

**TEXAS GROUNDWATER AND SURFACE WATER LAW
BEFORE AND AFTER SENATE BILL 1**
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"Overview of Texas Water Law"*

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I. INTRODUCTION

This paper is intended to provide a general overview of Texas water law by reviewing some basic principles and concepts and then overlaying pertinent provisions of Senate Bill 1 (S.B. 1) (1997).¹ S.B. 1 will have significant importance to Texas water rights law in the future. S.B. 1 will be discussed, and the interpretation given S.B. 1 by the TNRCC in its recently released proposed Rules² and the impact S.B. 1 and regulations may have on future water law developments in the state.

The evolution of Texas water rights law has been a combination of judicial recognition of common law concepts coupled with legislative enactments regulating the exercise of these rights. Historically, Texas water law has taken two (2) separate courses based upon whether water was surface water in streams or located under the surface of the land.

The general “rule of capture” has applied with respect to water under the surface. This rule entitles the surface owner of the land to pump unlimited quantities of water from his land regardless of the impact the pumping has on his neighbors’ ability to obtain water on lands over an underground aquifer. Technological changes and population growth has created a greater need for groundwater than there is supply. This has resulted in the last two decades in a gradual change in state groundwater law policy toward regulation. This change is typified by the Edwards Aquifer controversy and legislation and significantly in S.B. 1.

Texas surface water law was the first to be regulated. In the late 1800s the legislature, recognizing that there was a greater need for surface water than the supply of water in our streams in the arid portion of the state, imported the appropriation doctrine to Texas. This was done to encourage irrigation in the arid western portions of the state. Patterned after western states mining laws, one would stake a claim to water by filing a written Declaration of Intent to Appropriate Water in the stream with the county clerk. In 1895, the legislature applied the appropriation system state-wide. Later in 1913, the legislature modernized this law and adopted a permitting system, and a method of making a state inventory (record) of all appropriative surface water rights in the state. Since 1913, rights to surface waters can only be obtained by obtaining a permit from the state. The courts and the legislature historically protected vested riparian rights to those owning land adjacent to a stream to take water from the stream.

1913 and 1917 were significant surface water law years in Texas. Under public pressure

¹ Senate Bill 1 (Acts 1997, Texas Legislature, Regular Session, Chapter 1010).

²The TNRCC staff filed on August 21, 1998, proposed changes to 30 TAC Chapter 50, 288, 293, 294, 295 and 297 and was considered by the TNRCC on September 10, 1998, with staff provisions a 30-day comment period with final adoption tentatively set for the TNRCC Agenda meeting of December 16, 1998.

to develop the water resources of the state, the people of Texas passed a “water conservation” constitutional amendment enabling the legislature to create governmental entities whose purpose was to “conserve” water by developing water resources in the state. The term “conservation” at that time, meant the development of water resources through projects and practices to “conserve” the water in our streams so it was not lost to the Gulf of Mexico. This remained the water law policy of the state until recent times when the term has changed its meaning to mean conserving water by using it efficiently so that there will be sufficient water to meet the needs of the great anticipated growth in population in the state and the environment. S.B. 1 reflects the latest word on how the state will address its surface water needs in the future by promoting water conservation practices and encouraging a reallocation of the available water supply, within a basin and between basins, by use of voluntary consensual water marketing concepts. It also introduces for consideration the *hydrologic* connection between surface and groundwater.

Here follows a discussion of Texas water rights laws, with the qualification that in discussing a broad subject within the space and time limits imposed, must necessarily be done in general terms.

II. TEXAS GROUNDWATER LAW

A. Summary

A majority of the water used in Texas is groundwater. The term groundwater includes percolating water, underground flow, and artesian water. Groundwater is presumed to be percolating, unless proven otherwise. Historically, the principles governing use of groundwater in Texas were simple and straightforward as compared to surface water laws.

Groundwater under the land of the owner of the surface is the property of the landowner unless one of two exceptions applies. The owner only has the *right* to pump the water; similar to the right to take wild animals located on the owner’s land, and capture whatever water is available. Under common law, the owner had no right to save it for later use or protect it against use by others. Texas courts did allow it to be transferred and used elsewhere by others.

The second exception is the regulatory programs of local underground water conservation districts who can regulate the use and exercise of this right. The legislature has encouraged groundwater regulation in the past, and S.B. 1 has extended this limitation on the law of capture.

B. Texas Rule of Capture

The seminal Texas groundwater case on the rule of capture is *Houston & T.C. Railway Co. v. East*, 98 Tex. 146, 81 S.W. 279 (1904). In this case, the Texas Supreme Court adopted the

English common law rule of *Acton v. Blundell*, 12 M. & W. 234, 152 E.R. 1223 (Ex. 1843), that the owner of the land could pump unlimited quantities of water from under the owner's land, regardless of the impact this might have upon his neighbor's ability to obtain water on nearby land. Neither an injunction nor damages will lie to prevent such action.

The rule of capture also prevailed over surface water right holders. In *Pecos County WCID No. 1 v. Williams*, 271 S.W.2d 503 (Tex. Civ. App.-El Paso 1954, writ ref'd n.r.e.), the *Comanche Springs case*, applied the principles of the *East case* to the effect of groundwater uses on surface water. The plaintiff, a statutory senior appropriator of surface water, complained that defendant's well had reduced springflow of Comanche Springs to such an extent that insufficient water was available for irrigation out of the spring. The court ruled that the plaintiff's right to use the water attached only after the water emerged from the ground. Prior to such emergence, the defendant could use any amount of water he chose, regardless of the impact upon others, including impacted surface water right holders.

The courts also held that groundwater need not be used on the premises of the owner's property. It may be sold and used off-site by a third party. *Texas Co. v. Burkett*, 117 Tex. 16, 296 S.W. 273 (1927).

Groundwater may be transported in streams. The use of groundwater at a distant location, even though the majority of the water may be lost in transportation, is permissible. In *City of Corpus Christi v. City of Pleasanton*, 154 Tex. 289, 276 S.W.2d 798 (1955), the Texas Supreme Court approved Corpus Christi's transportation of artesian well water 118 miles in a surface watercourse to its downstream diversion point and use, even though as much as 75% of the original supply was lost in transit due to evaporation, seepage, and transportation.

