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Water for Your Project: A Walkthrough

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Water for Your Project: A Walkthrough

I. Understanding the Water Needs for Your Client's Project

The most important thing to do before assisting a client in obtaining a water supply for his project is to understand the project. While it generally falls to the engineers to evaluate the various water supply options available for a project, the attorney needs to understand the legal requirements and the potential impediments for each of the options to assist the client in making an informed decision. There are several questions you should ask in order to understand and analyze the legal aspects of the water supply options:

- A. Why is the water needed? Is the water needed to supply a subdivision? Generate electricity? Irrigate crops? Manufacture microchips? Water a golf course?
- B. What kind of water is needed? Treated water? Reclaimed water? Raw water?
- C. Where is the water needed? Is the project within the service area of a city? What river basin is the project located? Is it in a groundwater conservation district?
- D. How much water is needed and for how long? Are there daily delivery requirements? Is the water only needed seasonally? Does the project only need water for a few months or years?
- E. When is the water needed? As soon as possible? In 10 years? Before construction begins?

The answers to these general questions will play a large part in determining the source of the water and what the associated legal requirements are. This paper analyzes the basic sources of water and provides a general overview of the main decision points. Also, attached at the end of this paper are two flow charts that provide a general decision-making matrix for each type of water source that your client might be considering.

II. The Sources of Water

Generally, when evaluating water supply sources for a project, there are four primary sources: surface water, groundwater, treated and reclaimed water. However, there are a myriad of different options for each type of water supply and, as would be expected, various legal requirements and possible impediments for each type of supply source.

A. Surface Water

All water within a defined water course is owned by the State of Texas. TEX. WATER CODE § 11.021. No person may divert, store, impound, take, or use surface water without first

obtaining a water right or permit. TEX. WATER CODE § 11.121. An appropriative surface water right is a right to use a certain amount of state water for a particular beneficial use, such as municipal, agricultural, and industrial uses. TEX. WATER CODE §§ 11.024, 11.025. The holder of an appropriative surface water right acquires title to his appropriation by limitation against any other claimant, once his right is perfected through beneficial use of the water. TEX. WATER CODE §§ 11.026, 11.0291. Because appropriative water rights are property, these rights may be bought, sold, transferred, and leased like any other property interest. The Texas Commission on Environmental Quality (“TCEQ”) is responsible for issuing, amending, and transferring appropriative rights.

Thus, in order to use surface water from a water course, the person either needs to obtain a new water right or permit from TCEQ, purchase or lease an existing water right, or execute a wholesale water supply contract with an existing water right holder.

1. New Water Rights

When evaluating whether to pursue a new appropriative water right, reliability of the water supply is likely to be the main hurdle. There are two aspects to reliability: (1) the priority date of the water right; and (2) how often the water is expected to be available. In Texas, each water right is assigned a priority date, which is the date the application is declared administratively complete by TCEQ. 30 TEX. ADMIN. CODE § 297.44(c). All water rights with an earlier priority date (senior water rights) may make a priority call on surface water being diverted by junior water rights holders.¹ TEX. WATER CODE § 11.027. As was seen in several river basins in Texas during 2011, this means junior water rights holders must suspend diversions so that the more senior water rights holder may divert that water.²

In addition to the priority date, you need to consider the water’s actual reliability as determined by TCEQ’s water availability model (“WAM”). TCEQ will not issue an appropriative water right unless there is a sufficient amount of water available for a sufficient amount of time to make the project viable. 30 TEX. ADMIN. CODE § 297.42. For example, TCEQ will not issue an irrigation water right that does not have on-channel or off-channel storage unless 75% of the water is available 75% of the time when distributed on a monthly basis. *Id.* Lower availability percentages may be acceptable if the applicant can demonstrate that the project is a viable one for its intended purpose, even though the water is less reliable. *Id.*

It should also be noted the new water right will be subject to the environmental flow standards adopted for the particular basin. *See* TEX. WATER CODE § 11.1471, 30 TEX. ADMIN.

¹ In the Middle and Lower Rio Grande, the priority of the water right is based on the type of use rather than the priority date. *See* 30 TEX. ADMIN. CODE § 303.22. However, there is no water available in the Middle and Lower Rio Grande for appropriation. Thus, in this area of Texas, you must buy existing water rights.

² It should be noted, however, in 2009 and 2011, TCEQ took the position that, in order to protect the public’s health and safety, only non-municipal and non-electric generation water rights would be suspended when a senior water right holder made a priority call. *See ex.* August 8, 2011 letter from Zac Covar, Deputy Executive Director of TCEQ to Water Rights Holders in the Brazos River Basin. This practice was formalized in TCEQ’s rules this year. *See* 30 TEX. ADMIN. CODE ch. 36. Thus, it appears that municipal, domestic, and power generation water rights might have a greater reliability than other types of water rights, even more senior rights.

CODE ch. 298. These standards affect how much water is available for appropriation. But even more importantly, for less sophisticated water users, these requirements could be problematic because these standards will likely result in permit conditions that will require a greater level of daily management of the water right.

