board requested the legislature to change the State Water Plan by expressly stating a policy of *management* and *conservation*—to put management and conservation on par with development as a basic policy in Kansas water resource management. The legislature did not pass the bill that would have effected this change.<sup>182</sup>

The counter to the argument that safe yield can not be required is two-fold. First, the Chief Engineer (and through him the GMD's) is given broad discretion by the Water Appropriation Act to decide how to regulate the water supplies in the State of Kansas. The Act does not expressly prohibit him from setting up safe yield objectives and in fact, it requires him to make the tough allocation decisions. The question of safe yield boils down to whether the current generation will be allowed to drink up all the water and in doing so, deprive future generations of that water. The safe yield requirement simply balances the use of the water between the present and future generations. Second, the policy of conservation is implicit in the Water Appropriation Act, the Groundwater Management District Act, and the State Water Plan Act.<sup>183</sup> The Chief Engineer must administer the laws of the state and must not only control, regulate, allot, and aid in the distributions of the water resources, but also must *conserve* the water.<sup>184</sup> The Groundwater Management District Act allows the Chief Engineer to establish Critical Ground-

<sup>179</sup> KAN. STAT. ANN. § 82a-901 (1977) (emphasis added).

<sup>180</sup> *Id.* § 82a-907(a).

<sup>181</sup> *Id.* § 82a-927(1).

<sup>182</sup> H. 2739, 68th Legis., Reg. Sess. (1980).

<sup>183</sup> KAN. STAT. ANN. §§ 82a-901 to -926 (1977).

<sup>184</sup> *Id.* §§ 82a-706, -706a.

water Use Control Areas whenever he finds a mining situation.<sup>185</sup> Does this not imply that he could require safe yield? While maximum development is a policy of the legislature, so too is the development of *water conservation* projects<sup>186</sup> and sound *management* of ground water supplies.<sup>187</sup> So while conservation is not listed as one of the basic policies in the State Water Plan, it can be implied.

Last, other states have adopted safe yield requirements. The Idaho Groundwater Act, for example, provides that "[w]ater in a well shall not be deemed available to fill a water right therein if withdrawal therefrom of the amount called for by such right would . . . result in the withdrawing of the ground water supply at a rate beyond the reasonably anticipated average rate of future natural recharge."<sup>188</sup> This is, in essence, a safe yield formula imposed by the legislature. The Idaho Supreme Court upheld this formula in *Baker v. Ore-Ida Foods, Inc.*,<sup>189</sup> and in doing so required the sixteen wells that caused the mining situation to shut down because they were junior to the four wells allowed. Arguably, the Idaho and the Kansas GMD situations are different because Idaho's requirement is statutory, while Kansas' requirements are in administrative regulations or GMD management programs or policies. That distinction, however, is probably not determinative on the question of the validity of the Kansas GMD safe yield formulae. A court could look with more respect on a statutory formula than on an administrative formula. Yet, if it is constitutional for the legislature to create GMD's, then the GMD's presumably have legislative-type powers. Thus, their programs and policies and the rules and regulations they recommend to the Chief Engineer should be given great respect. On balance, the stronger arguments support the Chief Engineer's and the GMD's imposing safe yield standards on new applications, but their position would be buttressed substantially by an express policy of "conservation" in the State Water Plan.

#### *b. Validity of the Depletion Formulae*

An unsuccessful applicant in GMD No. 3 might argue that the depletion formula chosen by the GMD has no proper basis and, therefore, is arbitrary and capricious. As previously discussed, the Water Appropriation Act probably allows the Chief Engineer to impose a safe yield requirement on the area within a GMD and if he can do that, surely he can allow a depletion formula in another GMD. After all, a depletion formula is more liberal in allowing withdrawals than is a safe yield formula. On the other hand, to withstand judicial scrutiny, the formula chosen by the GMD and endorsed by the Chief Engineer should have some rational basis.

