My recollections of boyhood in Concordia, a small town in north-central Kansas, from the late 1940s to the early 1960s include vivid memories of water use. My family camped at Kanopolis Reservoir, a U.S. Corps of Engineers project completed in 1948. We spent hot summer days at the public swimming pool where a couple of hours of scrubbing the ring off the pool side and working as basketboys earned us free swimming, though probably violating some child labor law. My parents would buy a block of ice from the ice plant, chip it up, and use it to make hand-cranked, homemade ice cream. When we were older, we swam in the Republican River. We caught frogs in ponds and lakes by luring them with small pieces of red flannel on treble hooks. We rode our bicycles a mile south of town to a muddy farm pond to sane crawdads for fishbait, which we carted to a sand pit a mile northeast of town near the Republican River. Frog hunting and fishing (bass, sunfish, bluegill, and bullheads) were allowed there, but signs warned us not to swim. We heard stories, true or not, of people who would swim in these waters, very warm on top and very cold at ankle level, have leg cramps, and be sucked down under into a kind of black hole vortex of quicksand, later to be found miles downstream in the Republican. Once Dad took me with him on a business trip to Randolph, Kansas, where I saw large yellow signs reading “Big Dam Foolishness,” which protested the impending construction of Tuttle Creek Reservoir. The old town site of Randolph now lies under that reservoir.

I spent junior high and early high school summers working on nearby farms, stacking hay bales and driving wheat trucks. John Scott hired me to drive his wheat to the elevator. In the evenings, he taught me how to catch channel catfish legally from Lovewell Reservoir using trotlines, and he showed me how some people snagged carp illegally from the irrigation canal by dragging large treble hooks across the water. On Warren St. Pierre's farm in late summer I first saw hybrid corn, taller than I, in perfect rows running in all directions, irrigated with water from the alluvial groundwater of the Republican River. Unbeknownst to me, such water uses in Kansas depended on a complex system of water rights under Kansas law.

Likewise, most Kansans today use water without considering the laws behind its use. They turn on their showers, brush their teeth, flush their toilets, water their lawns, fish, swim, and think about water only when paying their city water bills or when complaining about some problem causing a temporary loss of water. Most Kansans have never heard of the 1945 Kansas Water Appropriation Act. Of the small percentage of Kansans who have, an even smaller number would think the date of its enactment, June 28, 1945, should be noted, even on its fiftieth anniversary. I know some people who would rather hang it in effigy. But a law professor for whom some narrow piece of legislation becomes an important part of his work over seventeen years can gain respect for that legislation. Although the Act obviously has not had the pervasive impact that legislation like the Internal Revenue Code has had, Kansans with water rights would acknowledge that the Act has affected them in some way, whether by creating and protecting a property right or by causing headaches in obtaining, maintaining, or changing the right.

One thing about the Act is clear. When first enacted in 1945, it made a fundamental and profound change in Kansas water law and policy. And in the fifty years since its enactment, with continuing amendments, the Act has continued to affect water use.
and users dramatically in the State. To mark the occasion, I offer this short descriptive Essay, not to analyze or criticize, but merely to describe the background, enactment, growth, and change of the Act.

From the very beginning as a territory and as a state, Kansas expressly adopted the common law in existence at that time. While the prior appropriation doctrine of “first in time, first in right” was just getting started in the arid West, the general common law rule for stream water distribution was the riparian doctrine: Land ownership along a stream gave the right to use water from the stream; nonriparians could not use the water; water rights were not lost by nonuse; and conflicts among users were settled in the courts using sharing concepts or self-help. For groundwater, Kansas applied the common law “absolute ownership doctrine,” which allowed landowners to withdraw water and use it as they pleased, regardless of the effects on their neighbors. Under these common law doctrines, water users did not know the extent of their rights, because the rights were not quantified or filed of record.

Landowners sometimes used force to settle disputes. James H. Lane of Lawrence killed his neighbor Gaius Jenkins over the location and use of a well. A dispute over a water tank between the Deweys and the Berrys in northwest Kansas resulted in the killing of three men and a horse. But courts were more often used to settle disputes. Several major water cases reached the Kansas Supreme Court between statehood and 1945, involving surface water, groundwater, and the interconnection between groundwater and surface water.

The seeds of the 1945 Kansas Water Appropriation Act were first sewn in legislation in the 1880s and 1890s. Irrigation laws contained aspects of appropriation doctrine, such as permitting water to be diverted out of the stream to irrigate farmland. The legislature created the state Water Commission in 1917 and the state Irrigation Commissioner in 1919. The Commission's duties included working out a general plan for development of all the watersheds in the state to ensure that the “(w)ater development of all kinds throughout the state . . . conform(ed) to the general plans . . . .” The legislature also charged the Commission with studying state water laws for the purpose of making revisions. This legislation contained hints of an appropriation system like those first adopted in Wyoming and later in other western states, but it lacked the specificity and detail necessary to convince a court that Kansas had made a wholesale change from the common law. The legislature abolished the Commission and the Commissioner in 1927 when it conferred their duties on the newly created Division of Water Resources (DWR). In 1933, the legislature made the Chief Engineer head of DWR.