Underflow of a watercourse is considered surface water. Underflow is that portion of the flow of a surface watercourse occurring in sand and gravel deposits beneath the surface of the bed of the stream, *Texas Co. v. Burkett*, 117 Tex. 16, 296 S.W. 273. It is hydrologically connected to the surface flow of the stream. Underflow is considered surface water and property of the state, subject to appropriation. V.T.C.A. Water Code § 11.021.³

The Texas rule of capture does not apply to "underground streams." In determining whether an underground stream exists, the critical distinction made by the courts is whether groundwater is flowing in a well-defined and known subterranean stream, if so, surface water law applies. Since there is a presumption that groundwater is percolating, a subsurface watercourse must have all the characteristics of a surface watercourse; such as containing a bed and banks forming a channel, and a current of water. *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235 (Tex. App.- Austin 1989, writ denied). In this case, downstream landowners sought a declaration that upstream landowners had no authority to appropriate waters adjacent to Kickapoo Springs for irrigation purposes. The Court of Appeals held that absent proof that the

³All statutory references are to the Texas Water Code unless otherwise noted.

subterranean watercourse possessed all the characteristics of a surface watercourse, the presumption of percolating groundwater is not rebutted. Also, the fact that springflow makes a sufficient addition to streamflow to be of benefit to downstream riparian owners, does not make the underground flow qualify as an underground stream.⁴

Underground streams issues were first raised in a significant manner a few years ago regarding the Edwards Aquifer. A lawsuit was filed maintaining, and the Texas Natural Resource Conservation Commission (TNRCC) declaring, that the Edwards Aquifer was an underground river. A Travis County District Court, held that the TNRCC rules declaring the Edwards Aquifer to be an underground river, and thus state water, were void and of no effect, *Cause No. 92-05214; Danny McFadden & Texas Farm Bureau, et al. v. Texas Water Commission, in the 331st Judicial District Court of Travis County, Texas*. The case was appealed, but dismissed as moot following TNRCC's repeal of the challenged rules. To clarify the issue the legislature later declared that the Edwards Aquifer is “. . . a unique natural resource . . . but not an underground stream.” Act of June 11, 1993, 73rd Leg., R.S., ch. 626, § 1.01 (S.B. 1477). Under these circumstances, it would seem to be different to establish an underground stream in Texas.

The rule of capture applies to “artesian water.” Artesian water is groundwater confined under pressure by an impermeable geological layer, capable of flowing when properly cased in a well. Texas courts have applied the principles applicable to percolating water to artesian water. However, §11.205 does prohibit the waste of artesian water and § 11.202 provides some limitations on artesian wells.

The rule of capture does not allow a landowner to capture and use percolating water maliciously with the purpose of injuring a neighbor or in a manner that amounts to wanton and willful waste of the resource. *City of Corpus Christi v. City of Pleasanton*, 154 Tex. 289, 276 S.W.2d 798, 801 (1955). Also, significantly since 1978 an action for damages would lie for the negligent pumping of groundwater that caused subsidence of neighboring land. *Friendswood Dev. Co. v. Smith-Southwest Indus., Inc.*, 576 S.W.2d 21, 30 (Tex. 1978).

C. Water Well Drillers Act

Another regulatory impact on groundwater is the Water Well Drillers Act (the Act), which makes it unlawful for a water well driller to drill a water well or offer to perform services as a water well driller without a license, §§ 32.001-019. However, the law does not require a license to drill a water well on one's own property for personal use, or to assist in the construction of a well under the direct supervision of a licensed driller.

Under the Act, a water well is defined as “. . . any artificial excavation constructed for the purpose of exploring for or producing groundwater.” The Act expressly excludes: (1) test or

⁴This ruling is now recognized in the proposed TNRCC rule amendments which provides that spring water, before it reaches a watercourse, is not state water, § 297.1(46).

blast holes in quarries or mines; (2) wells or excavations used in the exploration of oil, gas, or other minerals unless the holes are used to produce groundwater; and (3) any injection water source well regulated by the Railroad Commission pursuant to its authority to prevent water pollution.

To be licensed as a water well driller, a person must submit an application to the TNRCC, meet the requirements of by the Texas Water Well Drillers Advisory Council and TNRCC, pass the required examination, and pay a license fee. The license must be renewed annually.

The TNRCC rules contain specific requirements for the reporting of well logs and the reporting of undesirable water (*i.e.*, water that is injurious or that can cause pollution). The rules also address procedures for drilling, completing, capping, and plugging wells. If the procedures outlined in the rules are inapplicable, unworkable, or inadequate for a particular job, the driller or the person having the work done may seek approval from the TNRCC's Executive Director to utilize alternative procedures or a combination of the procedures prescribed in the rules.

Violations of the Act or rules are subject to administrative penalties of up to \$2,500, § 32.011, or civil suit by the Attorney General if referred by the Executive Director or the TNRCC. 30 TEX. ADMIN. CODE §§ 338.74(c)-(g) (West 1995).

D. Underground Water Conservation Districts

1. In General

Groundwater is subject, however, to reasonable regulation under the police power to protect the public health and welfare. *Friendswood Development Co., supra*. Moreover, like oil and gas property rights, this general rule is supported by the Conservation Amendment, *Art. XVI, Sec. 59, Tex. Const.* Exercise of the state's regulatory authority until 1997, however, was limited to local or regional districts, known as Underground Water Conservation Districts created on a local option basis.

Groundwater water district can be created either by the TNRCC pursuant to provisions of general law, or by special act of the legislature. The more common pattern is legislative action. In creating an UWCD by special legislation, the legislature may modify the powers, authorities, management, or funding mechanisms. In *most* cases, however, the authority of legislatively created districts tracks those of general law districts.

Chapter 36, Texas Water Code, contains the general law applicable to the districts. They possess extremely broad powers and regulatory authorities, although in many instances those powers may not have been exercised. S.B. 1 amended Chapter 36 and has expanded and clarified district powers and provides measures so as to encourage the formation of districts in groundwater management areas.

2. S.B. 1

Under previous law, the TNRCC had authority to create groundwater districts, however, S.B. 1 has strengthened this process. The legislature has declared that such districts are the state's preferred method of groundwater management.

(a) Priority Groundwater Management Areas

S.B. 1 provides a two-step process in creating districts. At each step, there is an opportunity for a hearing. First, the TNRCC and TWDB identify, designate, and delineate priority groundwater management areas which are experiencing or expected to experience water shortages, subsidence, or contamination of groundwater within the next 25 years. S.B. 1 changed the terminology of "critical areas" to "priority groundwater management area" (PGMA). The TNRCC's rules pertaining to designation of PGMA's had been consolidated in Chapter 294 of the proposed new rules.