Neither the rules and regulations nor the management program of GMD No. 3 explains the basis for the decision to choose a twenty-five year, forty percent depletion formula. The twenty-five year period may have been chosen because it represents the average life of an irrigation system, because it represents the term of a typical amortizing loan used to finance installation of an irrigation system, or because it represents approximately one generation. Alternatively, it could be based on the term of years the GMD wants to continue to have some use of the groundwater in the area. The forty percent figure might have been chosen because that is the figure

<sup>185</sup> See notes 37-38 and accompanying text *supra*.

<sup>186</sup> KAN. STAT. ANN. § 82a-901 (1977).

<sup>187</sup> *Id.* § 82a-927.

<sup>188</sup> IDAHO CODE § 42-237a(g) (Supp. 1980).

<sup>189</sup> 95 Idaho 575, 513 P.2d 627 (1973).

at which extraction of groundwater under current conditions and energy costs would no longer be economically feasible. It is possible that the GMD chose the figure based on figures used in other states or GMD's.

Coincidentally (or perhaps not), the Colorado Ground Water Commission chose a similar test. While it based its determination on a *three-mile* radius test (rather than the two-mile test used by GMD No. 3), it also incorporated a forty percent, twenty-five year depletion formula. This test was subjected to judicial scrutiny in *Fundingsland v. Colorado Ground Water Commission*.<sup>190</sup> Fundingsland sought a new well permit and was turned down because withdrawals from existing wells would cause more than forty percent depletion of the aquifer within a three-mile radius of his well in twenty-five years. On appeal to the Supreme Court of Colorado, the three-mile test was upheld.<sup>191</sup> The court first examined the *statutory* factors the Commission was required to consider when it passed on well permit applications.<sup>192</sup> In Colorado the Commission was to consider "the area and geologic conditions, the average annual yield and recharge rate of the appropriate water supply, the priority and quantity of existing claims of all persons to use the water, the proposed method of use, and all other matters appropriate to such questions."<sup>193</sup> As in Kansas, "impairment" of existing water rights included "the unreasonable lowering of the water level . . . beyond reasonable economic limits of withdrawal or use."<sup>194</sup> In upholding this three-mile, forty percent in twenty-five year depletion test, the court stated that the test is "partly based on policy and partly based on fact and theory."<sup>195</sup> It concluded that the test takes into account all the considerations specified in the statute.<sup>196</sup> Expert engineering testimony at the trial suggested that the three-mile radius circle represented the area over which a well, located at the center, would have an effect if permitted to pump intermittently (approximately one hundred days per year) for twenty-five years. Other testimony revealed that the modified Theis equation had been used to determine what the draw-down effect on the water in the aquifer would be within the three-mile circle. Recharge was also considered. Forty percent was derived as the figure of depletion beyond which irrigation would no longer be economically feasible. Twenty-five years was the amount of time given by a lender as a reasonable term for repayment of a loan for irrigation works.<sup>197</sup> Last, the court recognized that groundwater hydrology is a complex area "about which little is known."<sup>198</sup> The three-mile test was, according to experts at trial, "the best tool they presently have to work with, and . . . will be refined as they continue to learn more about the area."<sup>199</sup>

The question here would be whether GMD No. 3's two-mile test would be upheld by a Kansas court because the similar three-mile test was upheld by a Colorado court. The statutory factors that the Colorado Commission and the Kansas Chief Engineer must consider are very similar.<sup>200</sup> The rationale for the

<sup>190</sup> 171 Colo. 487, 468 P.2d 835 (1970).

<sup>191</sup> *Id.*

<sup>192</sup> *Id.* at . . . , 468 P.2d 836.

<sup>193</sup> COLO. REV. STAT. § 37-90-107(5) (1973) (formerly § 148-18-6(5)).

<sup>194</sup> *Id.*

<sup>195</sup> 171 Colo. at . . . , 468 P.2d at 836.

<sup>196</sup> *Id.* at . . . , 468 P.2d at 837.

<sup>197</sup> *Id.*

<sup>198</sup> *Id.* at . . . , 468 P.2d at 838.