The appellate court decision that demonstrated the confusion and triggered the legislature's interest in changing water use doctrine was State ex rel. Peterson v. Kansas State Board of Agriculture in 1944. In the 1930s, the city of Wichita had started looking northward to the Equus Beds for water. Around 1940 Wichita leased land in the Equus Beds in Harvey County, put down wells, and in 1941 began to pump and divert water to Wichita over twenty miles away. Wichita filed an application with the DWR of the State Board of Agriculture seeking approval of its water diversions. Under the common law absolute ownership doctrine, the landowner could use the groundwater anywhere. The statutes, however, seemed to require application and approval of the Chief Engineer. The cities of Newton, Halstead, and Burton filed protests with DWR. The Harvey County Attorney was the plaintiff in the case, and he alleged that the Chief Engineer had no authority to allocate the waters of the Equus Beds.

The suit was a quo warranto action, filed by the Harvey County Attorney against the State Board of Agriculture, DWR, and the Chief Engineer “to determine the authority of defendants to control the use of water in the Equus Beds, and . . . to allot it among various claimants.” The defendants claimed that legislative enactments in 1917 and 1927 had changed the common law to give authority to the Chief Engineer to allocate water. The Kansas Supreme Court disagreed. It noted that in the twenty-seven years since the statute's enactment, numerous cases had continued to follow the common law regarding water. The Commission had not formed plans as directed. It had not requested that the legislature amend the water laws. The court stated that the language concerning the need to apply for permits was confusing, contradictory, and difficult to apply. The court upheld the common law
rule that “underground waters are part of the real property in which they are situated.” This result denied Wichita a chance to have water rights that were quantified and predictable.

Two months later, Governor Andrew F. Schoeppel appointed a committee to study Kansas water laws and to make suggestions for improvement. He named Chief Engineer George S. Knapp as chairman. The Committee held a conference in October 1944 and invited several speakers from other states and the federal government. The Committee had a transcript of that conference made. Speakers included Spencer L. Baird, District Counsel of the U.S. Bureau of Reclamation; Wells A. Hutchins, a noted water lawyer and economist from the U.S. Department of Agriculture; and John L. Riddell, Assistant Attorney General of Nebraska. These and other speakers described the laws of other Western states and the methods by which those states had made the transformation from the common law to statutory appropriation law. The speakers answered questions from the Committee. They discussed Kansas water law, or the lack thereof, in context with other state law. The thrust of this conference, however, was not the problem raised by the State ex rel. Peterson case—the groundwater problem that seems to have prompted Governor Shoepell's creation of the Committee. Rather, the thrust was the question of how riparian-rights law for streams could be changed to create a surer and more predictable legal foundation on which the U.S. Bureau of Reclamation could rely in building its projects. Baird and Hutchins were worried about three things: (1) Kansas had no constitutional sections on water law; (2) the extent, both geographic and quantity, of riparian rights were unknown and unknowable; and (3) even riparian owners who were not using water might make claims once a Federal project was built.

In its December 1944 report, the Committee stated at the outset that it thought that the 1917 legislation was meant to give control over appropriation and use of water to an administrative agency. The Committee cited the practice of almost all of the Western states of using state agencies to administer their prior appropriation water doctrine, and even the need of Eastern states to control the diversion and use of water through agencies “notwithstanding the early adoption of the common law.” The Committee sought to establish “an orderly system for the appropriation and use of water.”

The Committee further noted the historical change in the use of water since statehood: primarily for navigation and water power uses gradually changing to irrigation, industrial, and municipal uses—“from an economy which required that stream flow be maintained without diminution, and which justified the adoption at that time of the common law, to one which more and more has its foundation in the appropriation and diversion of water for beneficial use.” The Committee described the interrelationship between groundwater and surface water, the scope of a state’s power and responsibilities over natural resources, the two doctrines of surface water allocation, and the change from the common law to prior appropriation, stressing Nebraska in particular as a state having similar legal history and heritage. The Committee concluded with suggested legislation.

The legislature enacted the Water Appropriation Act on March 26, 1945, less than ten months after the Kansas Supreme Court's State ex rel. Peterson decision and less than four months following the Committee's report. The Act would go into effect on June 28, 1945. If you take down from the library shelf the canvas-bound, straw-colored session laws of the Kansas Legislature for 1945, blow the dust off the top, open to page 665, and find Chapter 390, you will read the purpose of H.B. 322: “An Act to conserve, protect, control and regulate the use, development, diversion and appropriation of water for beneficial and public purposes, and to prevent waste and unreasonable use of water . . . .” That was a big order.

In his Kansas Bar Association Journal article describing the 1945 legislation, Franklin Corrick, Revisor of Statutes, sensed that Act's importance:

As to spectacular “freak-law” bills there is nothing to report from the fifty-first regular . . . session of the Kansas legislature. . . . Its accomplishments on the whole are commended by many as magnificent.
A comparison of the Report's recommendation and the Act shows a very close correlation. 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.” Thus, groundwater and surface water doctrines were combined into one. The Act protected then-current users of water by preserving their “vested rights” so that their rights could continue and be superior to the new appropriation rights created under the Act. Although persons having common law riparian or groundwater rights who were not using the water lost those rights, they were given a cause of action for damages. Appropriation rights were to be obtained solely from the Chief Engineer, except for domestic use, defined as “the use of water for household purposes, the watering of livestock, poultry, farm and domestic animals and the irrigation of gardens and lawns.” The test for granting the right required that the proposed use not conflict with an existing use and neither be prejudicial nor unreasonably affect the public interest.

The Act determined priority among users by the date the Chief Engineer received the application. Receipt of the permit allowed the prospective water user to construct the diversion works and divert water to beneficial use, upon the completion of which the user would notify the Chief Engineer, who would issue a certificate to be filed in the register of deeds. Failure to use the water for three years might result in losing the right. Water use would have priorities in times of conflict in this descending order: vested rights, appropriation rights according to date, users of water without vested or appropriation rights.

