WATER LAW

WATER LAW. The complexity of the Texas law of water rights stems from its combination of Hispanic elements with traditional English common law, as well as from its legal fragmentation of the hydrologic cycle. Water-rights law determines who is entitled to use the available water supply, in what quantities, and for what purposes, and often specifies when and where the water may be used. Unlike scientists, who usually regard all water as part of the endless hydrologic cycle, a natural whole, Texas courts divide water into unrelated legal classes with different rules of law governing the ownership and use of each class. Several classes of underground and surface water[qv] are recognized, and recent attempts to modify the weather bring yet another class, atmospheric moisture, into consideration. Texas law pertaining to surface-water resources is voluminous, while groundwater law is relatively sparse; as might be expected, law pertaining to atmospheric moisture is even less developed.

With respect to surface-water rights, Texas is one of several dual-doctrine states that recognize both riparian and prior-appropriation doctrines, which are dissimilar in almost every respect. The riparian doctrine, which accords water rights to those who own riparian land, was introduced into Texas over 200 years ago during the Spanish settlement of San Antonio. Hispanic legal principles and practices were continued essentially unchanged by the Mexican government after 1821 and later by the

Republic of Texas (/handbook/online/articles/mzr02) until 1840. Extensive tracts of land with appurtenant water rights were granted by these governments in Texas, and today title to about twenty-six million acres, one-seventh of the state, can be traced to these sources. For many years Texas courts, water agencies, and water users assumed that Hispanic and pre-1840 republic land grants carried extensive riparian rights, including the right to take water from streams for irrigation, a principle with which the Texas Supreme Court agreed in the landmark case *Motl v. Boyd* (1926). However, in the 1950s, construction of **International Falcon Reservoir** (/handbook/online/articles/roi02) on the Rio Grande prompted a reexamination of Hispanic water law, and it was determined in *State v. Valmont Plantations* (1961) that rights to water for **irrigation** (/handbook/online/articles/ahi01) and other major uses did not accrue from these grants unless expressly mentioned. Only a few specific grants of irrigation rights were made.

More comprehensive riparian rights were attached to all lands granted by the republic and state between 1840 and the Appropriation Acts of 1889–95, an era when vast tracts of Texas land passed from the government into private hands (*see* **LAND GRANTS** (/handbook/online/articles/mpl01), *and* **LAND GRANTS FOR INTERNAL IMPROVEMENTS** (/handbook/online/articles/mnl04)). In 1840 the Texas Congress adopted the common law of England (with some exceptions) and with it acquired the English riparian doctrine, somewhat different from the Spanish. Subsequent judicial modifications of the original doctrine gave riparian landowners the right to make reasonable use of water for irrigation or for other purposes. As early as 1872 the Texas Supreme Court pointed out the unsuitability of riparian doctrine for the arid and semiarid portions of the state and suggested legislation to impose the prior-appropriation system. The appropriation doctrine was adopted by the state near the turn of the century. Since 1895 land acquired from the state has no longer carried riparian water rights as a matter of course. Instead individuals must appropriate water rights from the state through established statutory procedures. The superior position of preexisting riparian rights has, however, been uniformly recognized by all appropriation statutes. Between 1895 and 1913 a landowner could appropriate water

from a stream merely by filing a sworn statement and map with his county clerk describing the diversion. It is not surprising that under this loosely administered system, water-rights claims often overlapped, described unrealistically large irrigated acreages, or claimed more water than the stream could possibly supply. These rights are called "certified filings" because after 1913 the state recognized and recorded certified copies of the early diversions, which amounted to almost 1,000 certified filings. A 1913 statute introduced a more modern and strictly administered appropriation procedure. Since that time persons have had to make application to the **Texas Water Commission** (/handbook/online/articles/mdtnf) (now the Texas Natural Resource Conservation Commission) for permits to appropriate water from Texas streams. As of August 1975 the agency had recognized more than 10,600 water-rights claims involving almost fifty-four million acre-feet of water, slightly more than the state's average annual surface-water runoff of forty-nine million acre-feet.

State water agencies and water users have always had great difficulty in coordinating the diverse Hispanic and English riparian rights and later appropriation rights, all of which were in effect on the same streams. Because permit holders are required to file annual reports, reasonably accurate long-term records of appropriative water use are extant. However, as late as 1968 there were unrecorded water-rights claimants (riparians and some unrecorded certified filings) in all major river basins; the extent of their claims and the amount of water they were diverting each year were unknown. This perhaps large but unquantified water use made coordinated administration and management of the state's surface-water resources difficult, if not impossible. A decision on all surface-water rights was urgently needed. Adjudication on the lower Rio Grande in a massive lawsuit, *State v. Hidalgo County Water Control and Improvement District No. 18* (1969), involving forty-two special water districts, over 2,500 individuals, and more than ninety lawyers, showed the futility of a purely judicial determination of water rights for the entire state. The Water Rights Adjudication Act (1967), designed to remedy the situation, set up a complex administrative and judicial adjudication procedure. All unrecorded water-rights claims

were required to be filed with the TWC by 1969. Over 11,600 unrecorded claims, primarily from riparian landowners, were filed, asserting rights to more than seven million acre-feet of water. Claims were limited to the maximum amount of water diverted during any year between 1963 and 1967. After administrative determination of rights by the TWC, these findings were to be filed in district court for judicial determination of rights, and eventually certificates of adjudicated water rights were to be issued to successful claimants. Adjudication under the act began on sparsely populated southwestern stream segments in 1969 and proceeded to the northeast into the more populous river basins. As of the late 1980s, the adjudication process had withstood constitutional challenges. Following adjudication, nebulous riparian rights and other unrecorded water rights were for the first time limited to a specific maximum quantity of water. The number of permit holders was also limited, and permits became subject to cancellation for nonuse. The potential for more efficient surface-water management, administration, and planning was greatly increased.