<sup>199</sup> *Id.*

<sup>200</sup> Compare COLO. REV. STAT. § 37-90-107(5) (1973) with KAN. STAT. ANN. § 82a-711 (1977).

twenty-five year and forty percent depletion could also be the same, but that is unknown at this time because the management programs and the regulations do not explain why these numbers were chosen. Even if the rationale for the twenty-five year period were the same, it is questionable whether the term for an irrigation works loan repayment has any rational connection with the term chosen for the depletion formula. The disparity between the three-mile versus two-mile test might be questioned, but that difference is arguably not important. What both tests are trying to determine is the volume of water under the proposed well surrounded by a circle of a given radius. Factors such as the average saturated thickness of the underlying aquifer and recharge are included in both equations. As long as the two-mile radius figure represents a figure that incorporates average saturated thickness underlying the aquifer and as long as the circle includes all existing water rights, it would seem that whether a two-mile radius or a three-mile radius circle is chosen should not be significant. Since a three-mile radius circle has more than twice the area of a two-mile radius circle, the larger circle would merely be more onerous administratively because more wells would have to be added to the equation.

On the other hand, there are two reasons why the size of the circle can make a substantive difference. First, in any specific case, circle radius could be significant because enlarging the circle could result in a higher or lower density of wells (number of wells per square mile) in the added area, thus changing the total withdrawal allowable in the formula. Second, even if the density of wells in a given area were uniform, the circle radius could make a difference because any one proposed well will have a greater impact on potential groundwater mining in a small area than in a large area. Stated in another way, with an increase in circle size, there is a corresponding decrease in the proportion that the quantity of the proposed well's withdrawal bears to the total quantity allowed within the circle by the formula. Thus, an applicant might be denied a permit if his requested amount were totalled with existing amounts in a small radius circle because the combined total might exceed the allowable figure. Yet he might be granted a permit if his requested amount were added to existing amounts in a larger circle, even though the density of existing wells were the same in both circles.

Thus, since circle size can make more than an *administrative* difference, the size of the circle should have some rational basis. In Colorado, the radius size was apparently based on the draw-down effect of the well. If that is a proper basis for determining the size of the circle, then the GMD should figure the draw-down for a typical Kansas well in that vicinity and base the circle test on that radius or on some other rational, defensible basis. The GMD should be prepared to defend its formula on grounds other than the fact that Colorado has a similar test that has been upheld. A Kansas court would surely recognize, as did the *Fundingsland* court, that hydrology is complex and still somewhat imprecise. Yet, to meet the challenge of arbitrariness and capriciousness, the depletion test used must be supportable under scientific reason and the factors given in the statute. Of course, each GMD may have precise and supportable reasons for its test and if so, it will be prepared to prove this in court. Now, however, the bases for the tests are simply not evident from the rules and regulations or the management programs published by the Chief Engineer or the GMD's.

*c. Consideration of Existing Water Rights*

A third objection that might be made to either the safe yield or depletion formula relates to calculating the quantity of existing claims. If the proposed well would make the total quantity diverted exceed a certain figure, the well permit is denied. GMD's No. 2, No. 3, and No. 5 set up two-mile radius circles around the proposed well site and then total the quantities of the existing well withdrawals. This total is calculated by using the figures shown in the official records of the Chief Engineer. These figures include not only certificates of appropriation and vested rights, but also permits that have not achieved the status of a certificate and mere applications on file that have not yet been approved.

The argument would be that the figures the Chief Engineer has in his records do not necessarily indicate what is actually being taken. Some wells might have ceased operation, yet they would still appear in the Chief Engineer's records if he had not held the abandonment hearing allowed to one who abandons his water right.<sup>201</sup> If the permit has not achieved the perfected status of a certificate of appropriation, the appropriator's actual water right may be considerably less than he originally requested. The Chief Engineer must inspect a well before certifying an appropriation right.<sup>202</sup> Since the Chief Engineer's office is behind by several years in officially certifying appropriation rights, the amount shown in the Chief Engineer's records may not accurately indicate the amount of outstanding appropriation rights. The applicant could argue that it is not fair to include a well in the two-mile circle calculations if the well has not achieved the status of a perfected, certified water right because a disparity exists between the amount of water appropriators claim to use and their appropriation rights, which are determined by actual usage. With the paucity of meters to measure actual diversion rates and total quantities taken, the amounts are hard to estimate anyway. Empirical data from other studies indicate *gross* disparities between the quantity shown on permits or certificates and that actually being diverted. One study in Wyoming, for example, showed great disparity (forty-eight percent) between the total acreage that was supposedly being irrigated according to the records and the acreage actually being irrigated; disparity as to actual location of points of diversion; and disparity between the actual existence of diversion works and what the "paper rights" in the records would indicate.<sup>203</sup>