The most important change from the common law involved the dedication of the water to the use of the public. This dedication contrasted with pre-Act law for surface water, which had held that land ownership along the stream gave the owner a water right in the water--a usufruct, but nevertheless an automatic right. The Act also contrasted with pre-Act law for groundwater, which had held that the landowner owned the corpus of the groundwater just as the landowner owned the land. The Act created an elaborate system of obtaining and maintaining water rights in Kansas. Nothing in the Act, however, required obtaining a permit for an appropriation right. Using water without obtaining a permit would not be penalized, except that those water users without water rights might risk being enjoined by users with water rights, either vested or appropriation. Furthermore, users without a permit could not protect their uses in court.

The Act made DWR's Chief Engineer the principal administrator. Since its creation in 1929, DWR has had four Chief Engineers: George S. Knapp (1919-1951), Robert V. Smrha (1951-1972), Guy E. Gibson (1972-1983), and David L. Pope (1983-present). One aspect of being a Chief Engineer since 1945 is having one's name memorialized in the Kansas Reports in cases involving water law. Two early challenges to the Act were made prior to any major amendments to the Act. The Chief Engineer in 1945 was George S. Knapp, who had been a member and the chairman of Governor Shoeppep's Committee to study the law and who became the defendant in the first case contesting the constitutionality of the act in 1949, State ex rel. Emery v. Knapp. The Kansas Bostwick Irrigation District No. 2 was being formed in north-central Kansas on the Republican River in cooperation with the U.S. Bureau of Reclamation. The District planned to use impounded water to irrigate riparian and nonriparian lands by ditches from White Rock Creek below Lovewell Reservoir in Jewell County (where, by coincidence, John Scott taught me about trotline fishing). These diversions would have an impact on downstream riparian owners. The common law riparian doctrine had prohibited use of water on nonriparian lands. The Act contained no such geographical limitation on the use of water. Observing that the “heart of the statute” was section 702, which dedicated all water to use of the people of the state, and that no complaint was made about that section, the Kansas Supreme Court upheld the validity of the Act.
Knapp’s successor as Chief Engineer was Robert V. Smrha, the defendant in Baumann v. Smrha. An owner of land in Harvey County complained that Wichita’s taking groundwater in the vicinity had caused the water table to go down, resulting in his inability to use groundwater for “passive irrigation.” The plaintiff had not been actively diverting water and therefore had no vested right. The court upheld the legislature’s modification of the common law rights, but while vested rights had to be respected, the court did “not regard a landowner as having a vested right in underground waters underlying his land which he has not appropriated and applied to beneficial use.”

From 1945 to 1955, DWR granted approximately 5000 permits and certified numerous vested rights. In 1955, the KU Law School hired Earl Shurtz as a new assistant professor. At that time, Robert L. Smith, who later became a chaired professor of engineering at KU, was executive secretary of the Kansas Water Resources Board, an entity established in 1955 and charged in part with collecting information on the water resources of the state and making “a study of the laws of this state . . . relating to . . . water resources.” While executive secretary, Smith directed that numerous technical studies be made and published on the water resources of the state. In addition, Smith hired Shurtz to conduct legal studies. Smith and Shurtz can be credited with two very important and well-written legal studies on water use, one in 1956 and the other in 1960.

The 1956 Report contained a detailed analysis of the Act, with proposed amendments. The 1960 Report contained no proposed amendments, but focused instead on existing Kansas law and descriptions of groundwater law in other Western states. Smith remembers Shurtz’s dedication as they worked together in the evenings at Shurtz’s home writing the 1956 Report and preparing for legislative hearings. Shurtz, “a magnificent musician,” would leave the table and move to the piano to play and compose when frustrated at an impasse. Smith would fume at this waste of time. In fifteen minutes, Shurtz would return and write the most lucid paragraph possible. Smith later decided that Shurtz was not thinking about music at all, but was working out the legal problem at hand.

Shurtz stated in the summary of his 1956 Report: “The present Kansas water appropriation act is a good one. Still, amendments and additions are probably necessary. . . . Any such legislation, however, should follow only the most deliberate, careful, and extended study. (Premature birth endangers survival here no less than in the animal kingdom).” He proposed extensive amendments that, if adopted, would make profound changes in the Act. The legislature accepted many of his recommendations.

Many of the 1957 amendments recommended by Shurtz and adopted by the legislature were significant. Perhaps the most important was the addition of “water right” as a defined term to include either a vested right or an appropriation right. The definition was further embellished with the following explanation: “It is a real property right appurtenant to and severable from the land on or in connection with which the water is used and passes as an appurtenance with a conveyance of the land by deed, lease, mortgage, will, or other voluntary disposal or by inheritance.” Professor Shurtz had noted the questions raised by the Act’s creation of vested rights and appropriation rights: “Persons interested in water law must ask themselves . . . whether water rights are property rights, and if so, what particular kind. They must ask whether such rights are assignable, inheritable, severable, etc.”

Another amendment changed the definition of “domestic use” to limit watering of livestock to that used in operating a farm and to limit irrigation of lands for gardens, orchards and lawns to one acre. This change attempted to insure that large-scale livestock operations and irrigators would have to apply for a water appropriation right and not be able to claim rights under domestic uses. Another amendment changed the definition of the term “vested right” to add that such rights do not include common law claims under which water had not been applied prior to 1945. Thus, the amendment encompassed Professor Shurtz's recommendation that natural subirrigation should not be deemed a diversion or beneficial use of water.
Amendments to section 707 of the Act clarified that the preference listing (domestic, municipal, irrigation, industrial, recreational, and water power) was relevant in condemnation, but not in direct disputes between water users when temporal priority would govern. New section 708b permitted holders of water rights to change the type of use, place of use, and point of diversion with prior permission of the Chief Engineer, provided that other rights were not adversely affected. Amendments to section 718 established a procedure for declaring rights to be invalid for non-use.