(b) Creation/Annexation of Districts

Following the designation of a priority groundwater management area by the TNRCC and hearings, the TNRCC may enter an order determining that creation of a district over the management area is needed. Following issuance of a TNRCC order, the landowners in the area may create a district, have the area annexed to an adjoining district, or create a district(s) through legislative action. If the TNRCC proposes the creation of a district, the Texas Agricultural Extension Service, in conjunction with the TWDB and other state agencies, will begin a public education program in the area to inform the residents of the areas of water needs and options. This is done prior to further action by the TNRCC.

If the TNRCC determines that the area should be annexed to an existing UWCD, it submits its order to the Board of Directors of the existing district for a vote. If the Board accepts the annexation, it may request the Texas Agricultural Extension Service, TNRCC, TWDB, and other state agencies to engage in a public education program to inform the residents of their water situation and possible annexation to the existing UWCD, and call for an annexation election in the area. If the vote is favorable, the reasonable representation from the annexed area is to occur. If the annexation is defeated, then another election cannot be held until after one year from the date of the first election.

If the TNRCC determines that it should create a district, it notifies the County Commissioners in each county involved of the creation of the district. The County Commissioners appoint the temporary directors and calls an election to confirm creation of the district and election of permanent directors.

S.B. 1 also clarifies the selection of temporary directors in cases where the TNRCC creates a district upon petition of residents under § 36.015, and when it dissolves a district under § 36.303. If it creates a UWCD by its own order under new § 36.0151, the County Commissioners appoint the temporary directors. Provisions are added pertaining to selection of temporary directors where the district is in more than one county (new § 36.0161).

(c) Review of District's Performance

S.B. 1 adds new provisions providing for *performance review* of UWCDs in connection with the dissolution of districts. It amends Subchapter I of Chapter 36 by adding provisions requiring the submission of management plans, and a legislative audit review by the state auditor to see to it that districts are abiding by their management plans. The state auditor shall report results of its performance reviews to the legislative audit committee and the TNRCC. The audit is conducted after one year following the TWDB's certification of a district management plan and every five years thereafter.

If a district is found not operational, the TNRCC under new §36.303 may hold a hearing, after notice, and issue an order requiring the district to take certain actions or refrain from certain actions, dissolve the district's Board, remove the district's taxing authority, dissolve the district, and may recommend to the legislature actions the TNRCC deems necessary to accomplish comprehensive management in the district. These actions may be applied by filing an action in district court in any county in which the district is located. A dissolved district's assets escheat to the State.

S.B. 1 provides that the TWDB shall report to the Governor, Lieutenant Governor and Speaker of the House of Representatives, no later than January 31 of each odd-numbered year, on the status of designation of priority groundwater areas and creation of districts. The report shall contain a recommendation with respect to areas where voters have failed to organize or annex an area to an existing district as to whether the legislature should create a district, require the annexation or whether the TNRCC should take over management of the area through its nearest regional office. If the TNRCC takes over management in an area, then a new election in the area may not be called for three years after the last election in the area.

S.B. 1 also gives county governments authority in a priority groundwater management area to adopt water availability requirements in conjunction with the approval of subdivision plats.

Obviously, the state legislature has evidenced a strong message to UWCDs to actively manage and regulate the exercise of the rule of capture in Texas.

Chapter 293 of the TNRCC proposed rules implementing S.B. 1 amendments to Chapter 36 sets out in more detail the various steps in district creation, dissolution or annexation. It is important to note that if local voters reject creation of a district in a PGMA, which the TNRCC deems needed or other additional problems exist, then the TNRCC is directed in S.B. 1 to report this to the legislature. This seems to express a legislature intent that groundwater be regulated in PGMA's.

(d) Regulatory Authority

Regulatory authorities of districts are extremely broad, and implemented in two ways. First, the district has general rulemaking authority under Chapter 36. Because the statute's "waste" definition includes both physical quantities, quality, and protection against degradation from other sources, the district's charge to prevent waste gives it far-reaching authority under its rulemaking power. Second, with the exception of "exempt wells," all wells in the district must receive a permit from the district. Exempt wells are primarily small wells, usually of a domestic and livestock character, but may also include oil and gas related wells. §36.117. Note, however, that exempt wells are not exempt from well construction or regulatory requirements, only the permitting requirement.

Amendments to §36.117 by S.B. 1 provide that wells drilled after September 1, 1997 to supply water for hydrocarbon production must meet spacing requirements of the district unless no space is available within 300 feet of the production well as central injection stations. Wells existing at the time of district creation are permitted under a "grandfathering" provision. The permitting requirement provides an opportunity to impose limits on spacing and production. S.B. 1 further elaborates in new §36.113 the details and requirements of applications for permits, requires drought management plans and among other things, whether it *unreasonably affects existing groundwater and surface water resources*.

S.B. 1 also adds further specific requirements of permits granted by districts. New §36.1131 has specific recommended elements of permits in an apparent effort to standardize permits and assure they contain specifics regarding such things as closure and drought management plans.

(e) Research and Planning

Districts have had authority to conduct research and do planning under prior statutes. S.B. 1, however, mandates that districts, following notice and hearing, develop a water management plan. This plan must coordinate with surface water management on a regional basis and address use, waste, subsidence, conjunctive surface water management, and other natural resource issues outlined in S.B. 1 (§ 36.1071). The plan must be consistent with the regional water plans required by S.B. 1. The management plan shall be filed with TWDB for review, approval and certification.

(f) Export of Groundwater

An area of controversy and concern in the past is the extent of authority of a district to impose limitations on the export of groundwater outside the district. S.B. 1 speaks to this issue by adding § 36.122 allowing a district to promulgate rules requiring a permit to transport water outside the district. If a district adopts rules, on purchases after June 1, 1997, it may impose fees for processing an application, and must hold a hearing on the application, and consider:

- “(1) the availability of water in the district and in the proposed receiving area during the period for which the water supply is requested;
- (2) the availability of feasible and practicable alternative supplies to

- the applicant;
- (3) the amount and purposes of use in the proposed receiving area for which water is needed;
 - (4) the projected effect of the proposed transfer on aquifer conditions, depletion, subsidence, or effects on existing permit holders or other groundwater users within the district; and
 - (5) the approved regional water plan and certified district management plan.

