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CHAPTER 10
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- *Effective Representation on Motions for Rehearing* presented to the Austin Bar Association Administrative Law Section, March 5, 2010
- *Water and Environmental Legislative Update* presented to the Austin Bar Association Administrative Law Section, June, 2009, Austin, Texas
- *Securing Water Supplies for New Development* presented to the Austin Bar Association Real Estate Law Section, November, 2008, Austin, Texas
- *Unique Water Rights Permitting Issues* (The University of Texas School of Law’s 2007 Texas Water Law Institute in Austin, Texas)
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DROUGHT MANAGEMENT, WATER CONSERVATION AND ENFORCEMENT OF WATER RIGHTS – WATER PURCHASER PERSPECTIVE
By Leonard H. Dougal and Cassandra Quinn

I. INTRODUCTION.

While many factors must be considered in contracting to purchase a supply of water, the recent drought in Texas has highlighted that a key factor for any buyer to consider is reliability of supply. The extent to which reliability is important varies depending on the proposed use of water. For water purchasers responsible for meeting municipal and domestic water needs, reliability will be one of the highest priorities. In addition, water users needing significant supplies often include electric power plants and other industrial users that need a reliable or “firm” water supply to maintain critical production operations.

Frequently, these users purchase water under contract from a municipality, river authority or water district. Water shortages resulting from drought or other causes have the potential to limit a water supplier’s ability to meet the needs of all its customers, and as water supplies dwindle, the supplier must address how to conserve and allocate the water supply. In order to avoid a surprise cutback of water that was considered “reliable,” a water purchaser should become familiar with the potential ways in which water usage may be curtailed and should perform adequate due diligence prior to entering into a contract for water to ensure the volume available will meet the user’s needs during drought conditions or that alternative arrangements can be made to get the user through such conditions.

II. CONTRACTING FOR SURFACE WATER.

For surface water, which generally refers to water flowing in creeks, rivers, lakes and bays, Texas follows a “first in time, first in right” approach, in which older (“senior”) water rights are given priority over newer (“junior”) water rights. To obtain a new water right, an application must be filed with the TCEQ for a water rights permit. However, in the major river basins in the state most of the reliable surface water is already fully appropriated to existing users. Further, even if water is available for appropriation, such water would likely not be reliable or “firm” water because as a more-junior water right, it would be subject to curtailment when sufficient water is not available to satisfy the rights of all senior users.

As a result, those looking to secure a new source of water will often seek to purchase water by contract with a wholesale water supplier with existing water rights, such as a river authority, municipality, or water district. One of the most important considerations in securing a source of supply is whether that water will be available during drought. Many wholesale water suppliers have form agreements they use for surface water transactions, but there can be many variations depending on the needs of the specific project. Before entering into any agreement, the purchaser should become familiar with how the proposed water supplier may be impacted by drought conditions and how the supplier plans to address such conditions.

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1 The views and opinions stated in this paper are solely those of the authors and do not necessarily represent the views or opinions of Jackson Walker LLP or any of its clients.

A. **Drought Impacts on Supply.**

Most surface water supply planning in Texas is based on the historical “drought of record” that occurred from approximately 1950 to 1957, during which all but ten of Texas’s 254 counties were declared federal drought disaster areas. River authorities, such as the Lower Colorado River Authority (LCRA) and Guadalupe-Blanco River Authority (GBRA), use this drought of record to determine how much water stored within their reservoirs is considered “firm” water (i.e. water that would be available even if there was a repeat of the drought of record).³

Based on these calculations, they are able to determine how much water is expected to be available for sale on a firm basis. Firm water is typically supplied from water stored in a reservoir. If extra water beyond the amount needed to satisfy firm demands is or will be available in the system, that water may be made available on a non-firm or “interruptible” basis. Interruptible water may be supplied from water storage, but may also come from run-of-river rights, which authorize the diversion of water flowing in a watercourse, if it is available.

1. **Drought Contingency Plans.**

To be prepared to respond to drought conditions, each wholesale water supplier is required to develop and implement a drought contingency plan,⁴ which is defined as a “strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies.”⁵ These plans have the potential to impact the amount of water available to purchasers.