Water seemed to be a hot topic at the time. The KU Law School held a Water Law Conference on the campus in March 1957, just prior to the enactment of the amendments, which occurred in April. According to Professor Shurtz, “interest ran high, attendance was excellent and the speakers performed brilliantly.” The Law Review published a symposium on water law, which contained ten articles. While no Kansas Bar Association Journal articles covered legislative changes in general for 1957, the Appropriation Act amendments merited a separate article. In his first of several water law articles for the Journal, Arno Windscheffel, a lawyer from Smith Center who served as the Chairman of the Kansas Water Resources Board (other lawyer-members of the board have included Justice Fred N. Six of Lawrence, Justus H. Fugate of Wichita and Patrick J. Regan of Wichita) and later as the disciplinary administrator, wrote:

Within the last few years, we in Kansas have witnessed a legal phenomenon. A few short years ago Kansas practically had no water law. In those few years Kansas has come up with a water law which has taken other western states almost a century to acquire. The 1957 session of the Kansas legislature has come up with a new and important chapter to our water law.

In 1963, several years after these amendments took effect, the third challenge was mounted to the constitutionality of the Act: Williams v. City of Wichita, with facts similar to those in Baumann. The trial court held the Act unconstitutional and enjoined Wichita from further pumping in the Equus Beds. The Kansas Supreme Court reversed and upheld the Act. The court retreated from its prior statement in State ex rel. Peterson that “underground waters are part of the real property in which they are situated,” this time stating that “under the common law the overlying owner does not have absolute title to the underground water . . . (but rather only) the unqualified right to drill a well on his own land and take from the strata below all the water that he may be able to reduce to possession.” The court also pointed out that the Act does not compel landowners to obtain permits to use groundwater; but if one uses water without a permit, the user can be enjoined by persons with valid water rights. Chief Justice Schroeder's biting dissent suggested that the Court was outdoing the legislature “by decreeing an established property right . . . to be nonexistent” and protested that this was an arbitrary exercise of police power that was a communizing of private property.

The 1970s witnessed the establishment of a governor's task force on water resources, two amendments to the Act, and, from a legal standpoint, one significant personnel addition to DWR. On March 24, 1977, Governor Bennett appointed a task force of twenty-six members to examine some of the water problems of the state. The task force published two reports and made thirty-nine specific recommendations involving, among other things, surface water, groundwater, water quality, water marketing, and the state water agencies.

In 1977, the legislature added section 728 to the Act, making it a crime to use water without a permit, with several exceptions, such as using water for domestic use. This amendment was one of the most important amendments since 1945. Of less importance was the amendment passed in 1978, when the legislature replaced section 704 with section 704a to establish July 1, 1980 as the final date after which vested rights could no longer be claimed and certified. Professor Shurtz had recommended this vested rights legislation in his 1956 Report, suggesting a cut-off date of one year following enactment of his proposed
amendment, which would have been 1958. The legislature finally took his suggestion, but effective twenty-two years later, not a "premature birth."

The significant personnel change came in 1978, when Leland Rolfs began working as in-house legal counsel, half-time each for DWR and the Water Resources Board. Earlier, Warden Noe (1939-1975) and Ken Wilke (1975-present) served as general counsel for the State Board of Agriculture and thus aided DWR when called on, including arguing before the Kansas Supreme Court.

Several amendments to the Act during the 1980s and 1990s have had a major impact on existing and prospective holders of water rights. Some of these resulted directly or indirectly from the Governor's task force reports. Some resulted indirectly from legislation in 1982, when the legislature changed the Kansas Water Resources Board into the Kansas Water Office, headed by the Director. That change, giving the Office a more dynamic state water planning function, has resulted in a scrutiny of water law in general and of the Act in particular.

The legislature also adopted minimum desirable streamflow legislation over a period of several years. The idea was to attempt to preserve streamflow without harming existing water rights. The legislature described specific streams and specific flows by month, and stated that these amounts were to be "withheld" from appropriation. Water rights obtained after these designations were to be subject to these flows; rights held prior were senior. Water rights obtained between April 1, 1984 and June 1, 1990 were to be junior to these flows, even if the flows had not yet been specifically designated at the time of obtaining the water right permit, provided that the stream designation occurred prior to June 1, 1990. This legislation does not enable individuals to obtain permits to create minimum streamflow--it enables only the state to withhold from appropriation amounts of water to create minimum streamflow.

The 1988 Kansas Legislature made the filing of an annual use report mandatory by all water right holders except domestic users. DWR had required these reports administratively prior to this time, but reporting had often been spotty. This amendment, with the potential of a $250 civil fine for noncompliance, put teeth into the requirement. In 1991, the legislature made it possible for DWR to impose conservation plans on holders of water rights.

One last constitutional challenge to the Act was mounted in 1981. In F. Arthur Stone & Sons v. Gibson, a western Kansas farmer claimed that DWR's denial of permission to pump water without a permit was unconstitutional. The supreme court had arguably left the door open to such an attack in Williams, when the court stated that one reason that the Act was constitutional was that people did not have to obtain permits, but that without them they would not be protected with a water right. In the meantime, the legislature had mandated obtaining a permit except for domestic use. The court, however, again found the Act to be constitutional despite this change in the Act. Chief Justice Schroeder, the only member of the court to have helped decide Williams, dissented once again, stating that he adhered to the reasons he had offered in his Williams dissent.