The district may limit a permit issued under this section if certain conditions exist in addition to conditions provided by Section 36.1131, the permit shall specify: the amount of water that may be transferred out of the district; and the period for which the water may be transferred.”

E. The Edwards Aquifer Authority

The Edwards Aquifer Authority (EAA) was created by the Texas Legislature in 1993 and amended in 1995. Act of May 30, 1993, 73rd Leg., R.S., ch. 626, 1993 Tex. Gen. Laws 2355, *as amended by* Act of May 29, 1995, 74th Leg., R.S., ch. 261, 1995 Tex. Gen. Laws (the Act). The Supreme Court of Texas upheld the Act’s facial constitutionality against numerous challenges in *Barshop v. Medina Underground Conservation District*, 925 S.W.2d 618 (1996).

The Act was in response in part to the inadequacy of existing laws to regulate pumping to protect all uses of the aquifer, including flows at Comal Springs and San Marcos springs. An existing district, the *Edwards Underground Water District* had worked many years in research and attempts to be steward for the Aquifer, but lacked sufficient powers to regulate. Voluntary management initiatives were weak. An attempt by the Texas Water Commission in 1992 to regulate the aquifer as an underground river was held to be unauthorized. *Danny McFadden & Texas Farm Bureau v. Texas Water Commission*, No. 92-05214 (Dist. Ct. of Travis County, 331st Judicial District of Texas). However, these regulations were relied upon in drafting the Act creating the Edwards Aquifer Authority. Undoubtedly, the greatest incentive for passage of the Act was fear that a suit by the Sierra Club to compel enforcement of the federal Endangered Species Act would nationalize regulation of the aquifer. *Sierra Club v. Lujan*, No. MO-91-CA-069, 1993 WL 151353 (W.D. Tex. 1993), *appeal dismissed*, 995 F.2d 571 (5th Cir. 1993).

The EAA’s apparent central goal is protection of endangered species in Comal Springs and San Marcos springs, but at the same time protect groundwater rights. The EAA is mandated to “. . . ensure that, not later than December 31, 2012, the continuous springflows of the springs . . . are maintained to protect endangered species to the extent required by federal law.” The Act establishes an aquifer-wide cap on withdrawals from non-exempt wells of 450,000 acre-feet per year through the year 2007 and 400,000 acre-feet per year after 2007. The EAA may increase the caps, if sufficient water is available. The available supply is allocated by a permit system. Permits are first issued to existing beneficial users. Reductions in withdrawals to meet the 2007 cap and federal law requirements for protection of endangered species, it is believed, will be achieved if EAA’s methods include conservation, reuse, and purchase of other

water rights. If necessary, entitlements of permittees will be reduced to satisfy mandated cutbacks in total aquifer withdrawals. A mandated “critical period management plan” must (1) reduce discretionary uses to the extent feasible and (2) to the extent that further reductions are necessary, reduce nondiscretionary uses in reverse order for the following purposes: “(A) municipal, domestic, and livestock; (B) industrial and crop irrigation; (C) residential landscape irrigation; (D) recreation and pleasure; and (E) other uses that are authorized by law.”

Other purposes for which withdrawals may be limited under this act are to: “. . . (1) protect the water quality of the aquifer; (2) protect the water quality of the surface streams to which the aquifer provides springflow; (3) achieve water conservation; (4) maximize the beneficial use of water available for withdrawal from the aquifer; (5) protect aquatic and wildlife habitat; (6) protect designated threatened or endangered species under state as well as federal law; and (7) provide for instream uses, bays, and estuaries.”

In the *Barshop* case, the Supreme Court rejected the view that groundwater is less amenable to regulation than surface water. This notion rested on the proposition that surface water is owned by the state and private rights in them are usufructory, unlike groundwater rights, which is not owned by the state. The Court in *Barshop* upheld the Act at this stage even though it was retroactive and was alleged to be an unconstitutional taking of property. The court said that the attack upon the Act in *Barshop* was a *facial attack*; an unconstitutional taking could not be established until the Act was actually applied to a landowner. The court acknowledged that the parties disagreed as to whether a Texas landowner owns groundwater before taking possession of it. But the court deemed it unnecessary to resolve this issue.

It is significant that the court relied on the Conservation Amendment of the Texas Constitution. Tex. Const., Art. XVI, § 59(a), adopted in 1917. The court stated that it applies to “all” of the natural resources of the state, and is not limited to surface water. The court said: “Indeed, the State has the responsibility under the Texas Constitution to preserve and conserve water resources of all Texans.” *Barshop*, 925 S.W.2d at 623. If the Act is contested in future litigation, it could be upheld as was the Water Rights Adjudication Act in *Adjudication of the Water Rights of the Upper Guadalupe Segments of the Guadalupe River Basin*, 642 S.W.2d 438 (Tex. 1982).

The EAA has now published and implemented its rules, a discussion of which is beyond the scope of this paper.

III. SURFACE WATER LAWS

A. In General

Surface water law and regulation was earlier developed and regulated as contrasted to the case with groundwater. Beginning with the *Irrigation Acts of 1889 and 1895*, substantial modifications in Texas surface water laws occurred to a greater extent than other aspects of property law. An historical review of the development of surface water laws leads to a deeper understanding of them; however, such a review is beyond the scope of this paper. The reader is referred to such sources as: Baade, *The Historical Background of Texas Water Law - A Tribute to Jack Pope*, 18 St.Mary's L.J. 2(1986); *State v Valmont Plantations*, 346 S.W.2d 853, (Tex.Civ.App.-San Antonio (1961), aff'd, 163 Tex. 381, 355 S.W.2d 502 (1962), Blalock, *Excerpts from the Opinion of the Trial Court*, Proceedings, Water Law Conference, University of Texas Law School 16 (1959); *State v. Hidalgo County W.C.I.D. No. 18*, 443 S.W.2d 728 (Tex.Civ.App. 1969, writ ref'd n.r.e.).

B. Riparian Rights

Texas surface water laws developed a dual system of surface water rights. The courts recognized vested riparian rights, which was traditionally protected by the legislature, when the legislature adopted the appropriative system of surface water rights. A riparian water right is a water use right recognized at common law. It entitles the owner of property adjacent to a watercourse to take water from the stream and make reasonable use of it. The legislature in 1913, limited riparian rights to rights attached to land patented by the State between January 20, 1840, when Texas statutorily adopted the common law, and July 1, 1895, when the legislature imported the appropriative water law concept to Texas in the *1895 Irrigation Act*. The 1913 Irrigation Act established July 1, 1895, as the last date upon which the State granted riparian rights with its land patents.