A drought contingency plan must include specific, quantified targets for water use reductions to be achieved during periods of water shortage and drought, as well as specific water supply or water demand management measures to be implemented during each stage of the plan.⁶ Each plan must require that every wholesale water contract contain a provision stating that in case of a shortage resulting from drought, the water will be divided according to Water Code Section 11.039 (Distribution of Water During Shortage) (discussed below).⁷

Thus, a water purchaser can expect that its water supply agreement will require compliance with the supplier’s drought contingency plan. The TCEQ’s rules require that drought contingency plans be updated on a five-year basis,⁸ so water purchasers should also be aware that the plan in existence at the time the water purchase contract is executed is subject to change.

In the self-evaluation report prepared by TCEQ as part of the “Sunset” review process, the TCEQ has identified several existing policy issues, including specifically, the TCEQ’s lack of statutory authority to require water suppliers to implement a drought contingency plan.⁹ According to the report, “[t]he TCEQ finds that many suppliers are hesitant to voluntarily

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³ See 30 Tex. Admin. Code § 297.120 (“Firm yield--That amount of water, that the reservoir could have produced annually if it had been in place during the worst drought of record.”).
⁶ Id. § 288.22(6), (7).
⁷ Id. § 288.22(8).
⁸ Id. § 288.22(c).
implement a DCP and thereby curtail water usage by customers. As a result, water-conservation efforts often come too late to prevent service interruptions resulting from diminished supplies.” As a possible solution, the TCEQ has proposed a statutory change to allow the TCEQ to mandate “consistent, enforceable, and timely DCP implementation.” The focus on this issue may signal potential changes that would result in drought management stages being implemented more quickly than in the past. As a result, if the Texas Legislature chooses to address this issue, water purchasers may not be able to rely solely on a water supplier’s past practices related to its drought contingency plan.

2. **Distribution of Water During Shortage.**

During water shortages, such as may result from drought, accident, mechanical failure, or other causes, the Texas Water Code authorizes water suppliers to implement pro rata reductions for distribution of water.\(^\text{10}\) The requirements vary slightly depending on whether the supplier has prepared a water conservation plan to address shortages.

If a water shortage is not covered by a water conservation plan, “the water to be distributed shall be divided among all customers pro rata, according to the amount of water which each customer may be entitled; or (2) the amount of water to which each customer may be entitled, less the amount of water the customer would have saved if the customer had operated its water system in compliance with the water conservation plan.”\(^\text{12}\)

Because firm water is water that should be available during a repeat of the drought of record, curtailment of supplies should not be required for firm water unless a drought is more extreme than the drought of record (or unless some other cause of water shortage exists). As an example, this concept is evident in LCRA’s water management plan, in which pro rata reductions first occur for purchasers of interruptible water, and only if the drought in effect is worse than the drought of record would reductions, on a pro rata basis, occur among purchasers of firm water.

One key issue that has not been fully decided is how to determine a water purchaser’s “pro rata” share. Is the share based on the amount of water the purchaser is entitled to purchase under the contract, or is it based on the actual amount being supplied or that which was supplied historically? For instance, if a contract is to supply 10,000 acre-feet per year, but the water purchaser has historically only used 1,000 acre-feet per year, which of these numbers should be the basis for determining cutbacks?

Many water providers appear to be interpreting Section 11.039 to apply to the amount of water actually supplied. For example, LCRA’s water management plan uses language similar to the statute—curtailment is on a pro rata basis according to the amount of firm water to which LCRA’s customers “are legally entitled

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11 Id. § 11.039(a).
12 Id. § 11.039(b).
under the terms of their contract and consistent with the curtailment plan approved by the LCRA Board and TCEQ—"but LCRA interprets this language to base pro rata curtailment on actual usage." GBRA’s drought contingency plan uses more express language, stating that if emergency water shortage conditions are found to exist for Canyon Reservoir, a “wholesale water customer’s allocation for water from storage shall be based on the customer’s previous one (1) years use.” Other water suppliers look to past monthly or seasonal use.

Whether these policies are consistent with Section 11.039 depends on the meaning of “the amount of water to which each customer may be entitled.” Arguably, if a customer has a contract reserving a certain amount of water, that is the amount the customer is entitled to, and thus, is the amount the pro rata share should be based on, regardless of actual usage.

While there are water users that have secured supplies in excess of their current demand, these are often cases where the user is attempting to plan for increased demand over time. If a water user’s demand has increased over the previous year, for instance due to an increase in population, then a reduction based on the previous year’s use is not truly “pro rata”. It doesn’t take into account the current amount to which the customer would be “entitled”. As a result, it acts to penalize users with increasing demands, even if those users are implementing water conservation best management practices. Conversely, it also acts to benefit users with decreasing demands and has the potential to reward less efficient users, because the higher the actual use, the higher the pro rata share. As a result, selecting a historic period does not appear to be an appropriate method for calculating how much water a particular user is “entitled” to in order to determine its pro rata share.