In further support of this argument is a Colorado case in which similar claims were asserted. In *Thompson v. Colorado Ground Water Commission*<sup>204</sup> plaintiff's application for a permit to construct a well and appropriate groundwater was denied by the Colorado Ground Water Commission and the trial court because the proposed appropriation would unreasonably impair existing rights. This denial was made on the basis of a Colorado statute that required the Commission to consider the "quantity of existing claims" in passing on new well permit applications.<sup>205</sup> This "quantity" was the sum of all water rights that had been appropriated and those in the process of being appropriated under conditional permits. Plaintiff's

<sup>201</sup> See KAN. STAT. ANN. § 82a-718 (1977).

<sup>202</sup> *Id.* § 82a-714.

<sup>203</sup> McIntire, *The Disparity Between State Water Rights Records and Actual Water Use Patterns*, 5 LAND & WATER L. REV. 23, 26-30 (1970).

<sup>204</sup> 194 Colo. 489, 575 P.2d 372 (1978) (*en banc*).

<sup>205</sup> COLO. REV. STAT. § 37-90-107(5) (1973).

argument on appeal was directed at the Commission's consideration of these "conditional permits." Plaintiff claimed that the Commission was not issuing final permits and thus was not determining the exact amount of the water rights. Plaintiff's argument was that the Commission, in using the quantity stated in the conditional permits, was inflating the amount of water actually used under the permit. Plaintiff claimed that (1) the usual claim for a right to irrigate 160 acres was inflated by 21 percent because most irrigators use the center pivot method that irrigates a  $\frac{1}{4}$  mile circle rather than a  $\frac{1}{4}$  mile square; and (2) the Commission generally granted  $2\frac{1}{2}$  acre feet of water per acre when in fact these irrigators normally apply only 16 to 18 inches per acre per year. The Colorado Supreme Court agreed, and reversed the denial of plaintiff's application.<sup>206</sup> It noted that the Commission could not rely on conditional permits as though they were final permits. The court's decision was directed toward prohibiting conditional permit holders from "sleeping" on their water rights by not using them to the full extent, which in effect would deprive new applicants of their right to unappropriated water. Thus, the court ruled that the Commission may use two figures to determine the "quantity of existing claims": the amount in conditional permits still in the well construction phase and the amount in perfected water rights. The actual amount used for a well that is pumping under a conditional permit must be determined by the Commission before it can be considered in the calculation of existing claims.<sup>207</sup>

The case is relevant to the Kansas situation. While the Colorado and Kansas water right procedures are not identical, they are similar. In Kansas a person may divert water once his permit is approved and he builds his diversion works. As in Colorado, he must notify the Chief Engineer of the completion of his works and have them inspected by the Chief Engineer to receive his certificate. Also, the Chief Engineer requires the appropriation and vested right holders to send in annual reports of water usage.<sup>208</sup> If a person is not using water to the full extent of his right, he may lose a portion of that right. Although the Kansas Water Appropriation Act does not expressly discuss partial abandonment of a water right, the Act contains a three-year non-use abandonment provision<sup>209</sup> and a statement that "[a]ppropriation rights in excess of the reasonable needs of the appropriators shall not be allowed."<sup>210</sup>

The GMD's response to the argument that the Chief Engineer's records do not accurately reflect the actual amount of water appropriated is two-fold. First, the safe yield and depletion formulae, while they are stated as hard and fast rules, are given some flexibility in the regulations of the GMD's. The GMD can recommend exceptions to the policies of the Chief Engineer if the applicant in an individual case proves to the GMD that the proposed well would neither impair a use nor prejudicially and unreasonably affect the public interest.<sup>211</sup> Thus, an applicant could attempt to show that there has been either total or partial abandonment by other well owners within the two-mile radius, that less water is actually being diverted than is shown

<sup>206</sup> 194 Colo. at ..., 575 P.2d at 377-79.