Finally, any new water right issued by the TCEQ must be consistent with the State Water Plan. *See* TEX. WATER CODE § 11.134(b)(3)(E). Often, to ensure consistency, the project will be included as a water supply strategy in the Plan. However, the project might fall within other more general water supply strategies, thereby meeting the consistency requirement.

In addition to the appropriative water rights, the TCEQ issues seasonal permits, temporary permits, and term permits, which allow the permit holder to divert and use state water for a limited period of time. TEX. WATER CODE §§ 11.137, 11.138, 11.1381, 11.152-11.155. Seasonal permits are typically granted to irrigators who desire to irrigate a seasonal crop, or to a person who desires to fill an off-channel reservoir during the wet season. *See* 30 TEX. ADMIN. CODE § 297.12. Temporary permits are issued for a short duration of time, no more than three years. These permits are designed for short duration projects, such as highway construction projects, oil and gas drilling projects, and hydrostatic testing of pipelines. 30 TEX. ADMIN. CODE § 297.13. The water available for the seasonal and temporary permits is generally from water that is either not appropriated, or is unreliable for other purposes.

Term permits are used by TCEQ for a term of years to allow use of unused appropriated water when there is insufficient unappropriated water in the watershed. 30 TEX. ADMIN. CODE § 297.19. However, TCEQ will not issue a term permit if the permit will jeopardize financial commitments made for water projects that have or will be built, or if the use of the unused appropriation will prohibit the holder of the appropriative right from beneficially using the water during the term of the permit. *Id.*

None of the short-duration permits become vested water rights like the appropriative rights.

2. Purchased or Leased Existing Water Rights

The first step in purchasing or leasing an existing water right is to locate the various water rights along the water course, and evaluate the reliability of each of the rights. Location information is available from the TCEQ. The purchaser or lessee should also examine what, if any, additional regulatory requirements might be imposed by TCEQ to change various aspects of the water right. The purchaser or lessee must apply to TCEQ to amend the water right to relocate or add diversion points, change the type of use, or change the diversion rate as needed. These changes can result in additional regulatory requirements for use of the water right, and thus change the reliability of the water right. For example, if a water right is purchased and moved to an upstream location, TCEQ will likely impose additional environmental flow requirements on the right. If there are intervening water rights holders between the existing diversion point and the proposed diversion point, TCEQ may impose pumping restrictions or other protective measures to ensure those intervening water rights holders are not adversely affected by the relocation of the diversion point.

Once a water right meeting the client's needs is located and the water right holder is willing to lease or sell the right, the parties will need to execute the appropriate legal documents to effectuate the transfer, such as a lease or deed. 30 TEX. ADMIN. CODE §§ 297.81, 297.83. When the parties change the ownership of the water right, the deed must be filed in the real property records of the county. Once recorded, the new owner would then need to file a change of ownership application with the TCEQ to finalize the change of ownership. 30 TEX. ADMIN. CODE §§ 297.82, 297.83. Once the ownership is transferred, the client would then need to file an application with the TCEQ to amend the water right, if necessary.

3. Wholesale Water Supply Agreements

If obtaining a new water right or purchasing an existing water right is not an option or is undesirable, the client could contract with a wholesale supplier for the water. Typically, wholesale water suppliers own one or more reservoirs and thus have the ability to supply water stored in the reservoir to customers along the perimeter of the lake or downstream of the lake. The TCEQ's rules regarding wholesale water supply agreements are found in Title 30 of the Texas Administrative Code, Subchapter J of Chapter 297.

If the client is pursuing a wholesale water supply source, there are four main items to consider when negotiating the supply contract: quantity, quality, price, and delivery. First, the client should carefully consider how much water will be needed for the project. Most large water purveyors have take-or-pay contracts (which means that the client will pay for all of the water under contract, whether it is used or not), and require the customers to bear the water lost during the transportation of the water downstream to the project. Thus, the amount of water should be sufficient to address current needs of the Project, future water needs over an appropriate planning period, and transportation losses.

Second, the client should consider the cost of the water as compared to other available sources. For many wholesale water suppliers, the price of the water is non-negotiable because it is set each year by the entity's board of directors and is applicable to all customers. Nevertheless, this is an important component, particularly if the client is contracting for more water than is currently needed.

Third, the client should evaluate the quality of the water and what it will take to treat the water to the standards needed for the project. For example, in many parts of Texas, the inland surface water can contain high levels of chlorides. If the water is needed for a drinking water supply, the water may need to be mixed with other sources to make it treatable to drinking water standards.

Finally, the client should evaluate how the water will be delivered to the project. As previously mentioned, the delivery can affect how much water is required and the overall cost. Water may be delivered to an intake structure on the perimeter of a lake, or delivered using the bed and banks of the water course to an intake structure located downstream. If the project is not located directly on the lake or water course, a pipeline or canal might also be required to carry the water to the final destination. For example, in the lower and middle Rio Grande, many of the

municipalities contract with irrigation districts to transport water using the irrigation canals to the city's water treatment plant located several miles from the Rio Grande. These cities generally pay for the delivery of the water diverted on their behalf, which includes the water lost during the transportation.