As important as these challenges to the constitutionality of the Act have been, of equal importance to the state and to the employees of DWR was the recent successful challenge to the constitutionality of the makeup of the Kansas State Board of Agriculture, of which DWR was a part. Before Judge Lungstrum's decision in Hellebust v. Brownback, DWR was under the Kansas State Board of Agriculture, the secretary of which was elected by various private farm associations in the state. In turn, the Board appointed the Chief Engineer of DWR. The plaintiffs, two individuals and the Kansas Natural Resource Council and Common Cause of Kansas, filed a declaratory judgment action. Judge Lungstrum held that this structure violated the equal protection clause under the Reynolds v. Sims rationale requiring "one man one vote." He reasoned that, unlike the facts in two recent United States Supreme Court water-agency cases, our Board of Agriculture, with DWR, had several general governmental purposes protecting health, safety, and welfare. DWR can, for example impose water conservation measures and restrict water movement to other states. The Hellebust decision ordered the governor to act as receiver for the Board and the employees of DWR until a new Board was elected.
secretary until the legislature solved the constitutional problem. The Tenth Circuit upheld the decision. \textsuperscript{90} The 1995 Kansas Legislature enacted \textsuperscript{751} corrective legislation that provides for a nine-member Kansas Board of Agriculture to be appointed by the governor. The board in turn submits three nominees for the secretary to the governor, and the person selected by the governor is subject to senate confirmation. \textsuperscript{91}

To appreciate its full impact on water users, one must read the Appropriation Act with other legislation enacted over the last fifty years. For example, Kansas is a party to several interstate water compacts, which attempt to allocate waters among Kansas and its neighboring states. \textsuperscript{92} The apportionment of water in these compacts is binding on the states and the citizens of each state, even if the state has granted water rights prior to entering into the compact. \textsuperscript{93} Kansas is now involved in litigation with Colorado before the United States Supreme Court \textsuperscript{94} concerning the interstate compact for allocation of the waters of the Arkansas River. \textsuperscript{95}

Other important legislation included the creation of the Water Resources Board in 1955, \textsuperscript{96} with its Executive Secretary, which was later changed in 1981 to the Kansas Water Authority and Kansas Water Office, with its Director. \textsuperscript{97} The Kansas Water Office is a small agency established to study water resources problems and develop solutions by way of a state water plan. \textsuperscript{98} The legislation which originally established the Water Resources Board required the Board to make legal studies. \textsuperscript{99} When the legislature created the Water Authority, it continued that requirement. \textsuperscript{100} Serving as Executive Directors of the Water Resources Board were Robert L. Smith (1955-1962), Dwight Metzer (1962-1967), Keith Krause (1967-1976), James A. Power (1976-1979), and Francine Neubauer-Hines (1979-1981). Directors of the Kansas Water Office \textsuperscript{752} include Alan Lockner (1981-1982), Joe Harkins (1982-1991), and Steven Hurst (1991-present).

After an unsuccessful attempt in 1968, \textsuperscript{101} the legislature in 1972 enacted legislation that permitted the establishment of groundwater management districts (GMDs). \textsuperscript{102} While the legislature gave these GMDs power over certain local matters, the GMD Act stated that “(i)t 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 basic laws and policies of the state of Kansas.” \textsuperscript{103} These “basic laws and policies” are found primarily in the Water Appropriation Act. The five GMDs have a special role and have become significant players in water resource policy in central and western Kansas, with regulations, standards and policies, and management plans. For the most part, however, the Appropriation Act still governs water rights.

In 1978, the legislature appended four sections onto the GMD Act to permit the establishment of “intensive groundwater use control areas” (IGUCAs) in areas of special concern. \textsuperscript{104} These new provisions gave the Chief Engineer power to “reduce permissible withdrawals of groundwater by any one or more appropriators thereof,” a power that could conceivably trigger a constitutional takings challenge. \textsuperscript{105}

From the late 1940s through the 1960s, water agencies of the federal government constructed large reservoirs in Kansas for flood control and water supply purposes. After the development period, Kansas needed a method of recognizing the rights of storage in these reservoirs for water to be sold to cities and industries while at the same time maintaining the priority system of water rights under the Appropriation Act. Kansas enacted the State Water Plan Storage Act in 1974, \textsuperscript{106} which created the “water reservation right,” a type of water right held by the state which enables the state to store water in federal reservoirs and to sell the water to cities and industries. These water reservation rights take their place in the time priority along with appropriation rights created under the Appropriation Act. \textsuperscript{107} A related bit of legislation followed in 1986 with the enactment of the Water Assurance \textsuperscript{753} Program Act. \textsuperscript{108} Water assurance districts can be formed on rivers below reservoirs by holders of municipal and industrial water rights.
In 1982, the legislature enacted the Water Transfer Act\textsuperscript{109} to prescribe a framework under which large diversions of water over long distances might receive deliberation over and above that required by the Appropriation Act. Diversions were possible under pre-Transfer Act law, and some diversions existed.\textsuperscript{110} But the legislature wanted more structure in the decisionmaking process. For diversions of 1000 acre-feet or more per year moving 10 miles or more in distance, the Transfer Act required—in addition to the normal approval of the Chief Engineer under the Act—approval of a three-person panel (Chief Engineer, Director of the Water Office, and the Secretary of the Department of Health and Environment). If the panel approved the application, the applicant was next required to obtain approval of the Water Authority. Lastly, the legislature could have disapproved the application by concurrent resolution. The 1993 legislature amended the original version of the Transfer Act by increasing the quantity and distance to 2000 acre-feet per year moving 35 miles or more in distance. The legislature also deleted the required approval of the Water Authority and the permissive disapproval of the legislature.

