



## PREVENTING WASTE AND CONSERVING GROUNDWATER

### Background

Groundwater Conservation Districts (GCDs or Districts) are primarily governed by Chapter 36 of the Texas Water Code and are established to provide for the **conservation**, preservation, protection, recharging, and **prevention of waste** of groundwater. Specifically with respect to a District's obligation to prevent waste of groundwater, §36.001(8) of the Texas Water Code defines "waste" as one or more of the following:

(A) withdrawal of groundwater from a groundwater reservoir at a rate and in an amount that causes or threatens to cause intrusion into the reservoir of water unsuitable for agricultural, gardening, domestic, or stock raising purposes; (B) the flowing or producing of wells from a groundwater reservoir if the water produced is not used for a beneficial purpose; (C) escape of groundwater from a groundwater reservoir to any other reservoir or geologic strata that does not contain groundwater; (D) pollution or harmful alteration of groundwater in a groundwater reservoir by saltwater or by other deleterious matter admitted from another stratum or from the surface of the ground; (E) willfully or negligently causing, suffering, or allowing groundwater to escape into any river, creek, natural watercourse, depression, lake, reservoir, drain, sewer, street, highway, road, or road ditch, or onto any land other than that of the owner of the well unless such discharge is authorized by permit, rule, or order issued by the commission under Chapter 26; (F) groundwater pumped for irrigation that escapes as irrigation tailwater onto land other than that of the owner of the well unless permission has been granted by the occupant of the land receiving the discharge; or (G) for water produced from an artesian well, "waste" also has the meaning assigned by Section 11.205.<sup>1</sup>

This definition of waste has gone essentially unchanged for decades. "Prevention of waste" as a primary purpose of a District emanates from the "Rule of Capture" for groundwater. In 1999, the Supreme Court stated, "This Court adopted the common-law rule of capture in 1904 in *Houston & Texas Central Railway Co. v. East*. The rule of capture answers the question of what remedies, if any, a neighbor has against a landowner based on the landowner's use of the water under the landowner's land. Essentially, the rule provides that, absent malice **or willful waste**, landowners have the right to take all the water they can capture under their land and do with it what they please, and they will not be liable to neighbors even if in so doing they deprive their neighbors of the water's use." *Sipriano v. Great Spring Waters of America, Inc.*, 1 S.W.3d 75, 76 (Tex. 1999)

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<sup>1</sup> Tex. Water Code §11.205 ("Unless the water from an artesian well is used for a purpose and in a manner in which it may be lawfully used on the owner's land, it is waste and unlawful to wilfully cause or knowingly permit the water to run off the owner's land or to percolate through the stratum above which the water is found.")

(emphasis added). Since 1904, the law of Texas protects landowners' property rights in groundwater by preventing another from wasting that precious resource.

TCEQ's rules provide a useful definition of "waste" for regulating surface water rights. According to the TCEQ, "waste" means:

The diversion of water if the water is not used for a beneficial purpose; the use of that amount of water in excess of that which is economically reasonable for an authorized purpose when reasonable intelligence and reasonable diligence are used in applying the water to that purpose. Waste may include, but not be limited to, the unreasonable loss of water through faulty design or negligent operation of a water delivery, distribution or application system, or the diversion or use of water in any manner that causes or threatens to cause pollution of water. Waste does not include the beneficial use of water where the water may become polluted because of the nature of its use, such as domestic or residential use, but is subsequently treated in accordance with all applicable rules and standards prior to its discharge into or adjacent to water in the state so that it may be subsequently beneficially used.<sup>2</sup>

While Chapter 36 of the Texas Water Code does not define "conservation," it is defined in Chapter 11 of the Texas Water Code (related to surface water rights) as follows:

(A) the development of water resources; and (B) those practices, techniques, and technologies that will reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.<sup>3</sup>

GCDs must take measures to conserve groundwater and prevent waste to responsibly manage the resource to ensure that the groundwater needs of the State are met now and in the future. Groundwater is a finite resource. As the demands for groundwater continue to grow, the amount of groundwater in storage does not. Therefore, addressing conservation and waste prevention only becomes more critical over time.