<sup>207</sup> *Id.* at ..., 575 P.2d at 378.

<sup>208</sup> See KAN. STAT. ANN. § 82a-705a (1977).

<sup>209</sup> *Id.* § 82a-718.

<sup>210</sup> *Id.* § 82a-707(d).

<sup>211</sup> See KAN. ADMIN. REG. arts. 5-22-2, -25-3 (Supp. 1980); Southwest Kansas Groundwater Management District No. 3, Revised Management Program II, at 22 (1979).

in the official records, or even that a well is not actually within the two-mile radius because its diversion is located in a place other than that shown in the official records. Second, the GMD could simply request the Chief Engineer to take steps to perfect or declare as abandoned all the wells within the two-mile radius in question, and in effect, speed up the process for a particular area. At the time a lawsuit was contemplated, an applicant would, therefore, have no standing to claim that the Chief Engineer's records do not accurately reflect the water actually appropriated. The problem with this is that if multiplied by a large number of permit applications, the Chief Engineer's office would be where it is now—behind in its perfection and abandonment procedures because of a small staff and a large number of permits.

*d. Use of Average Figures for Conditions in the Tests*

A fourth objection to the safe yield or depletion tests is that the GMD's use of average figures might result in the denial of a permit in an area where these average conditions do not exist. Average figures are used in the various GMD formulae as follows:

*GMD No. 1:* Well spacing is varied according to the depletion of the aquifer since 1950 based on maps developed by the Chief Engineer.<sup>212</sup>

*GMD No. 2:* The safe yield formula uses average precipitation figures to calculate recharge, and an average twenty percent of the rainfall is deemed to recharge the aquifer.<sup>213</sup>

*GMD No. 3:* The depletion formula uses average saturated thickness of the aquifer under the two-mile radius circle, an average "specific yield,"<sup>214</sup> and an average annual recharge—all for the "district or sub-divisions thereof" as determined by the Board and approved by the Chief Engineer, "based upon available hydrological data and information." These figures, however, are not given in the rules and regulations or in the management program.<sup>215</sup>

*GMD No. 5:* The safe yield formula uses average annual precipitation of twenty-four inches and average recharge of this precipitation of five inches or approximately twenty percent; it uses an average from three to four inches of recharge from irrigation based on use of eighteen inches of groundwater for irrigation.<sup>216</sup>

An unsuccessful permit applicant could claim that the use of these average figures resulted in the unjustifiable denial of an appropriation right. He might argue that he is situated in a part of the GMD where there is more than average rainfall or where the soil and other geologic conditions are different, thus allowing for more recharge. If he is located in GMD No. 3, he might argue that his proposed source of water has a higher than average specific yield, and thus, there is actually more water available to be drawn.

The GMD could respond to this claim in several ways. First, the average figures chosen for recharge, at least, are probably liberal—they may be even greater than the actual average recharge. Erring on the side of assuming more recharge favors the permit applicant since it presumes the availability of more water than is actually

<sup>212</sup> KAN. ADMIN. REG. art. 5-21-3(a) (Supp. 1980).

<sup>213</sup> See notes 170-73 and accompanying text *supra*.

<sup>214</sup> GMD No. 3 used the term "specific yield" as synonymous with "coefficient of storage," defined in note 161 *supra*.

<sup>215</sup> See GMD No. 3, Proposed Rules, *supra* note 127; GMD No. 3, Revised Program, *supra* note 211.