Still other important legislative enactments, though not directly water related, must be read with the Appropriation Act: the Kansas Administrative Procedure Act\textsuperscript{111} (KAPA), and the Act for Judicial Review and Civil Enforcement of Agency Actions\textsuperscript{112} (JRCEA), both enacted in 1984.\textsuperscript{113} The original versions of the Appropriation Act, the GMD Act, and the Water Transfer Act created certain in-house administrative procedures. In the Appropriation Act, a hearing was required for a water right to be declared abandoned for non-use. Under the GMD Act, the Chief Engineer had to hold a hearing to establish an IGUCA. The Water Transfer Act required a hearing before the three-person panel and before the Water Authority. KAPA, enacted in 1984, applies “only to the extent that other statutes expressly provide that the *754 provisions . . . govern proceedings under those statutes.”\textsuperscript{114} In 1988, the legislature made KAPA applicable to water transfer hearings\textsuperscript{115} and abandonment hearings under the Appropriation Act,\textsuperscript{116} but legislature has not made KAPA applicable to IGUCA hearings.

DWR has grown over the life of the Act. After a relatively slow start with fewer than 300 applications each year through 1952,\textsuperscript{117} applications surged in the mid-1950s with over 1600 in both 1955 and 1956. Another surge in applications started in 1964 and lasted until 1981, during which DWR received at least 800 applications annually, averaged over 1500 applications annually and in 1976 and 1977 received over 2800 applications each year. Over the first twenty-five years, DWR received roughly 17,000 applications. Over the last twenty-five years, DWR received roughly 24,600. The two surges can probably be explained by the serious drought in the mid-1950s and by the growth of center-pivot irrigation in central and western Kansas during the 1960s through the mid-1980s. The very high numbers of applications in 1977 and 1978 were due in part to the anticipated amendment to section 728 of the Act, which made it mandatory for water users to obtain a permit or face criminal penalties. We stand today with over 41,600 permits.

When called upon, DWR administers water rights under the Act to help solve water rights disputes. As the number of water rights have increased, however, Kansas has reached a point in parts of the state when new permits can no longer be granted as easily as they could in the Act's early years. In the early 1980s, DWR began to become more restrictive in the granting of permits and in enforcing conditions. David Pope, Chief Engineer since 1983, has been much busier than his predecessors in holding hearings on various matters, in part due to requirements in the Act and in part due to Pope's willingness to grapple with the difficult issues that arise when a limited resource must be shared by numerous persons and interests.

The Appropriation Act requires or permits several types of hearings. DWR has recently become more active in declaring unused rights abandoned and has held numerous hearings, contested and uncontested. The legislative requirement that annual water use reports be filed has led not only to more administrative headaches for DWR, but also to *755 actions filed in district court.\textsuperscript{118} DWR has held several IGUCA hearings, the most lengthy of which was the IGUCA for the Wet Walnut Creek in Barton, Rush, and Ness Counties in 1991 and 1992, focusing on upstream junior groundwater users who allegedly had been impairing the downstream senior surface right held by the state for water used in the Cheyenne Bottoms Wildlife Area. Held in Great Bend intermittently over several months, the hearing resulted in an order that substantially cut the water use by some irrigators.
Personnel in an agency like DWR that has wide responsibility over such an important resource have to make numerous decisions regarding various water rights matters. Over the years, in addition to the administrative regulations DWR has promulgated after legislative approval, DWR has built a book-sized set of so-called administrative policies and administrative procedures. Not officially law, these are nonetheless important sources of information on how DWR operates.

The Act has been in effect for fifty years. Prior to 1945, Kansans used water and Kansans had water rights. Without a court decree, however, they did not know the quantitative extent of their rights. At the very least, the Act has created order. Water users have documents that state that they have a vested right, or a permit or certificate for an appropriation right. With these, water users can have some hope of knowing the extent of their water rights: priority date, annual quantity, rate of diversion, type of use, place of use, and point of diversion.

Since 1957, these rights have been defined to be real property rights. For several reasons, however, they are not as secure or flexible as regular real property rights. They can be lost for non-use. They can be lost for failure to follow conditions imposed by DWR. They can be reduced in annual quantity in an IGUCA proceeding or by DWR's imposition of conservation plans. Recently, DWR has even begun to make it an express condition stated on the permit and certificate that DWR can reduce the amount for good cause. There is no indication yet that Kansas will follow California's lead in stating that the public trust doctrine is on par with the prior appropriation doctrine, enabling (and indeed compelling) the state water administrator periodically to reconsider water rights quantities. In fact, the Kansas Supreme Court rejected judicial recognition of the public trust doctrine in another context. There may be, however, a national trend in the direction of giving more respect to that doctrine. What could stop that trend might be recently proposed laws that would protect property rights against government agency actions.

