

SURFACE AND GROUNDWATER REGULATION

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SURFACE AND GROUNDWATER REGULATION

This is a two-part presentation on the basics of water resources regulation in Texas. The first part of this paper focuses on the regulation of surface water. The second part will focus on the regulation of groundwater. The regulatory schemes for the two universes of water in Texas are extremely different; therefore, an understanding of the distinction between the two is an important foundation for all topics relating to water law and regulation.

SURFACE WATER BASICS

I. SURFACE WATER VS. GROUNDWATER

A. State Surface Water

In order to understand what resources constitute groundwater, one must first make a cursory examination of what surface water is generally. Surface water resources can be divided into two groups: state water and diffuse surface water. When the term “surface water” is used, it usually is meant to refer to state water and not diffuse surface water. The surface water section of this paper will focus primarily on the State of Texas’ regulatory scheme for state water, which is largely administered by the Texas Commission on Environmental Quality (TCEQ). TEX. WATER CODE § 5.013(a)(1).¹

Diffuse surface water is what it sounds like: water “which is diffused over the ground from falling rains or melting snows, and continues to be such until it reaches some bed or channel in which water is accustomed to flow.” *City of Princeton v. Abbott*, 792 S.W.2d 161, 163 (Tex. App.—Dallas 1990) (quoting *Stoner v. City of Dallas*, 392 S.W.2d 910, 912 (Tex. Civ. App.—Dallas 1965)) (internal quotations omitted). Diffuse surface water is the private property of the owner of the land upon which it gathers and remains such until it enters into a natural watercourse. *Domel v. City of Georgetown*, 6 S.W.3d 349, 353 (Tex. App.—Austin 1999, pet. denied) (citing *Turner v. Big Lake Oil Co.*, 96 S.W.2d 221, 228 (Tex. 1936)).

Texas, essentially, does not regulate diffuse surface water. TCEQ rules, which are published in Title 30 of the Texas Administrative Code, expressly exempt from permit requirements the construction or maintenance of any system of contouring, terracing, spreader dams or other such practices designed to make maximum beneficial use of diffused surface water and overbank flooding. 30 Tex. Admin. Code § 297.23.

In contrast to diffuse surface water, state water is 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[.]” Tex. Water Code § 11.021(a). These waters are called state water because all such waters are, by statute, property of the State of Texas. *Id.* The rivers, streams, lakes, and other bodies of water referenced in Section 11.021 are commonly known as watercourses. Essentially, all water contained within the banks of a watercourse is state water.

A “watercourse” is defined by TCEQ rules as “a definite channel of a stream in which water flows within a defined bed and banks, originating from a definite source or sources. (The water may flow continuously or intermittently, and if the latter, with some degree of regularity, depending on the characteristics of the sources).” 30 Tex. Admin. Code § 297.1(59). Texas courts have further described watercourses as having:

- (1) a defined bed and banks,
- (2) a current of water, and
- (3) a permanent source of supply.

Domel 6 S.W.3d at 353 (quoting *Hoefs v. Short*, 273 S.W. 785 (1925)) (internal quotations omitted). Courts have considerable discretion when considering the three factors listed in *Domel*. For example, the required “permanent” source of water supply can be rainfall. *Hoefs* 273 S.W. at 787. Also, a watercourse does not have to be a constantly flowing stream. *Humphreys-Mexia Co. v. Arseneaux*, 116 Tex. 603, 605–08, 297 S.W. 225, 227–28 (1927).

Importantly, the statutory definition of state water includes the *underflow* of watercourses in addition to the “ordinary flow[.]” Tex. Water Code § 11.021(a). Obviously, water that is apparent on the surface of a river, stream, or lake is state water. Water saturated in the ground immediately beside and under the beds of those watercourses is also state water subject to regulation the same as water visible above the surface. 30 Tex. Admin. Code § 297.1(55). Underflow is defined in TCEQ rules as water “in sand, soil, and gravel below the bed of the watercourse, together with the water in the lateral extensions of the water-bearing material on each side of the surface channel, such that the surface flows are in contact with the subsurface flows, the latter flows being confined within a space reasonably defined and having a direction corresponding to that of the surface flow.” *Id.*

Although underflow is physically in the ground, it is considered to be surface water for regulatory purposes. Determining whether water in the ground is underflow or groundwater is difficult but crucial to

¹ The TCEQ and its various predecessor agencies will be referred to herein as “the commission.”

knowing how it is regulated. Unfortunately, little guidance beyond TCEQ's definition exists to help in making that determination, so it is generally easier to determine which water is definitely *not* underflow in order to know if it is regulated as state water.