The key to a riparian right is "reasonableness." Riparian rights were not quantified. A riparian property owner could use any amount of water that is reasonably necessary. Although a riparian may use the water for any reasonable purpose, a riparian could not unreasonably interfere with the uses of other riparian water users. If necessary and reasonable, a riparian landowner may impound water pursuant to his riparian rights.

A riparian landowner may sell the water for use off-site of the riparian property, provided that the off-site use does not prejudice other riparian water users. Riparian rights could, by express conveyance, be separated from the riparian land. *Watkins Land Co. v. Clements*, 98 Tex. 578, 86 S.W. 733 (1905).

Significantly, riparian rights attach to the *normal* flow of the stream, as opposed to the *storm and flood* flow. *Motl v. Boyd*, 116 Tex. 82, 286 S.W. 458 (1926). Riparian rights are superior to appropriative water rights. *Matagorda Canal Co. v. Markham Irrigation Co.*, 154 S.W. 1176 (Tex.Civ.App.-Galveston 1913, no writ). Unlike appropriative water rights, riparian

rights were not lost through non-use. *Fleming v. Davis*, 37 Tex. 173 (1872).

As discussed below, under the *Water Rights Adjudication Act*, the state completed the merging of riparian and appropriative water rights for most practical purposes. On rivers that have been adjudicated, the distinction between riparian rights and appropriative rights have essentially been removed, and riparian rights have been converted into appropriative rights for all practical purposes. However, the riparian or appropriative “roots” of a water right may become an issue in certain water rights transfers.

C. Appropriative Water Rights

1. In General

Surface water is owned by the State subject to appropriation through a statutory appropriation process, or as a vested riparian right. This development began in the *Irrigation Acts of 1889 and 1895, and the 1913 and 1917 Acts*.

Currently § 11.021(a) provides:

“The water of the ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state is the property of the state.”

Although § 11.021 appears to assert State ownership over every sort of surface water, such a reading is overbroad. Surface water rights are property rights, but are capable of alienation by the sovereign. The sovereign’s original grant of land in many cases carried a right *to use* water. The nature and extent of the right depends upon which sovereign (Spain, Mexico, Republic of Texas, or State of Texas) made the grant. To the extent that a prior sovereign has granted rights to water, §11.021 is incapable of constitutionally withdrawing the grant. The extent of the alienation of the sovereign’s grant of water rights and the exception for diffused surface water is discussed later.

2. Reuse

S.B. 1 addresses the right to reuse surface water prior to its return to the watercourse which has been referred as “direct reuse.” The asserted right to return water to a stream and divert it further downstream and reuse it again, is referred to as “indirect reuse.” S.B. 1 added new language to § 11.046 providing that the TNRCC may require the return of water to the stream after a single use, or specify the amount of water that can be reused by requiring a certain amount of return flows so as to protect senior downstream water rights and instream flows. Re-circulated water used for cooling purposes, is not considered surplus water. *See* § 2.07 of S.B. 1.

It is noted that some existing permits require return flows and restricts continued use or direct reuse of water. It is believed that in the past downstream permits have been granted based, in some respects, upon the assumption of upstream return flows being returned to the watercourse. S .B. 1 addresses this possibility by requiring the TNRCC to standardize its method of determining water availability in a stream in new permit proceedings by improvements to its water availability computer models utilized by the TNRCC. Section 2.06 of S.B. 1 requires one who discharges privately owned groundwater to a stream and makes reuse of it downstream to obtain a “bed and banks” permit. One who returns previously used surface water to the stream is required to obtain a new permit.

3. “Bed and Banks” Permit

New § 11.042(b) – the “bed and banks” permit provision – requires a permit from the TNRCC if one wishes to discharge privately owned groundwater (developed water) into a stream and use it further downstream. New § 11.042(c) requires a new permit and assessment of the impact on the stream in cases of indirect reuse of once diverted water returned to the stream. Existing indirect reuse and groundwater retrieval projects previously granted by the TNRCC before September 1, 1997, are grandfathered from these new provisions.

D. Obtaining Appropriative Water Rights

1. In General

Since the 1913 Act was passed, one must obtain a permit to obtain a surface water right. This appropriation doctrine is the prevalent system of surface water rights in the western states. Like riparian rights, the appropriative right is usufructuary, *i.e.*, a right *to use* the water, not *ownership* of the corpus (the water itself) in a stream. Unlike the riparian system with its vague criteria of “reasonableness,” the appropriative system provides for precisely defined water rights. The use of water is authorized, under the appropriative system in an amount specified, for a particular purpose, to be diverted from the watercourse at a definite location and used on a particular tract of land. The doctrine of *priority* or “first in time, first in right” applies to the allocation of water between appropriators during times of shortage on a watercourse.⁵

Beneficial use is a key concept to the appropriation doctrine. The appropriation, now a permit, authorizing use of water under the appropriative system is a right to make a beneficial use of water. To the extent the appropriator actually puts the water to beneficial use, the appropriation is then *perfected* and becomes a *vested property right*. Even a vested appropriative right, however, may be lost through nonuse over an extended period of time by cancellation by the TNRCC because it does not become a right of nonuse, *Texas Water Commission v. Wright*, 464 S.W.2d 642 (1971).

⁵This is the rule in Texas, except with respect to the waters in Amistad and Falcon Reservoirs and downstream on the Rio Grande where a judicial decree established a different priority system, *State v. Hidalgo County W.C.I.D. No 18 et al.*, 443 S.W.2d 728 (Tex.Civ.App. 1969, writ ref’d n.r.e.)

2. Permit Requirements

A person desiring to appropriate water may obtain a permit under §§ 11.124 - 11.136, if, after filing a permit application, the payment of fees, and notice and hearing, the applicant shows that (a) unappropriated water is available in the source of supply, (b) the proposed appropriation contemplates application of water to a beneficial use, (c) the proposed appropriation does not impair existing water rights or vested riparian rights, (d) the proposed appropriation is not detrimental to the public welfare, and (e) reasonable diligence will be used to avoid waste and achieve conservation. Each of the required findings presents a potential source of dispute in a contested hearing.

On November 5, 1985, the voters approved a constitutional amendment that incorporated water conservation oriented requirements in the permitting process.