From a period of development of water resources from 1945 through the early 1980s, we are currently in a period of administration and conservation. The important questions now are generally not whether a new water right can be obtained but whether water rights are being properly used and whether and how they can be changed, sold, or condemned. The Act's efficacy is not diminished because fewer rights are granted. Its original purposes included conserving, protecting, controlling, and regulating water use. That was, and continues to be, a big order, but the Act can still meet these objectives and can continue to do so into the twenty-first century. The Act will hopefully continue to evolve as it has over the first fifty years to meet the water resources challenges ahead.

I will not be around to read the essay someone might write at the Act's centennial, if there is one, but I wonder what the legal, hydrological, and political landscape might be then. A few questions come to mind. Will the Water Appropriation Act even last that long, or will it have been supplemented like our current Chapter 42 on irrigation has been, thereby making it practically irrelevant? Will it have been repealed or replaced? Which movement will Kansas have embraced, the public trust doctrine, the strict protection of private property rights, or some reasonable compromise between the two? Will the western and central Kansas groundwater aquifers have been depleted? Will Kansans be moving water around the state in large quantities to irrigate even more land or to quench the thirsts of large cities? Will Wichita be peacefully taking water from Milford Reservoir or will the Kansas River cities and industries have joined with Missouri to fight that transfer? Or will Wichita and other central Kansas cities have found adequate supplies elsewhere? Will the federal reservoirs be filled in with sediment? Will Kansas still be litigating with Colorado? Will Kansas be at the tail-end of a fifty-year water war with Nebraska over water use in the Republican River? Will Kansas be marketing its water to other states or importing needed water from Canada? If written because the Act still exists, the centennial essay will no doubt answer these questions and many others.

Footnotes

Professor of Law, University of Kansas School of Law. My thanks to Robert L. Smith, Guy Ellis, Leland Rolfs, James Powers, Mary Shurtz, and Steven Hurst for providing information about people and dates.


See, e.g., Irwin v. Phillips, 5 Cal. 140 (1855).


Cases appeared dealing with the “reasonable use” theory as opposed to the “natural flow” theory of riparian law, see, e.g., Clark v. Allaman, 71 Kan. 206, 80 P. 571 (1905), the rights of users inter se, see, e.g., Frizell v. Bindley, 144 Kan. 84, 58 P.2d 95 (1936), the nature of the right as real property, see, e.g., Shamleffer v. Council Grove Peerless Mill Co., 18 Kan. 24 (1877), and other questions.

One involved the mineral waters of Gueda Springs, near Arkansas City. These waters had a reputation for being medicinal--strong enough to have created the dispute that led to Jobling v. Tuttle, 75 Kan. 351 (1907), but not strong enough to save the life of gunfighter Luke Short, who was suffering from dropsy and who died within a month after moving to Gueda Springs. N. Hiller & J. Snell, Great Gunfighters of the Kansas Cowtowns, 1867-1886, at 414 (1963). The court's statement in Jobling “(t)hat percolating waters, such as these springs are, belong to the owner of the land as much as the land itself, admits of no doubt,” 75 Kan. at 360, was a classic explanation of the absolute ownership doctrine. Earlier in City of Emporia v. Soden, the court had noted that “the owner of the land may appropriate (groundwater) to any use, and in any amount, and without reference to the effect of such appropriation upon his neighbor's land or supply of water.” 25 Kan. at 410.

Justice Brewer wrote City of Emporia v. Soden in 1881, in which he recognized this hydrologic principle and forced the city of Emporia to stop pumping water from a well near the Cottonwood River because the pumping had lowered the level of the river to the detriment of a downstream mill owner. 25 Kan. at 417-18, 426. Later when Justice Brewer went on the U.S. Supreme Court, he wrote Kansas v. Colorado, the seminal case that held that states on interstate streams each have equitable rights to the waters in the streams, to be allocated in the original jurisdiction of the U.S. Supreme Court. 206 U.S. 46, 80 (1907). Kansas lost the case, however, because Kansas could not show enough harm by Colorado. Id. at 117-18.


It is not clear from the case itself why Wichita filed this application. Wichita's brief stated the following: . . . (T)he approval of the appropriation application for beneficial utilization of subterranean . . . water--allotment of a quantity of the available supply of the . . . water, for reasonable needs for beneficial use . . .--is a condition precedent to its perfecting its appropriation right under this statute. The acquisition of an allotment of a determined quantity of available supply at a fixed maximum rate of withdrawal enables the user to protect his acquired rights in a court . . . as against encroachments by later users when withdrawals
exceed the rate of supply recharge. We submit that the legislature intended to give this protection to the public in its financial investments in water use development projects.

Respondents' Brief at 28. The plaintiff's brief stated the following:

The supply of water is not unlimited and perhaps in order to forestall some other municipality from interfering with its supply, Wichita filed its application . . . to have . . . the chief engineer . . . determine that Wichita had the legal right to appropriate a certain amount of the water in the Equus Beds, not limiting their application in any way either geographically or geologically, except to the Equus Beds and to a maximum of 50 cubic feet per second which in round numbers amounts to 32,500,000 gallons per day--a lot of water, and nearly twice Wichita's present average daily consumption.

Plaintiff's Brief at 24.


18 Id. at 609, 149 P.2d at 608.

19 Conference of the Governor's Committee on the Appropriation of Water in Kansas, Topeka, Kansas (Oct. 16-17, 1944). Lee Rolfs of DWR in Topeka provided me a copy of the transcript.

20 Id. at 4-39.

21 Id. at 39-89.


23 Id. at 5.

24 Id. at 6.

25 Id.

26 Id. at 10.

Old Kansas maps reveal numerous mills powered by steam, horses, wind, and water. Water mills on Kansas rivers and streams were labeled by type. An 1874 inventory showed a total of fifteen water-power saw mills in the state, eighty water-power flour mills, and thirteen water-power saw and grist mills. Steamboats traveled the Missouri and Kansas Rivers, and, yes, even the Arkansas River. Ferry companies charged tolls to cross rivers.