B. Groundwater, or what is *not* surface water.

When water is put or allowed to sink into the ground, it loses its character and classification as surface water and is considered to be "percolating groundwater." Tex. Water Code § 11.023(d). Water in the ground that is "percolating, oozing, or filtrating through the earth" is groundwater. *See Houston & Tex. Central Ry. Co. v. East*, 98 Tex. 146, 149, 81 S.W. 279, 280 (1904).

Determining whether water within the ground constitutes underflow or groundwater is strongly affected by the presumption in Texas law that all underground water is presumed to be percolating groundwater. *See Texas Co. v. Burkett*, 296 S.W. 273, 278 (Tex. 1927); *see also, Pecos Co. Water Contr. & Impr. Dist. No. 1 v. Williams*, 271 S.W.2d 503, 506 (Tex. Civ. App.—El Paso 1954). Underflows can be said to have a hydrologic connection to surface flows. Groundwater does not. Once water has seeped far enough into the ground that it no longer behaves similarly to water in a surface water feature, it can be said to be groundwater for purposes of state regulation.

Use and ownership of groundwater is regulated much differently than surface water. The nuances of groundwater regulation and use will be addressed in the second part of this presentation.

II. CURRENT SURFACE WATER LAW AND REGULATION

This section outlines the most important concepts in modern surface water regulation in Texas and will serve as a foundation and reference point for more advance concepts to be built upon in this conference and beyond. Many of these concepts will be familiar from the historical discussion above.

A. Ownership of State Water

The State of Texas owns all surface water in every watercourse in Texas and holds it in trust for the use of its citizens. Tex. Water Code § 11.0235. With few exceptions, any person wishing to take water from a watercourse or store water within a watercourse may only do so with express authorization from the state through a TCEQ permit. *Id.*, §§ 11.022, .121.

B. Water Rights Are Limited Property Rights

A water right is a property right, but is usufructuary, i.e. non-possessory, to the natural resource concerned. *Texas Water Rights Comm'n v. Wright*, 464 S.W.2d 642, 649 (Tex. 1971). Irrigation rights are appurtenant to land and pass with title to the land

unless expressly severed or reserved. Tex. Water Code § 11.040; *see Lakeside Irr. Co. v. Markham*, 285 S.W. 593 (Tex. Comm'n App. – 1926, *opinion adopted*). Water rights may be sold and conveyed by deed, which should be filed in county deed records. Tex. Water Code § 11.040. Like other property, a water right is subject to taking by eminent domain. *Id.* § 11.033.

C. Beneficial Use – How Water May Be Used Under Permits

Tex. Water Code § 11.024 broadly defines what uses qualify as beneficial for regulatory purposes. The section lists various uses as beneficial. Among them are domestic and municipal use, agricultural and industrial, mining, hydroelectric, navigation, and recreational use. The Code recognizes that there are other beneficial uses beyond those expressly listed. Commission rules expand upon the statutory list by including "instream uses, water quality, aquatic and wildlife habitat, or freshwater inflows to bays and estuaries[.]" 30 Tex. Admin. Code § 297.43(a). The TCEQ has previously contemplated issuing permits specifically to preserve flows within streams for environmental purpose. However, the legislature preempted the issuance of permits solely for such a purpose. *See Tex. Water Code §§ 11.0235(d), 11.0237(a); Tex. Comm'n on Env'tl. Quality v. San Marcos River Fnd.*, 267 S.W.3d 356 (Tex. App.—Corpus Christi-Edinburg 2008, *pet. denied*).

D. Senior Priority

The legislature's declaration of senior priority in 1889 was eventually codified as Tex. Water Code § 11.027 which states, in its entirety, "As between appropriators, the first in time is the first in right." Certificates of adjudication were issued with priority dates based on evidence presented during adjudication proceedings. Since then, all water rights have been managed on a time priority basis. The Commission maintains a database of all water rights and administers them accordingly. New water rights applications are awarded a priority date based on the date of filing of an application with the Commission. In typical conditions, all water rights owners are able to take water. Senior priority is invoked during times of drought or shortage when a senior water right may not be able to divert. A senior priority water right may "call" on junior water rights to stop diverting or impounding to free up water and make it available for the senior water right owner's use.