<sup>216</sup> See GMD No. 5, Revised Program, *supra* note 156.

available. Thus, for this kind of averaging, the applicant would have no reason to object. Second, the GMD could point to the provisions in the rules and regulations and management programs allowing exceptions in meritorious cases. Certainly one such case would be when the applicant can show with reasonable certainty that conditions at his well location are different than the average conditions presumed by the GMD. If he can make such a showing, the GMD could and would recommend to the Chief Engineer that the permit be issued. The GMD, however, should require good evidence of the difference—good enough to persuade a judge if the matter were taken to court. Otherwise, if GMD's become too loose in allowing new wells for different-from-average conditions, the GMD itself might be subject to a mandamus suit requesting that it properly enforce its policies.

## VII. CONCLUSION

Controlling groundwater withdrawals in times of increased demand and generally lowering water tables is a thorny problem when individual water use needs and demands must be balanced with the long-term needs of the public. The Kansas Legislature has attempted to achieve this balance with the Groundwater Management District Act, which provides for local, rather than centralized control. That objective, however, will have to be tested against the Kansas constitutional provision that authorizes delegation of legislative functions to solve *local* problems. There could also be a constitutional problem with authorizing the Chief Engineer to shut down any well he chooses within the boundaries of an "intensive groundwater use control area" since that authority would contravene the mandate of the Kansas Water Appropriation Act that established a time priority method of obtaining and recognizing water rights in Kansas.

The Act clearly divides the responsibilities of action between the Chief Engineer on the one hand and the GMD's on the other. The GMD's, for example, may only *recommend* rules and regulations for adoption by the Chief Engineer, but may adopt and *enforce* policies and standards. To date, there has been no conflict between the two bodies, and cooperation has been excellent. Even in the several lawsuits filed to date that involve GMD's either directly or indirectly, the conflicts have been between applicants for water permits on the one hand and the Chief Engineer working with the GMD on the other.

There are several problems, however, that might be aided by action on the part of the legislature or the GMD's:

First, since GMD's may not directly enforce rules and regulations, but may enforce their own policies, GMD's should include in their management plans and express policies the same provisions contained in the rules and regulations. If GMD's want more or different powers than contained in the rules and regulations, they should include them in their policies so they may enforce them. In all cases, the matters the GMD itself seeks to enforce should be clearly and expressly labeled as policies of the GMD.

Second, this Article has concluded that a rule and regulation of the Chief Engineer that gives the GMD power to enforce the Chief Engineer's rules and regulations is probably in violation of the GMD Act as well as the Kansas Water Appropriation Act. The legislature could change this situation by passing a bill enabling the



GMD's to enforce rules and regulations or enabling the Chief Engineer to designate a GMD as its agent to enforce them.<sup>217</sup> The change could appear in either Act. To insure the validity of that change, however, the legislature should also amend its definition of "rules and regulations"<sup>218</sup> to make them enforceable by special districts.

Third, in discussing well spacing, safe yield, and depletion, this Article pointed out that there exists no statutory definition of "impairment" of existing rights. The legislature, the Chief Engineer, or the GMD's could conceivably attempt to define the term so that the State of Kansas would know what effect one water user can permissibly have on another. There is probably good reason, however, why this important term has been left undefined. "Impairment," like some of the general constitutional terms such as "due process," is best left to interpretation by the courts in individual cases. On the other hand, this is not to say that individual GMD's should not have some criteria upon which they decide when they must begin to act in times of water appropriator conflict. Many problems might be solved without ever filing a lawsuit, with the GMD acting as mediator.

Last, the GMD's should be prepared for litigation by having some rational and, if possible, a scientific justification for whatever numbers are chosen for well spacing and safe yield or depletion formulae. Conceivably, Kansas courts might not be as respectful of geologists, hydrologists, engineers, and other water professionals as other state courts have been and may require better or more precise bases for whatever numbers are chosen. The legislature could help in this process by amending the GMD Act to include a recognition of well spacing and safe yield and depletion formulae as valid techniques for protecting groundwater resources. Also, all of the parties involved in regulating groundwater would be aided by the addition of groundwater conservation as an express policy in the State Water Plan.

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<sup>217</sup> Kansas Statutes Annotated section 74-510a (Supp. 1980) should be amended. See note 142 and accompanying text *supra*.

<sup>218</sup> See KAN. STAT. ANN. § 77-415(4) (Supp. 1980).