Peck, supra note 5, at 39 (footnote omitted).

27 Report, supra note 22, at 11-16.

28 Id. at 16-18.

29 Id. at 18-21.

30 Id. at 21-39.

31 Id. at 7.

32 Id. at 45-53.


36 The 1945 Water Appropriation Act is based on one system for all regions of the State and one system for all water. It declared all water to be dedicated to the use of the public. Kansas is on the boundary between areas of adequate rainfall and aridity. Parts of Kansas were described on early American maps as part of the Great American Desert. I have wondered why we do not have two sets of laws that recognize this difference in precipitation. In 1891, the Kansas Legislature attempted to divide Kansas into two parts at
the ninety-ninth meridian and to apply different doctrines in each, but the Kansas Supreme Court rejected this division in the 1905 case of Clark v. Allaman, 71 Kan. 206, 80 P. 571 (1905). Yet the common law of water rights at that time, which Kansas followed, bifurcated the law into two regimens, one for streams and one for groundwater. William Allen White suggested in his short fictional story The Story of Aqua Pura that Kansas, like Gaul, is naturally divided into three parts, Eastern, Central, and Western. Aqua Pura lay in western Kansas. It began, grew, blossomed, withered, and died because of rain followed by drought in 1890s western Kansas. White's three parts were based on economic development as well as on precipitation patterns. See William A. White, The Story of Aqua Pura, in The Real Issue 22, 22-23 (1896).

40 Id. S 1(c), 1945 Kan. Sess. Laws at 665.
44 Id. S 18, 1945 Kan. Sess. Laws at 670. This section did not contain all new language. Instead, it amended section 42-308, which had already provided for loss of a water right for failure to use it for a three-year period.
48 Id. at 624-25.
56 According to Smith, Donald Christy of Scott City is the person who suggested to Smith that Wells Hutchins be invited to spend time with the Board and to testify before the legislature.
57 Telephone Conversation with Robert L. Smith (Feb. 22, 1995). According to Smith, lawyer-members of the 1957 legislature who were important to the passage of the amendments included Senators Clifford R. Hope, Jr. of Garden City, William S. Bowers of
Ottawa, and Garner E. Shriver of Wichita; and Representative Robert A. Anderson of Ottawa. Critical nonlawyer members included Representative John D. Bower of McClouth. Important lobbyists included Irv Boone and Clarence Ruf of the Kansas Farm Bureau and Bud Kilker and Carl Nordstrom of the Kansas State Chamber of Commerce, now the Kansas Association of Commerce and Industry.


1956 Report, supra note 53, at 75-76. He argued:
. . . It would be unwise to treat an appropriation right, or any other water right, as a mere nontransferable, personal right. Death, bankruptcy, disability, and financial reverses would, under such a theory, destroy investments and impair development. Only corporate persons could safely undertake costly development. Others would have to risk their savings upon their continued health and fortune. Moreover, they would have to do so to the prejudice of their heirs and legatees.

An appropriator deserves better treatment. His right deserves greater protection. Surely it should have the standing of real property with the attending attributes of real property. These attributes, of course, should include flexibility with regard to assignability. They should also include severability, inheritability, and so on. Complex societal, as well as personal, needs so require.

Id. at 84.

As Arno Windscheffel, Chairman of the Kansas State Water Board, pointed out, some of these changes were not new, since G.S. 1949 S 42-121 provided that water rights were appurtenant to lands and passed with conveyances of the land and could be conveyed apart from the land. See Arno Windscheffel, Kansas Water Rights—Another Chapter, 25 J. Kan. B. Ass'n, Nov. 1957, at 188.


“(R)easonableness is as much a part of prudent water law as beneficial use. And it seems patently unreasonable and inconsistent with beneficial water development that millions of acre-feet of water should serve no purpose whatsoever but to support a capillary fringe for the irrigation of phreatophyte root systems.” 1956 Report, supra note 53, at 51.


Williams, 190 Kan. at 338, 374 P.2d at 594.

Id. at 341, 374 P.2d at 596 (Schroeder, J., dissenting).

Id. (Schroeder, J., dissenting).

77 With the growing number of legal questions arising in both the intrastate and interstate arenas, the Chief Engineer began to hire assistant legal counsel beginning in 1985: Donald Pitts (1985-1987), Rebecca Liggett (1987-1991), Connie Crittenden Owen and DeAnne Hupe Seib (1992-present).
80 Id. S 82a-703c.
81 Id. S 82a-703a.
82 Id. S 82a-703b.
86 824 F. Supp. 1511 (D. Kan. 1993), aff'd, 42 F.3d 1331 (10th Cir. 1994).
90 42 F.3d 1331 (10th Cir. 1994).
93 Hinderlider v. La Plata River & Cherry Creek Ditch Co., 304 U.S. 92 (1938).
99 See supra note 51.
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See Peck, supra note 100, at 57-60; Peck & Nagel, supra note 78, at 238-79.


The diversion from the Arkansas River to the Cheyenne Bottoms Wildlife Area is an example.


On January 9, 1995, Guy Ellis of DWR provided me a summary of the history of the applications received by DWR from 1945 through 1993.

For discussion of these cases, see the Water Law Chapters in the K.B.A. Annual Updates of the Law for 1992, 1993, and 1994.


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