E. Exemptions from Permitting Requirements

Permits are not required for certain beneficial uses. Chief among those is the statutory domestic and

livestock exemption. A landowner is allowed to impound on non-navigable streams not more than 200 acre-feet² and to divert as much water as is reasonable for uses to sustain livestock and apply to domestic uses. Tex. Water Code § 11.146(a); 30 Tex. Admin. Code § 297.21(a)-(c). This exemption is rooted in the old English Common Law riparian system. Domestic and livestock, or D & L, uses were exempt from water rights adjudication. Tex. Water Code § 11.303(l). That exemption continues in the modern permit-based regulatory scheme.

Similarly, impoundments used to maintain fish and wildlife habitat are also exempt. Tex. Water Code § 11.146(b). Like D & L reservoirs, fish and wildlife impoundments are limited to 200 acre-feet. In order to qualify for the exemption, a reservoir must be maintained on qualified open-space land as defined by the Tax Code. *Id.* This exemption is expanded upon in TCEQ rules which clarify that the exemption does not apply to a commercial operation. Incidental non-exempt use of a fish and wildlife reservoir that does not remove the land from the definition of open-space land does not disqualify the reservoir from exemption.

Other exemptions for petroleum production, sediment control for coal mining operations, mariculture, and historic cemetery maintenance are recognized in statute. *Id.* §§ 11.142(c)-.1422.

F. Interbasin Transfers (IBTs)

Generally, removal of state water from its native basin of origin to another river basin is not permitted. In most instances, the transfer of water between river basins must be authorized by the TCEQ. *Id.* § 11.085. Section 11.085 contains additional, and more stringent, requirements for water rights permit applications seeking an IBT authorization. A significant exception to this rule is that a retail public water utility may transfer water between river basins so long as the water remains within the utility's service area. *Id.* § 11.085(v)(4).

G. Reuse and Bed and Banks Authorizations

Senate Bill one added Water Code Subsections 11.042(b) and (c) which authorize the conveyance of water discharged into a state watercourse and subsequently diverted by permit from the TCEQ. This is known as a bed and banks authorization because a permittee utilizes the bed and banks of a stream to move water from one point to another. This is an effort to encourage conservation of resources. Generally, a water right owner will divert state water under a water right, beneficially use it, and then choose to reuse it at another place downstream. Rather than obtain a new water right for an additional consumptive use of

directly diverted state water, Section 11.042 allows a user to collect any residual amounts of water used under his or her water right, or any unused amount of water, and return it to the stream to move it to a point where it can be reused beneficially.

When state water is being reused, it is important that an authorization under Section 11.042 is acquired. Without one, unused water returned to a watercourse is considered to revert to its status as state water reserved for appropriation by other users. Tex. Water Code § 11.046. A bed and banks authorization is a means for a water user to claim a particular volume of state water returned to a stream without losing his or her right to divert it for reuse. Section 11.042 also provides a process by which a user of privately-owned groundwater or water transferred from another basin under an IBT authorization can secure a right to use the beds and banks of a stream to convey water for reuse. *See id.* § 11.042(b)-(c).

Prior to Senate Bill 1, Section 11.042 authorized the conveyance of stored water released from a reservoir to a downstream place of use. That authorization remains codified at Tex. Water Code § 11.042(a).

H. Environmental Flow Standards and Set-Asides

In 2011, the Commission adopted a new chapter of its rules pursuant to Senate Bill 3 for the protection of instream environmental flows and freshwater inflows to bays and estuaries along the Texas coast. See 30 Tex. Admin. Code § 298.1 et seq. Under those new rules, the Commission is required to incorporate special conditions into all new water rights, or amendments to water rights seeking an increase in the authorized appropriation, for the protection and maintenance of minimum streamflow conditions. See *id.* The standards for the necessary streamflow conditions were developed during a lengthy stakeholder process for each river basin in the state. Standards have been adopted and put into Chapter 298 for all but the Brazos, Nueces, and Rio Grande basins. As of the submittal of this paper, it is anticipated that the proposed rule standards for the remaining three basins will be published in the Texas Register on September 20, 2013. The Commission is expected to consider the final rule adoption on February 12, 2014.³

² An acre-foot is the amount of water covering one acre of land one foot deep, or 325,851 gallons.