Diffused surface water-surface drainage over the face of a tract of land before it is concentrated into a channel or streamcourse-is another legal class of water. It retains this classification until it reaches a streamcourse, sinks into the ground, or evaporates. In Texas landowners have the right to intercept, impound, and use diffused surface water on their land. Their rights are superior to those of adjacent lower landowners and to holders of rights on streams into which the water might eventually flow. Texas law provides that diffused surface water can be impounded in tanks by the landowner on his own property without a permit, so long as the reservoir does not exceed 200 acre-feet in storage capacity and the water is used only for domestic and livestock purposes. A permit is required if the reservoir exceeds the storage limits, if the dam is on a stream, or if the water is to be used for other purposes. Most farm tanks are shallow, have large surface areas, and lose large quantities to evaporation and percolation underground. Thousands of small, private tanks exist in some Texas watersheds, and they can have a very adverse effect on stream flow and downstream water use. During the drought of the 1950s it was calculated that more than 50 percent of surface runoff

in some watersheds was intercepted by such private reservoirs. Under present Texas water law, downstream water users have no recourse to protect their existing water rights.

Water that percolates beneath the land surface becomes part of yet another legal classification, groundwater. Groundwater, a particularly important resource, provides for more than 60 percent of the state's water needs. Because of the diverse physical and hydrologic environments of Texas, excessive pumping may lead to such regional problems as land-surface subsidence and saltwater intrusion on the Gulf Coast, dwindling spring flow and stream flow in Central Texas, and groundwater depletion on the **High Plains** (/handbook/online/articles/ryh01) and in far West Texas. Texas law subdivides groundwater into two classes: percolating groundwater and water flowing in well-defined underground streams. Texas courts presume that all groundwater is percolating unless proved otherwise. The law about the ownership of percolating groundwater in Texas is well settled. The strict common-law or "English" rule was established by the Texas Supreme Court in *Houston & T. C. Ry. v. East* (1904). Under this rule the owner of the overlying land can pump and use the water with few restrictions, whatever the impact on adjacent landowners or more distant water users. Since the *East* case the rule has been elaborated somewhat by Texas courts but has not been modified significantly. A law passed in 1949 provides for the voluntary establishment of local conservation districts for underground water. Also, groundwater districts may be formed by special legislation and given powers significantly different from those of general-law districts. Such local districts exercise about the only control over landowner rights to groundwater. General law districts have rather broad statutory powers, including regulatory authority over well spacing, water proration, and groundwater conservation. However, they have not implemented all these powers, and the only significant conservation rules they enforce pertain to well spacing and the control of off-farm groundwater waste. By the later 1980s only eleven districts had been formed under general law or by special legislation, and several areas with rapidly dwindling groundwater supplies were not within a district.

In the era since **World War II** (/handbook/online/articles/npwnj) there has been increasing interest in **weather modification** (/handbook/online/articles/ymwed), especially to increase rainfall and suppress hail. No Texas cases or statutes deal with possible sovereign rights to atmospheric moisture. However, Texas courts have gone further than those of any other state in finding private rights to this segment of the water resource. In *Southwest Weather Research, Inc. v. Duncan* (1958), cloud seeders were temporarily enjoined from engaging in hail suppression over plaintiffs' lands when it was claimed that precipitation was being reduced. Suggesting that landowners in Texas have a natural right to any precipitation that falls on their land, the court stated, "We believe that the landowner is entitled...to such rainfall as may come from clouds over his own property that nature in her caprice may provide." Subsequently, in 1967, a Weather Modification Act placed weather modification under control of the **Texas Water Development Board** (/handbook/online/articles/mdt30). In 1977 the Texas Water Commission took over the issuance of licenses and permits required for weather modification operations; unlicensed activities are prohibited. Amendments allow public hearings in affected areas, and public elections may be held where a permit is requested for hail suppression. For all its increasingly complex provisions, the act does not mention the question of public and private rights to atmospheric moisture in Texas. Uncertainties as to both the direct and side effects of weather modification continue to impede it.

Conjunctive management of water resources in various phases of the interconnected hydrologic cycle is often recommended and is viewed as a desirable objective in both the original (1969) and revised (1984) Texas water plans. Omitting consideration of atmospheric moisture and diffused surface water, it is evident that coordinated use and management of surface water and groundwater in a state like Texas, where different doctrines apply to each, would be almost impossible to achieve. Water in streams, the property of the state, can be managed in the general public interest, whereas groundwater is not subject to such control. The absolute ownership rule applied to groundwater provides no basis for correlating rights in an interconnected supply. Even

this brief overview of Texas water law should make it evident that the fragmented institutional structure governing water rights constitutes a formidable obstacle to achieving comprehensive and efficient water-resource management. In some areas, such as the ongoing adjudication of surface-water rights, great progress has been made. In others, the relative lack of control over groundwater and diffused surface-water use continues to cause problems. As the population of Texas grows and the demands on the state's limited water supplies increase, so do the difficulties of managing this essential resource.

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