In the definition of “conservation,” the legislature incorporated the need to efficiently use our water resources and reduce the consumption of water. Section 11.002(8) allowed the TNRCC to require the formulation and submission of a water conservation plan and require evidence that reasonable diligence will be used to avoid waste and achieve water conservation pursuant to section 11.002(8); and required the TNRCC to assess the effects, if any, of the issuance of the permit on the bays and estuaries of Texas, upon instream flow requirements, water quality and give notice of permit applications to the Texas Parks and Wildlife Department, who is entitled to participate in any such proceeding §§ 11.147 - 11.149. S.B. 1 added additional requirements, such as drought management plans and a project’s consistency with a regional water plan.

3. The Beneficial Use Requirement

The “beneficial use” requirement is normally easily satisfied by a prospective appropriator. An irrigator, industry, or municipality having definite plans to put the water to use after obtaining the permit normally qualifies. The only real inquiry in such instances is whether the volume of water requested is excessive in light of the use intended.

S.B. 1, by amendment to § 11.023(e), allows for multiple use of water by specific volumes. In other words, water may be used for more than one use, for example, irrigation and/or municipal use.

In the case of reservoir projects, particularly those reservoirs constructed in advance of current need, the issue is somewhat more complex. Commitments from future water supply customers can typically satisfy the beneficial use requirement. Otherwise, the applicant may introduce projections of municipal and industrial growth in the reservoir’s service area that show a projected water need capable of using the water supply. Very little case law construing the beneficial use requirements in this respect exists. In most instances it will be a fact issue, with the TNRCC determination reviewed under the substantial evidence rule.

4. The Availability of Water Requirement

The “availability of unappropriated water” requirement is a frequent source of controversy in contested permit applications. One aspect of the controversy centers around the legal definition of “unappropriated water,” *i.e.*, what is the standard used to measure it.

The Texas Supreme Court addressed the question of what constituted unappropriated water under §§ 11.134(b)(2) and (3) in *Lower Colo. River Auth. v. Texas Dep’t of Water Resources*, 689 S.W.2d 873 (Tex. 1984), the *Stacy Dam decision*. The Supreme Court held that unappropriated water meant the amount of water remaining after taking into account complete satisfaction of all existing uncanceled permits and filings valued at their recorded levels sometimes referred to as the “four corners” approach.

Given the legal definition of unappropriated water, factual questions of whether it is available, and how frequently it is available, still remain. An aspect of the mixed fact and law determination is noteworthy. On virtually any river in the state, flows of unappropriated water are periodically available. Even though the normal flow of the river may be fully appropriated, water may still be available during times of abundance or flood. No statutory criteria exists to determine how frequently water must be available to support a finding that unappropriated water is available for appropriation. In the case of direct diversions from the stream, without water storage facilities, the TNRCC has previously utilized the at least seventy-five percent standard, if seventy-five percent of the water requested should be available seventy-five percent of the time, then water is available for issuing a new permit. This guideline has now been included in the TNRCC new proposed rules.

S.B. 1 addresses this issue by requiring the development and standardization of water availability computer models, which is currently underway by the TNRCC.

The construction of reservoirs to store water during times of excess flood flow is a means of making water available for appropriation that otherwise might not be available with sufficient regularity to support a new appropriation. This is an example of *developed water* mentioned above. In the past, the TNRCC has typically limited the volume of use authorized from a reservoir to its “firm yield.” Firm yield is the amount of water, based upon a simulation utilizing historic streamflow records, that the reservoir could produce annually during the worst drought reflected by historical streamflow records. In performing these simulations, hydrologists should assume full exercise of upstream senior water rights under the *Stacy decision*, and allow for the passage of sufficient water to satisfy all downstream senior water rights. No specific legal requirement exists that the TNRCC limit the authorized use from the reservoir to its firm yield. The development of standard water availability computer modeling contemplated by S.B. 1 should enhance the TNRCC’s ability to determine this issue. This firm yield definition is now included in the TNRCC’s proposed rule, § 297.1(18).

5. Impairment of Existing Water Rights

As part of its hydrologic analysis, the TNRCC examines the impact of the proposed appropriation on existing downstream water rights. If the proposed appropriation would impair water availability for existing downstream rights, the TNRCC may include restrictions on the diversion and use of water in the new permit. The water availability computer modeling contemplated by S.B. 1 should assist the TNRCC in determining this issue, and the TNRCC proposed rules have included further clarification.

6. Public Welfare

The portion of § 11.134 that requires the appropriation not be detrimental to the public welfare is obviously very broad. Pursuant to current TNRCC rules, this protection of the public welfare can include consideration of environmental, social, and economic impacts of the proposed appropriation. This is a vague standard which is now a consideration in both applications for new and amended water rights.

7. Conservation and Drought Management Plans

Most applications for new, or under S.B. 1 amended water rights, must include a water conservation plan, which demonstrates that reasonable diligence will be used to avoid waste and achieve conservation of water. Water conservation is defined “. . . as the employment of practices, techniques, and technologies that reduce consumption, loss or waste, maintain or improve efficiency, increase recycling and reuse, or prevent pollution.”

S.B. 1 includes: (1) requirements for drought contingency plans for municipal, irrigation and wholesale water suppliers; (2) municipal and wholesale water suppliers must have a minimum of three drought or emergency response stages for implementation of response measures; (3) plans must document coordination with Regional Water Planning Groups to insure consistency with the appropriate approved regional water plans and the regional water planning process; (4) water right holders of 1,000 acre-feet a year or more for municipal, industrial, and other non-irrigation uses and water rights holders of 10,000 ac-ft a year or more for irrigation uses have until September 1, 1999, to submit a water conservation plan to the executive director; (5) retail public water suppliers with 3,300 or more connections have until September 1, 1999, to submit a drought contingency plan to the executive director; and (6) all other retail public water suppliers have until September 1, 2000, to prepare and adopt a drought contingency plan.

8. Other Requirements

Section 11.147 requires the TNRCC to consider the impact of the proposed appropriation on the bays and estuaries of the State of Texas. This requirement is based upon statutory requirements implemented on September 1, 1985, and codified in §§ 11.1491 and 11.152, which requires the TNRCC and the Parks and Wildlife Department to assess the effects on fish and wildlife habitats in cases where an application seeks to appropriate more than 5,000 acre-feet of water per year. Mitigation of adverse impacts that the appropriation may have, may be required, but the evaluation should also consider any net habitat benefits from the project. Sections

11.1491 and 11.152 further provide for an offset of any mitigation actions required pursuant to federal laws and require the consideration of the water quality impact of a proposed appropriation.