³ The Executive Director's executive summary memorandum, and the draft rules for the Brazos, Nueces, and Rio Grande environmental flows rule package can be found on the commission's website until the rules are finally adopted and published:
http://www.tceq.texas.gov/rules/propose_adopt.html.

I. Cancellation of Water Rights

Even though water rights are property rights under Texas law, a water right does not include a right to non-use. Water rights can be cancelled by the Commission for non-use. *Wright*, at 648. Statute provides that a permitted water right may be cancelled in whole or in part to the extent that the water right has not been used for a consecutive period of ten years and the holder has not used reasonable diligence to apply the unused portion of water to a beneficial use. See Tex. Water Code § 11.177. Under Commission rules, the Executive Director may file a petition with the Commission for a cancellation hearing at which the water right owner has an opportunity to show good cause why the water right should not be cancelled. 30 Tex. Admin. Code § 297.72(a).

The TCEQ may also cancel a water right if the permittee fails to construct necessary diversion or storage works within the time prescribed by law. See Tex. Water Code §§ 11.145–146; 30 Tex. Admin. Code § 297.51.

III. THE RIO GRANDE BASIN

The political climate of the Rio Grande Basin is unique in Texas river basins. As such, water rights are managed differently in most of the Rio Grande Basin than in the rest of the state. The Rio Grande Basin is a particularly arid one, and the flow of the main stem of the Rio Grande is controlled largely by artificial structures. The river is dammed at a key geographical point just upstream from Del Rio, the Amistad Reservoir.

The boundary of the river basin, and consequently the watershed for the river, narrows severely on the Texas side of the river at and below Amistad Reservoir. As water is diverted upstream, less water tends to be available downstream. Consequently, nearly all water rights are supplied by storage releases from Amistad and Falcon Reservoirs.

Under a 1944 treaty, the United State and Mexico are allocated certain amounts of the flow of the Rio Grande.⁴ The International Boundary and Water Commission (IBWC) was created jointly by the governments of the United States and Mexico, in part, to administer the allocation of water to the two countries. So even though water may be flowing in the river, a significant portion of it may not be available to water rights users in Texas.

⁴ The 1944 treaty was signed November 8, 1944 and took effect on November 8, 1945. It is referred to interchangeably as both the 1944 and 1945. It and all other treaties establishing the IBWC's authority can be found at the IBWC's website: http://www.ibwc.state.gov/Treaties_Minutes/treaties.html.

In 1969, Amistad Reservoir was constructed. Before the construction of Amistad Reservoir, efforts were already underway in the courts to overhaul the system of water rights in the Lower Rio Grande Valley below the existing Falcon Reservoir. That litigation established a system of management based on class of water rights as opposed to time priority. See *Hidalgo County*, 443 S.W.2d at 748-50. Three classes of water rights were recognized: 1) Domestic, Municipal, and Industrial uses (DMI); 2) rights evidenced under prior appropriation statutes or other legal doctrines recognizing a water right (Class A rights); and 3) claims from historical water users not supported by any legal doctrine (Class B rights). When adjudication of the Rio Grande Basin took place in the 1970s, the Commission determined that the prior appropriation system was not workable below Amistad Reservoir and expanded the class priority system for the entire portion of the basin downstream of Amistad Dam. That decision was upheld in district court. *In re Adjudication of the Middle Rio Grande and Contributing Texas Tributaries*, No. 322,018, 200th Dist. Ct., Travis County, Tex. (November 9, 1982).

Today, the weighted priority system is regulated under Chapter 303 of the Commission's rules. See 30 Tex. Admin. Code § 303.1, et seq. Each permitted water right has an account based on available storage under the 1944 treaty in Amistad and Falcon Reservoirs. Those accounts are administered by the Rio Grande Watermaster program. As a water right user diverts water, the amount available in that water rights' account is drawn down accordingly. DMI rights are first in priority and are protected before other rights during times of shortage. DMI accounts are the first to be satisfied when storage in the reservoirs is replenished. See *id.* §§ 303.21-22. The Upper Rio Grande above Amistad Dam is not governed under the class priority system, and continues to be regulated like all other river basins. See *id.* § 303.23.