3. No Preference For Type of Use.

Notably, Section 11.039 provides for rationing of water supplies on a non-discriminatory basis, with no preference for any particular type of use, not even domestic or municipal use. While Section 11.024 of the Water Code ranks different types of beneficial use of water in order of preference, consideration of these preferences appears to be limited to use “in appropriating state water.” The lack of preferences for existing rights was bolstered in 1997 with the repeal of the Wagstaff Act, which was originally enacted in 1931. Prior to its repeal, the Wagstaff Act provided that “[a]ny appropriation made after May 17, 1931 for any purpose other than domestic or municipal use is subject to the right of any city or town to make further appropriation of the water without paying for the water.” The implications of the Wagstaff Act were never defined by the courts, and how the statute may have applied

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during times of drought was subject to debate and never tested.

B. Due Diligence Regarding Water Source and Reliability.

Because drought and other water shortage conditions can result in curtailment of water supply, a water purchaser should perform sufficient due diligence to ensure its needs will be met. The first step would be to identify the potential source or sources of supply. In analyzing the reliability of a potential water source, the water purchaser will want to consider the adequacy of the supplier’s source of supply, any restrictions applicable to the supply, the plan for addressing reductions in the supply, and any mandatory water conservation measures.

If the water source is surface water, the purchaser should review the supplier’s water rights permit(s), which will provide details on the volume of appropriated water, priority date, authorized location and type of use, and use restrictions, such as special conditions designed to maintain environmental flows. The purchaser should also consider whether any amendments will be necessary to the underlying water right, such as a change in diversion point or place of use. If so, there is the potential that the water right could become subject to new restrictions.

However, determining firmness of the water supply is more complex than simply reviewing the applicable water right, and a water purchaser may want to go beyond the water supplier’s representations about the reliability of its supply. For larger projects, the purchaser may want to hire a water rights consultant, hydrologist or engineer to perform a water availability analysis. These types of professionals will often begin by using the publicly available, state-prepared water availability model (WAM) for the particular basin and may modify the WAM to update or tailor it to the particular project or location.

C. Mitigating the Impact of Potential Reduced Supplies.

Although the recurrence of drought conditions in Texas is inevitable, a variety of strategies can be employed to lessen the risks and impacts associated with potential water supply cutbacks.


To the extent that water rights, such as run-of-river rights, are not reliable during drought conditions, the water user may be able to increase the reliability by constructing additional facilities, such as off-channel storage. For power plants, off-channel storage may be in the form of a cooling pond or reservoir. Such facilities can be used to store water for use during times when water is not otherwise available for diversion from a watercourse.


Often large water suppliers will hold multiple water rights with differing priority dates. As a result, the supplier’s more-junior water rights would be subject to curtailment sooner than its more-senior rights. In negotiating a water supply contract, the purchaser may request that the supplier designate a specific water right with a higher priority date as the source of supply. A water supply with a higher priority date can reduce or avoid the need for curtailment.

While surface water and groundwater are generally regulated separately in Texas, projects to conjunctively use the two sources can be used to “firm up” water availability and may become more common in the future. “Conjunctive use” is the combined use of groundwater and surface water sources that optimizes the beneficial characteristics of each source. As an example, the GBRA is currently pursuing a conjunctive use project that would use surface water diverted under a new appropriation from the Guadalupe River as a primary supply, but would use groundwater pumped from the Carrizo Aquifer in Gonzales County as a supplemental supply. Without the backup supply of groundwater, the surface water supply would not otherwise be considered firm. The proposed project could provide a firm yield of approximately 25,000 acre-feet of water per year.

It should be noted, however, that groundwater can also be subject to curtailment during drought conditions. Withdrawals and uses of groundwater in most areas of the state are now governed and controlled by local groundwater conservation districts (GCDs), which have broad rulemaking and permitting authority. GCDs are authorized to make and enforce rules for conserving, preserving, protecting, and recharging groundwater in order to control subsidence, prevent degradation of water quality, or prevent waste, including by placing limits on groundwater production. They are also authorized to issue permits for drilling, equipping, operating, or completing wells or for substantially altering the size of wells or well pumps.