9. Interbasin Transfers

Section 11.085 requires special authorization for permits to transfer water from one watershed, or river basin, to another. A similar provision, applicable to the TWDB, is found in Section 49d of Article III of the Texas Constitution. It, and related statutory provisions, impose a limitation on TWDB projects, and prohibit interbasin transfers of water that is projected to be needed in a basin of origin within the next 50 years. These provisions are now contained in amendments to § 11.085 in S.B. 1. Before S.B. 1, the court case, *San Antonio v. Texas Water Comm'n*, 407 S.W.2d 752 (Tex. 1966), was the leading case involving the application of § 11.085. It required the TNRCC to balance future benefits and detriments of the two competing basins prior to authorizing the transfer. Now, S.B. 1 has added considerable more “guidelines” to the TNRCC in considering interbasin transfers and the TNRCC’s proposed rules includes more detail on these requirements.

E. The Water Rights Adjudication Act of 1967

The legislature established procedures for comprehensive adjudications of surface water rights in passing the Adjudication Act of 1967, Chapter 11, Texas Water Code (Adjudication Act). Adjudication of water rights was contained in the *1917 Act* which authorized the then Board of Water Engineers to adjudicate existing claims of water rights, riparian as well as appropriative rights. This provision was invalidated as an unconstitutional delegation of judicial power in *Board of Water Engineers v. McKnight*, 111 Tex. 82, 229 S.W. 301 (1921). This was a devastating blow to efforts to clarify and stabilize water rights. Forty-six years would pass before this gap in the State’s water laws would be filled.

The Adjudication Act avoided the fate of the *1917 Act* by providing that administrative adjudications would become final only after court approval. Successful claimants receive a certificate of adjudication, which defines the scope of their rights. The adjudication process has been completed for all stream segments except in the El Paso Upper Rio Grande area.

The Adjudication Act did much more than establish a procedure for adjudication of claims. It also cut back vested riparian rights, previously protected by the legislature, to the maximum demonstrated beneficial use during a five-year period prior to the effective date of the Adjudication Act.

The Supreme Court of Texas held that this legislative limitation of the significant common law right of riparians to make prospective uses of water was not an unconstitutional taking. The court reasoned that no one has a right to waste state waters and that non-use

constitutes waste, *in re Adjudication of the Water Rights of the Upper Guadalupe River Basin*, 642 S.W.2d 438 (1982). Riparian rights were thus transformed from a right to make an unquantified reasonable use of water into a right to make a beneficial use of a specified quantity of water – *a characteristic of appropriative rights*.

The transformation was made complete by administrative construction of the Adjudication Act as authorizing assignment of time priorities to proven riparian rights. The then Texas Water Commission declared that this was essential to a workable scheme. E.g., *Final Determination Before the Texas Water Commission in the Matter of the Middle Colorado River Segment of the Colorado River Basin* (1981). The priority date was established as the date of the first beneficial use of state water within the claim area for other than domestic or livestock purposes.

All other claims of water rights, except those under permits or certified filings, were treated in the same manner as riparian rights. Among such were claims under Spanish and Mexican grants and claims under the Acts of 1889 and 1895 for which there were no certified filings.

The *certificate of adjudication* has, thus, become the basic evidence of and measure of water rights, regardless of their origin, riparian or otherwise. Such rights are also limited by valid existing and future regulation. It is noted, however, that the “roots” of the right may be an issue in future water marketing transactions. Currently, however, rights remaining unappropriated water can be obtained by permits issued by the TNRCC as discussed above.

Riparian, domestic, and livestock uses were exempt from the Adjudication Act – regardless of the amount used.

Thus, now most all previous existing surface water rights have been defined and quantified, and two watermaster operations (Rio Grande and South Texas - Nueces, San Antonio and Guadalupe River) exist to enforce these water rights.

F. Cancellation

Prior to 1957, appropriative rights could be canceled only when “. . . willfully abandoned for three successive years . . .,” which was difficult to establish. In 1957 the legislature passed a cancellation statute (now Chapter 11 of the Texas Water Code) which provides a procedure to cancel rights for non-use for ten consecutive years. Retroactive application of this statute to existing rights was upheld in *Texas Water Commission v. Wright*, 464 S.W.2d 642 (1971). This law covered partial non-use as well as total non-use. Under § 11.172 an appropriator may avoid cancellation by convincing the TNRCC that the appropriator has a “bona fide intention of putting the water or the unused portion of the water to an authorized beneficial use within a reasonable time after the hearing.”

S.B. 1 in §4.06 has added further provisions. It is believed these provisions make it more difficult to cancel rights. This could be a recognition of the conflict between the “use it or lose it” approach and the modern definition of *water conservation*. S.B. 1 defines “conserved water” as a beneficial use of water which exempts it from cancellation. However, cancellation continues to be a threat to water right holders who do not use their rights and should encourage water marketing as the state’s preferred method of voluntary reallocation of water as expressed in S.B. 1. The new TNRCC proposed rules contain provisions outlining the cancellation process.

G. The Wagstaff Act

The Wagstaff Act was passed in 1931. The legislature perceived that upstream municipal water supplies was threatened by major downstream senior appropriations for hydroelectric and irrigation purposes. It gave priority to municipal needs against permits issued after 1931. Through the years, the Wagstaff Act accomplished several significant modifications of the existing appropriative system, such as the list of priority uses in § 11.024 that establishes a ranking of preferred water uses to be utilized in new permit issuance. Section 11.024 ranks water uses in the following order: domestic and municipal, industrial, irrigation, mining, hydroelectric, navigation, recreation and pleasure, and other beneficial uses.

The Wagstaff Act’s most significant provision in the codified Texas Water Code was contained in § 11.028. It provided that all appropriations following the effective date of the Wagstaff Act, *i.e.*, May 17, 1931, for any purpose other than municipal and domestic uses were subject to subsequent “. . . further appropriation . . .” for municipal or domestic uses without condemnation or compensation. The Wagstaff Act further provided that municipalities and other governmental agencies can exercise the power of eminent domain to acquire water and/or property devoted to uses other than municipal and domestic purposes.

The Wagstaff Act, appeared to provide a mechanism to make water available for municipal use on a watercourse (except the Rio Grande) that is otherwise fully appropriated. The implementation of these provisions in practice, however, was uncertain. No Texas court addressed these basic issues authoritatively.