IV. WATER RIGHTS ENFORCEMENT

The TCEQ has express statutory authority to enforce the terms of the water rights it issues. Tex. Water Code § 5.013. The Water Code provides for both civil and administrative penalties for unlawful use of state water. See *id.* §§ 11.081-.082. The Executive Director's Office of Compliance and Enforcement oversees the administrative enforcement of state water usage. Willful violations of permit terms or water rights laws are subject to a maximum civil penalty of \$5,000 for each day of each violation in suits that the Attorney General brings on TCEQ's behalf in the district courts. See Tex. Water Code § 11.082. The Attorney General, on referral from the TCEQ, may also seek injunctive relief in Court for violations of TCEQ rules and orders, including those relating to water rights. See Tex. Water Code §§ 7.002, 7.032,

7.101 and 7.105; *see also*, Tex. Gov't. Code § 2001.141.

The Commission may also assess administrative penalties for violations of permit terms and conditions or water rights laws under Water Code Section 11.0842. Designated TCEQ personnel may also issue field citations for violations that they observe, somewhat like a traffic ticket, which the alleged violator may pay or contest in an administrative hearing. Tex. Water Code § 11.0843.

Water rights in the Rio Grande, San Antonio, Nueces, Lavaca, and Guadalupe River basins, their associated coastal basins, and the Concho River segment of the Colorado River Basin are subject to regulation by a watermaster who can investigate water use and cause diversion works to be cut off in certain situations. *See, e.g.* Tex. Water Code § 11.326, et seq. The TCEQ's watermaster programs ensure compliance with water rights by monitoring stream flows, reservoir levels, and water use. They also coordinate use by water rights holders in the basins managed by their programs. The watermaster regulates reservoirs as needed to prevent the wasting of water or use by a water right owner beyond what is authorized in the user's right. Watermasters are also responsible for enforcing senior priority calls within their respective jurisdictions.

In watermaster areas, water rights holders must notify the watermaster of the intent to divert at a specific time and the specific amount of water to be diverted before the diversion takes place. Assuming that the water is available and that the water right holder has not exceeded, nor will not exceed, the annual authorized appropriation of water, the watermaster then authorizes the diversion and records it against the right. Watermaster programs include staff deputies who daily, weekly, or monthly make field inspections of authorized diversions to insure compliance with the water right.

If a water right holder does not comply with his or her water right or the rules of the Commission, the executive director may direct the watermaster to adjust and control associated works to prevent the owner from diverting, taking, storing, or distributing water until he or she complies.

Watermaster programs are funded by the water right holders in their area. Tex. Water Code § 11.3291. They can be established by appointment by the Executive Director under Water Code Section 11.326, the court under Water Code Section 11.402, or by petition of water right holders. In 2011, the Texas Legislature passed a bill requiring the TCEQ to evaluate and issue a report assessing the need for new watermaster programs in all river and coastal basins not already under the authority of a current watermaster. Tex. Water Code § 11.326(g)-(h). The bill requires TCEQ to conduct this assessment at least once

every five years, and the TCEQ developed a schedule to consider several basins each year. Under the statute, the TCEQ may decide to initiate a public hearing proceeding for the creation of a watermaster program. During 2012, the TCEQ evaluated the need for a watermaster in the Brazos and Colorado River Basins, and associated coastal basins. In 2013, the Commission did the same for the Trinity and San Jacinto Basins, and associated coastal basins. The Commission decided in each that it would not initiate on its own motion proceedings to create watermaster programs for those basins.

Following the Commission's determination to not appoint a watermaster for the Brazos River Basin, stakeholders in that Basin filed a petition for the creation of a watermaster program. On February 19, 2013 the Commission referred the petition to SOAH for an evidentiary hearing. As of the submittal of this paper, the hearing on the merits of the petition was scheduled to begin on January 23, 2013.

GROUNDWATER BASICS

The Texas Water Code defines groundwater simply as “water percolating below the surface of the earth.” Tex. Water Code § 36.001(5). As discussed above, groundwater does not include underground streams or underflow of watercourses. *Id.* § 11.021.

Production of groundwater—primarily through groundwater wells—is governed by the common law “rule of capture” and local regulation by Groundwater Conservation Districts, or “GCDs.” *Edwards Aquifer Authority v. Day*, 369 S.W.3d 814 (Tex. 2012); *Sipriano v. Great Springs Waters of Am.*, 1 S.W.3d 75, 76-79 (Tex. 1999); *Friendswood Dev. Co. v. Smith-Sw. Indus.*, 576 S.W.2d 21, 25-27 (Tex. 1978).