Many GCDs choose to preserve historic or existing uses of groundwater, so in some areas of the state the ability to obtain a new groundwater production permit may be limited. In addition, newer permittees may be subject to curtailment during water shortages before historic permittees. However, even water obtained under a historic use permit may be subject to significant curtailment during drought. The Barton Springs/Edwards Aquifer Conservation District (BSEACD) recently adopted revised rules under which all historic users of groundwater from the freshwater Barton Springs segment of the Edwards Aquifer would be required to curtail groundwater usage by 40 percent during the most extreme stage of drought. BSEACD’s rules also provide that usage by historical permit holders for industrial and non-agricultural irrigation uses could be completely curtailed if an “emergency response period” is initiated during the most extreme drought stage.

As a result, in considering the use of groundwater to firm up a surface water supply, the water user should consult the applicable GCD’s rules to determine the effect of any drilling, operation, or production limits.

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19 Tex. Water Code § 36.001(21).
22 Id. § 36.113.
24 Id. § 3-7.7(B)(4).
4. **Use of Reclaimed Water.**

As the state’s remaining firm water supplies become increasingly appropriated, water users will need to look to alternative methods to ensure an adequate supply. One option with considerable potential is the use of treated domestic or municipal wastewater, often referred to as “reclaimed water.” The TCEQ regulates use of reclaimed water, including the quality, design and operational requirements. Such water is more frequently being used for non-potable purposes, such as non-agricultural irrigation or industrial cooling water. Availability and use of reclaimed water is likely to become more widespread, especially in areas of the state where water resources are tight. For instance, the San Antonio Water System (SAWS) is in the process of implementing a water recycling plan to deliver up to 35,000 acre-feet per year of reclaimed water to commercial and industrial users throughout the City of San Antonio.

5. **Water Conservation Measures.**

While there are good reasons to investigate and implement strategies to reduce water consumption regardless of drought, the potential for water shortages and mandatory water use curtailment provide an additional incentive. For new projects, water conservation can be taken into account during the design phase to reduce water needs and save costs. For existing projects, water conservation can essentially provide a relatively inexpensive “new source” of water supply by reducing the need for the existing source of supply and/or delaying or avoiding the need to secure an additional source of supply.


6. **Seeking Enforcement of Water Rights Violations.**

For more-senior water rights, one approach to prolong the reliability of the water supply during a drought is to take steps to ensure that improper diversions are not being made by junior users. Inquiries regarding state-enforcement of water rights can be made to the appropriate watermaster’s office, if applicable, or to the appropriate TCEQ regional office if the water right is not within a watermaster area. Yet, one question that sometimes arises is whether a cause of action may be brought directly against a person who is diverting water out of turn or in a manner that reduces the ability to obtain water under the water right.

In 1997, the Texas Legislature added Section 11.0841 to the Water Code, which expressly states that nothing in Chapter 11 (Water Rights) affects the right of any private corporation, individual, or political subdivision that has a justiciable interest in pursuing any available common-law remedy to enforce a right or to prevent or seek redress or compensation for the violation of a right or otherwise redress an injury.

Presumably, this statute recognizes that a private cause of action exists to seek

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26 For a detailed discussion of water rights enforcement by the state, see M. Robin Smith, *Drought and Enforcement*, The Changing Face of Water Rights (Apr. 8-9, 2010).

an injunction or to recover damages. An injunction was at issue in *Hoefs v. Short*, decided by the Texas Supreme Court in 1925, in which a downstream landowner sought to enjoin an upstream landowner from building a dam across a creek because the dam would prevent water from passing to the downstream owner’s land.\(^{28}\) After determining that the creek was a watercourse to which water rights attach, the Texas Supreme Court concluded that the downstream landowner was entitled to equitable relief and upheld the lower court’s granting of an injunction.\(^{29}\)

### III. Conclusion.

In entering into agreements for water, consideration must be given to what water rights the water is being supplied under and how that supply might be affected by water shortages. The recent drought in Texas has emphasized the importance to water purchasers of knowing what rights they have and how “firm” those rights are. Before entering into a water supply contract, a water purchaser should perform due diligence on the water supplier and its supply to ensure that the reliability of the water will meet the user’s needs. If a firm supply is not available, there are several strategies that can be used to improve the reliability of the supply, including construction of water storage facilities or use of alternative water sources, such as groundwater or reclaimed water.

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\(^{28}\) 273 S.W. 785 (Tex. 1925).

\(^{29}\) *Id.* at 788-89.