### **Current Efforts to Conserve and Prevent Waste**

GCDs work within the statutory authority and duties contained in Chapter 36 to conserve groundwater and prevent waste. Chapter 36 provides GCDs with rulemaking authority to prevent waste of groundwater and to minimize drawdown and reduction of artesian pressure. When considering a permit application, §36.113(d)(6) provides that a district shall consider is whether the "applicant has agreed to avoid waste and achieve water conservation." Rulemaking authority allows districts to adopt rules to establish production limits and spacing requirements. Districts

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<sup>2</sup> 30 Tex. Admin. Code §297.1(58).

<sup>3</sup> Tex. Water Code §11.002(8).

must also require a permit for the drilling or production of groundwater. Chapter 36 also grants districts powers to enforce their rules. These powers extend to preventing the waste of groundwater. For example, drilling or operating a well without a required permit or producing groundwater in violation of a district rule adopted under Section 36.116(a)(2) is declared to be illegal, wasteful per se, and a nuisance according to the statute.

In carrying out their charge to conserve and prevent the waste of groundwater, Districts employ measures such as installing or requiring installation of well meters, requiring production/water use reporting, adopting drought rules/triggers for curtailment, requiring irrigation canal lining, adopting water conservation plans, conducting training and providing incentives for rainwater harvesting, creating programs to increase irrigation efficiency, and undertaking education and outreach efforts to further water conservation and prevent waste. These programs can vary by district and are developed to suite the circumstances relevant to the aquifer and users they govern.

## Challenges

GCDs make difficult policy decisions and face a number of challenges when addressing waste. Section 36.001(9) defines “use for a beneficial purpose” as use for “(a) agricultural, gardening, domestic, stock raising, municipal, mining, manufacturing, industrial, commercial, recreational, or pleasure purposes; (b) exploring for, producing, handling, or treating oil, gas, sulfur, or other minerals; or (c) any other purpose that is useful and beneficial to the user.” At times, applicants and permittees have claimed that a highly inefficient use of groundwater is nonetheless not wasteful because it constitutes a use for a beneficial purpose. These claims create a perceived conflict between the definitions of “use for a beneficial purpose” and “waste” contained in Chapter 36.

One challenge some districts face relates to permit applications seeking to use groundwater to maintain water levels in amenity ponds. Currently, only GCDs located in the Hill Country Priority Groundwater Management Area may consider whether the proposed use of water from a well is to provide water for an amenity pond under §36.113(d)(5). Amenity ponds can result in significant evaporative losses and, if these ponds are unlined, seepage losses. These allocations can stress local water supplies, create dissention amongst well owners, and make it very difficult to manage equitably when dealing with exempt users.

Another challenge is when a proposed use of groundwater involves significant losses before any beneficial use is made of the produced groundwater. This may occur as a result of transport by surface stream or an unlined irrigation canal, or delivery by a water system with excessive system line loss. If high-quality groundwater is introduced into a surface watercourse for the purpose of transport, the quality of the groundwater is changed and may then require treatment in order to be beneficially used.

## Considerations

With the goal of increasing conservation and preventing the waste of groundwater, there are several considerations:

1. The definition of use for a beneficial purpose in Chapter 36 may benefit from recognition that use for a beneficial purpose should be non-wasteful and utilize reasonably efficient practices.
2. Conservation and the prevention of waste may be improved through expanding the consideration of a well's use of water from the well is wholly or partly to provide water to a pond, lake, or reservoir to enhance the appearance of the landscape as found in §36.113(d)(5) to be applicable to all permit reviews by all GCDs.
3. Section 36.113(d)(6) may be improved by providing for a district's active consideration of whether an applicant will avoid waste and achieve water conservation during the permitting process.
4. Incorporating some of the definitions and concepts associated with waste of surface water (30 Tex. Admin. Code §297.1(58)) and conservation (Tex. Water Code §11.002(8)) may further efforts to conserve and prevent the waste of groundwater.