Unlike surface water, the right to which is a non-possessory usury right, ownership of groundwater is a real property right in the physical water itself both in-place below the ground and in the possession of a landowner after production. *Day*, 369 S.W.3d at 817. Like a state water irrigation right, however, the right of ownership in groundwater is severable and can be conveyed. *Evans v. Ropte*, 96 S.W.2d 973, 974 (Tex. 1936).

I. THE RULE OF CAPTURE

The law of groundwater regulation in Texas dates back to the Texas Supreme Court’s 1904 opinion in *Houston & Texas Central Railway Co. v. East*, which is commonly referred to as the *East* decision. In the *East* decision, the Court adopted the English “rule of capture” for the regulation of groundwater ownership in Texas. *Houston & Texas Central Railway Co. v. East*, 81 S.W. 279, 281 (Tex. 1904). The *East* case concerned a railroad company that drilled a large groundwater well that produced groundwater at such high quantities and rates that it essentially drained a neighboring landowner’s previously existing smaller, shallow well dry so that the landowner could not produce groundwater on his property. *Id.* at 280-281. The landowners sued the railroad company for damages. *Id.* at 281. The Supreme Court denied damages, holding that a person who owns the surface of the land may produce so much water from the land as the landowner wishes, even if it causes another landowner’s well to go dry. *Id.*

For more than a century following the *East* decision, only three exceptions or limitations to the rule of capture have been created. A landowner may not:

- (1) Maliciously take water for the sole purpose of injuring his neighbor,
- (2) Wantonly and willfully waste the water produced, or

- (3) Negligently drill or produce from a well in a manner that causes subsidence on a neighbor’s property.

City of Corpus Christi v. City of Pleasanton, 276 S.W.2d 798, 802 (Tex. 1955). Outside of those exceptions, the rule of capture provides little—if any—protection of private landowners from the actions of neighbors. The rule of capture has been criticized as “harsh and outmoded.” *Friendswood*, 576 S.W.2d 21, 28-29. In fact, Texas is the only state that has not fully abandoned the rule of capture as it applies to groundwater ownership and use. *Sipriano*, 1 S.W.3d at 82 (Hecht, J., concurring). The Supreme Court has revisited the rule of capture for groundwater over the years since the *East* decision, but has consistently declined to abandon the doctrine. *See, e.g., id.* at 80. The Court has noted, however, that there are “compelling reasons for groundwater use to be regulated” and that in “the past several decades it has become clear, if it was not before, that it is not regulation that threatens progress, but the lack of it.” *Id.*

II. GROUNDWATER CONSERVATION DISTRICTS

The Conservation Amendment to the Texas Constitution provides that

The conservation and development of all of the natural resources of this State . . . and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as maybe appropriate thereto.

Tex. Const. art. XVI, § 59(a). In Texas, therefore, “responsibility for the regulation of natural resources, including groundwater, rests in the hands of the Legislature.” *Sipriano*, 1 S.W.3d at 77. More specifically, the Conservation Amendment provides the following:

There may be created within the State of Texas . . . conservation and reclamation districts as may be determined to be essential to the accomplishment of the purposes of this amendment[.]”

Tex. Const. art. XVI, § 59(b).

Under its duty to regulate conservation and development of natural resources, the Legislature has enacted Chapter 36 of the Texas Water Code, which provides for the creation of Groundwater Conservation Districts, or “GCDs.” Tex. Water Code § 36.0015(b).

GCDs are the preferred method of groundwater management in Texas for the protection of property rights in groundwater. *Id.* The Commission has exclusive jurisdiction over the creation of GCDs. *Id.* § 36.011(b). The Commission creates GCDs through a petition and public notice process. *Id.* §§ 36.013-.014. When a GCD is created, the creation must be approved by the voters in the area in which the GCD is located. *Id.* §§ 35.017-.0171.

To date, GCDs have only been established for roughly half of the State of Texas. TEX. WATER DEV. BD., *Groundwater Conservation Districts: Confirmed and Pending Confirmation* available at http://www.twdb.texas.gov/mapping/doc/maps/GCDs_8x11.pdf.

The Commission has general authority over groundwater regulation. Tex. Water Code § 5.013. However, the Commission does not directly regulate groundwater production, instead deferring to local GCDs where they exist. Where GCDs do not exist, groundwater production and use is effectively unregulated.