The uncertainties created by the Wagstaff Act are now removed. S.B. 1 expressly solved this in § 9.01 of S.B. 1 by simply providing “Section 11.028, Water Code, is repealed.”

H. Diffused Surface Waters

Diffused surface waters are those waters which do not flow in any defined watercourse, but flows across the surface of land in a variant and unpatterned way. Generally, this is rain or snow runoff, although water left in upland areas after a flood recedes may also qualify as diffused surface water. Diffused surface waters are the property of the landowner, until they

enter a natural water course. When these waters flow into a natural water course they become state water subject to appropriation.

Upon entry into a watercourse, diffused surface water is legally transformed from private property to public property. Consequently, the definition of a watercourse is significant. A watercourse is a channel, with a well-defined bed and banks, in which water flows as a stream and has a “permanent source of supply.” *Hoefs v. Short*, 114 Tex. 501, 273 S.W. 785 (1925).

A watercourse does not always have to have water in it to satisfy the “permanent source of supply” requirement. Barilla Creek, the watercourse in *Hoefs case* did not flow year round. The stream flowed when it rained, from one to twenty-two times per year, with seasonal regularity. Such a watercourse is referred to as a *torrential stream*. The determinative issue in determining the existence of a “permanent source of supply” is its ability to provide a water supply for agriculture and other beneficial uses.

A watercourse is evidenced by a channel and is more than a low area in a pasture or a typical west Texas draw. *Turner v. Big Lake Oil Co.*, 62 S.W.2d 491 (Tex.Civ.App.-El Paso 1933), *aff’d* 128 Tex. 155, 96 S.W.2d 221 (1936). The requirement of a well-defined bed and banks is required. The channel, however, must be made by the flowing of water over an extended period of time. *International-Great N. R.R. Co. v. Reagan*, 121 Tex. 233, 49 S.W.2d 414 (1932).

Navigable streams are watercourses. An early Texas statute dealing with surveys of land grants defined a navigable stream as a stream maintaining an average width of thirty feet, from cut bank to cut bank. TEX. NAT. RES. CODE ANN. § 21.001(3). The waters of navigable streams are held by the state in trust for the public and, therefore, subject to appropriation. *Motl v. Boyd*, 116 Tex. 82, 286 S.W. 458 (1926); *Adjudication of the Water Rights of the Upper Guadalupe Segment of the Guadalupe River Basin*, 642 S.W.2d 438 (Tex. 1982).

Water which is provided by an outside source not ordinarily in the watercourse sometimes referred to as “developed water” is not public water. It is water augmenting the natural streamflow that has been made available through artificial means, such as imported surface water supply from another watershed or groundwater pumped to the surface, and deposited into a stream. In *Harrell v. F.H. Vahlsing, Inc.*, 248 S.W.2d 762 (Tex.Civ.App. - San Antonio 1952, writ ref’d n.r.e.) for example, irrigation return flow that remained in the canals of a water district was not public water. It had not been returned to a watercourse. It was legally reduced to possession and still under the control of the owner of an artificial conveyance system. It remained subject to sale or further use by the owner of the system, so long as he maintains control of the water. In *Guelker v. Hidalgo County WCID No. 6*, 269 S.W.2d 551, 555 (Tex.Civ.App.-San Antonio 1954, writ ref’d n.r.e.) the court ruled that the use of such water was not subject to regulation by the Board of Water Engineers, a predecessor to the TNRCC.

Once the water has escaped the owner's physical control and rejoins a watercourse, his rights to the water terminate. He does not own the *corpus* of the water, only the right of use. *South Texas Water Co. v. Bieri*, 247 S.W.2d 268 (Tex.Civ.App.-Galveston 1952, writ ref'd n.r.e.); See also § 11.046, Texas Water Code.

S.B. 1 reinforces this rule by adding a definition "surplus water" as water ". . . in excess of the initial or continued beneficial use of the appropriator," (new § 11.002(10)) and requires, in an amendment to § 11.046, that surplus water be returned to the stream by gravity flow if reasonably practicable to do so. The TNRCC proposed rules have several provisions dealing with the definition of surplus water, diffused water and state water which generally adopts the holdings of these court cases.

Section 11.086 makes it unlawful to divert or impound the natural flow of surface waters in such a manner so as to damage the property of another by the overflow of the water diverted or impounded. It provides a damaged party a remedy for such unlawful diversion and impounding, both at law, (*i.e.*, the recovery of damages) and in equity, usually in a form of an injunction.

The construction and maintenance of levees and other improvements to control floods and overflows in rivers and streams is not covered by this law, and it allows a person to fill the mouth of gullies or sloughs in cases where they have cut away or intersect the banks of a stream without incurring liability to other property owners.

IV. NEW ISSUES IN WATER LAW

With respect to surface waters, the water rights adjudication process has achieved the transition from a dual riparian and appropriative water law in Texas to a more purely quantified appropriative doctrine system. This transition is necessary to achieve the assured water supplies that are the prerequisite for municipal and economic growth in Texas. Nevertheless, it was apparent that the appropriative system, at least in its purest traditional form, was not entirely appropriate to meet the state's future needs.

"Conservation" in the jargon of water law has changed. In 1917, water conservation was equated with the storage and development of a water supply to make it available for use and preventing it to waste into the Gulf of Mexico. Now this term focuses on the use of water more efficiently.

With respect to groundwater, the subtle revision of the Texas law of capture by statutes providing for groundwater districts and the current provisions of S.B. 1's empowerment of the regulatory scheme appear to begin a legal structure to regulate and control the use of

groundwater in the state, and to recognize the hydrologic connection between surface and groundwater.

Water stewards in the State know of the need for water conservation and the efficient use of our finite water resources in order to meet expanding needs. Nevertheless, inherent conflicts of the appropriative system, with its “use it or lose it” philosophy, encourages the use of the entire amount authorized under an appropriation to preserve that legal right as noted above. Previously, the appropriative system as applied in Texas did not provide an incentive to use the minimum amount of water necessary, making the remainder available for other users. S.B. 1 attempts to address those issues. It recognizes, as other western states have, that there needs to be a free market for the transfer of water rights. While the marketing of water rights does, and has occurred in Texas, the legislative and regulatory framework for the process was ill-defined. S.B. 1 attempts to address this and provide at least some guidelines. S.B. 1 is not the complete answer, but it is the beginning. It provides a basis for experience which will dictate necessary changes in the future.