GCDs derive their powers from Chapter 36. *Id.* § 36.001. Chapter 36 generally prevails over any law that it is in conflict with, except for a GCD's enabling statute or act. *Id.* § 36.052. GCDs are political subdivision of the state and must comply with the Texas Open Meetings Act, Tex. Gov't Code Ann. §§ 551.001(3)(h), 552.003(1)(A) (West Supp. 2014), and the Texas Elections Code. Tex. Elec. Code Ann. § 1.005 (West 2010).

GCDs are governed by appointed or elected boards of directors. GCD boards must hold regular meetings subject to the Open Meetings Act. Tex. Water Code §§ 36.063-.064. Public notice of regular GCD Board meetings must be given at least 72 hours prior to the meeting. Tex. Gov't Code §§ 551.002, .043, .054.

GCDs must also adopt rules "to provide for conserving, preserving, protecting, and recharging of the groundwater" in the GCD's jurisdiction. Tex. Water Code § 36.101(a). Such rules can limit groundwater production based on the size of a tract of land or require minimum spacing between wells. *Id.* GCD boards adopt their rules through an administrative rulemaking process. *Id.* § 36.002. GCDs must provide public notice and an opportunity for hearing prior to adopting rules. *Id.* § 36.101(d). The Texas Water Code provides interested persons an opportunity to submit written or oral comments to the GCD and to be notified of all rulemaking hearings. *Id.* § 36.101(f), (i). Failure of a GCD to properly adopt rules may result in the invalidation of a later action by the GCD. *South Plains La Mesa Railroad v. High Plains UWD No. 1*, 52, S.W.3d 770, 781 (Tex. App.—Amarillo 2001, no writ).

GCDs are also mandatory participants in the Groundwater Management Area ("GMA") planning process. Tex. Water Code § 36.108(c). Texas is divided into 16 GMAs. TEX. WATER DEV. BD., *Groundwater Conservation Districts with Groundwater Management Areas* available at http://www.twdb.texas.gov/mapping/doc/maps/GCDs_GMAs_8x11.pdf. GMAs are essentially associations comprised of all of GCDs within a designated geographic GMA. The primary function of GMAs is to establish desired future conditions, or "DFCs," for the GMA. A GMA must approve, by a two-thirds vote of all GCDs within the area, a DFC that balances the highest practicable level of groundwater production and the conservation, preservation, protection, recharge, and prevention of waste of groundwater and control of subsidence in the GMA. Tex. Water Code §§ 36.108(d), (d-2).

The Texas Water Development Board, or "TWDB," provides the GCDs and GMAs with modeled available groundwater, or "MAG," volumes based on the adopted DFCs. *Id.* § 36.1084. the GCDs then adopt groundwater management plans and submit those plans to the TWDB. GCD boards are then required to adopt rules consistent with the respective GCDs' adopted groundwater management plans and "to the extent possible, shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition." *Id.* §§ 36.1071(f), 36.1132.

III. GROUNDWATER PERMITTING AND ENFORCEMENT

The procedure for obtaining a groundwater permit varies significantly among GCDs. Chapter 36 of the Texas Water Code provides wide discretion to GCDs for determining the procedure required to obtain a groundwater permit. GCDs may place limits on production by requiring permits and imposing annual production limits. Tex. Water Code §§ 36.113, .116(a)(2). GCDs may impose more restrictive permit conditions on new permit applications and amendment applications in order to increase use by historic users of groundwater within the GCD. *Id.* § 36.116(e).

The Texas Water Code requires all GCDs to require permits drilling water wells. GCD's must require permits for "the drilling, equipping, operating, or completing of wells or for substantially altering the size of wells or pumps. *Id.* § 36.113(a). GCDs are also authorized to protect water quality. *Id.* §§ 36.116(a). To regulate production and spacing, and to protect water quality, GCDs may require other types of permits, including for groundwater production, monitoring, and aquifer recharge and storage activities. *Id.* § 36.113(c)-(f), .1131, .115(c), .116. However, the Water Code does not expressly mandate that GCDs

require permits for the actual production and use of groundwater.

Chapter 36 of the Water Code also prohibits GCDs from requiring permits for certain types groundwater production. Tex. Water Code § 36.117. The most common type of statutorily exempt wells are “domestic and livestock” wells that are drilled on a tract of land larger than 10 acres and are incapable of producing more than 25,000 gallons of groundwater per day. *Id.* Other exemptions include wells used solely to supply an oil and gas exploration effort, and wells used for mining activities. *Id.*

When a permit is required under a GCD’s rules, the GCD is required to act promptly upon the administrative completeness of an application for a permit or an amendment. Tex. Water Code § 36.114. When a hearing is not required under the GCD’s rules, the GCD’s board must act on the application at an open meeting unless the board has delegated the authority to act on applications to a general manager. *Id.* § 36.114(c). GCDs may require by rule a full evidentiary hearing on certain types of permit applications. *Id.* § 36.114(b), .403. A GCD may contract with SOAH to conduct such hearings, and shall refer cases to SOAH if requested by a party to a contested case. *Id.* § 36.416. The procedure for a hearing conducted by SOAH on a groundwater permit is similar to that for a water rights application to the TCEQ. *See id.* § 36.416(a) (requiring that SOAH hearings be conducted under the same Administrative Procedure Act provisions that govern TCEQ permitting matters). As with surface water rights hearings, decisions of GCDs to grant or deny groundwater permits and amendments are subject to administrative appeal to judicial court. *Id.* § 36.251(a).

Chapter 36 of the Texas Water Code authorizes GCDs to enforce the provisions of Chapter 36 and GCD rules. Tex. Water Code § 36.102. GCD officials and employees are authorized to enter private property to inspect or investigate conditions relating to water quality or compliance with GCD rules, regulations, permits and orders. *Id.* § 36.123. GCDs are also authorized under Chapter 36 to enter private property to close or cap a groundwater well in compliance with Chapter 36 and GCD rules if the owner or lessee of such a well refuses to close or cap the well as required. *Id.* § 36.118.

IV. LANDOWNER’S COMPENSABLE INTEREST IN GROUNDWATER

In 2012, the Texas Supreme Court held, for the first time, in *Edwards Aquifer Authority v. Day* that a landowner possesses a compensable interest in groundwater that is “in place” below the surface of the landowner’s property. 369 S.W.3d at 823, 833. The *Day* case concerned an effective denial of a groundwater permit application by the Edwards

Aquifer Authority (the “EAA”), a GCD with jurisdiction over the Edwards Aquifer in central Texas. *Id.* at 821. The EAA had implemented a historical use permitting system under Chapter 36. The plaintiff sought a groundwater permit based on his predecessors’ production of water from his property. He filed suit against the EAA arguing that the effective denial constituted a regulatory taking of property because it prohibited the applicant from withdrawing groundwater that the landowner held interest to under his property. In a unanimous opinion, the Supreme Court held that the common law of ownership of oil and gas, which is owned by a landowner in place, also applies to groundwater. *Id.* at 831. The Court did remanded to the lower court the issue of whether the EAA’s denial constituted a constitutional taking, and the case subsequently settled before any court ruled on that issue.

Following the *Day* decision, the San Antonio Court of Appeals found that another EAA action denying a historical use groundwater permit was a constitutional taking and awarded the applicant landowner in that matter compensation. *Bragg v. Edwards Aquifer Authority*, 421 S.W.3d 118 (Tex. App.—San Antonio 2013, pet. denied). Similar to the *Day* case, the plaintiff in *Bragg* historically produced and used groundwater within the EAA’s jurisdiction. *Id.* at 126. Upon its creation by the Legislature, the EAA required all groundwater users to apply for permits to continue to produce groundwater. *Id.* at 125. The EAA partially denied the plaintiff’s permit application, and the plaintiff sued alleging that the denial constituted a regulatory taking of property. *Id.* at 126. Relying on the *Day* opinion, the Court of Appeals held that the EAA’s historical use permitting system resulted in a regulatory taking of the plaintiff’s property. *Id.* at 145-46. The EAA appealed that judgment to the Supreme Court, and the Supreme Court denied the EAA’s petition for review. Until the Supreme Court takes up the issue, the law appears to be that a landowner is owed compensation if a GCD permitting action limits that landowner to producing groundwater in volumes less than that landowner’s past use.

CONCLUSION

Both surface water and groundwater regulation are intensely complex areas of law. In both cases, drought has consistently served as the catalyst for major changes in the way Texas regulates its water resources. The state has recently recovered from a sustained drought that some have suggested may rival the drought of record of the 1950s. While the severity of the recent drought has yet to be fully understood, the Texas Legislature and a number of Texas political subdivisions have responded by putting in place new

regulatory functions that are changing the way water resources are managed in Texas. There is also unprecedented demand for water resources from a rapidly increasing population. The result is an area of law that has never been more dynamic than it is today. No doubt, there will continue to be important developments and changes in this area in the coming years.