B. Groundwater

In Texas, groundwater is treated and regulated differently than surface water. Unlike surface water, which is owned by the State, groundwater is owned by the surface estate owner, unless it has been severed from the surface estate. *See* TEX. WATER CODE § 36.002; *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814, 831-833 (Tex. 20120). The regulation of the groundwater as a supply source (as opposed to the regulation of the quality of the groundwater) is decentralized and governed locally by groundwater conservation districts, where they exist. There are 99 groundwater conservations districts in Texas covering all or part of 174 counties out of the 254 counties. *See* www.twdb.state.tx.us/groundwater/conservation_districts/facts.asp. Thus, the evaluation of groundwater as a supply source and the associated legal requirements involves a different analysis matrix.

1. Location of the Groundwater Source for the Project

If the client is considering using groundwater to supply water to his or her project, it is very important to know whether the groundwater source for the project is located in a groundwater district. If the groundwater source is not in a groundwater conservation district, then the client needs only to assess whether there is a sufficient supply of groundwater to meet the project's needs, purchase or lease the surface estate and groundwater, and the drill wells.

If the groundwater source is located in a groundwater conservation district, then the client should evaluate the project's water needs along with the groundwater permitting requirements, including spacing and production limits. Certain projects might not require any permit from the groundwater district as the following are exempt from the permitting requirements:

- A. A well used solely for domestic use or for providing water for livestock or poultry on a tract of land larger than 10 acres and that is incapable of producing more than 25,000 gallons of groundwater per day;
- B. Drilling a water well that will be used solely to supply water for a rig that is actively engaged in drilling or exploration operations for an oil or gas well permitted by the Texas Railroad Commission provided that the well is located on the same lease or field associated with the drilling rig; or
- C. Drilling a water well authorized under a permit issued by the Texas Railroad Commission for surface coal mining or for production from the well to the extent the withdrawals are required for mining activities regardless of any subsequent use of the water.

See TEX. WATER CODE § 36.117(b). Although no permits are required for these activities, groundwater districts may require that the wells be registered with the district and be equipped and maintained to conform to the district's rules to prevent escape or pollution of the groundwater. *Id.* § 36.117(h).

For other uses, the client will need to obtain a permit to drill and operate a well from the groundwater district. The production limits and spacing requirements vary from district to district.³ Districts are required to manage total groundwater production on a long-term basis to achieve an applicable desired future condition. *Id.* § 36.1132. To achieve these goals, and to prevent interference between wells, control subsidence, minimize drawdown, and prevent water quality degradation, districts regulate well spacing and distances from property lines and adjoining wells, and the production of the groundwater through various methods of production restrictions. *Id.* § 36.116. These production limits take many forms and may vary by type of use. For example, for certain types of wells, the Panhandle Groundwater Conservation District limits the maximum total production to 1 acre-foot per acre per year on any contiguous acre. The maximum rate of production is 2,880 gallons per minute per square mile section, or 4.5 gallons per minute per contiguous acre for contiguous acreages that contain less than a section. See Rules 4.3(g) of the Panhandle Groundwater Conservation District Rules.

The Mid-East Texas Groundwater Conservation District sets production limits on a case-by-case basis in order to minimize the drawdown of the water table or the reduction of artesian pressure, to prevent interference between wells, to prevent degradation of water quality, to prevent waste, and to ensure that the production amount does not unreasonably affect existing groundwater and surface water resources or existing permit holders. The total annual production amount may not exceed three acre feet per year per acre of surface area. However, in determining the annual production limit for a public water supply system well, the service area of the community water system or utility is considered the production area, less any production area assigned to any other permitted well. See Rule 6.3 of the Mid-East Texas Groundwater Conservation District Rules.

In some instances, the client may be obtaining land and groundwater rights from a person or entity that has the groundwater rights already permitted in some form. The client should be aware of the applicable permit transfer and amendment requirements within the district. See Susan M. Maxwell and Denise V. Cheney, *Groundwater Transactions*, in ESSENTIALS OF TEXAS WATER RESOURCES 406 (Mary K. Sahs ed., 2009). The ownership transfer requirements are often ministerial in nature but can have disastrous if not followed correctly. For example, the Evergreen Underground Water Conservation District requires an application to amend any permit to change the name of the permittee be made within 90 calendar days of the change in ownership of the permitted well. Failure to amend the permit invalidates the permit on the 91st day after transfer of the property. See Evergreen Underground Water Conservation District Rule 5.9. Also, these transferred permits may require a permit amendment in order to use the groundwater rights for the intended project.

³ See "Survey of Groundwater Conservation District Regulatory Approaches" by Stacey Steinbach, Executive Director of the Texas Alliance of Groundwater Districts presented at the 2012 Texas Water Law Institute for an overview of the different regulatory schemes of the groundwater districts across Texas.

2. Location of the Project as Compared to the Groundwater – Exporting Groundwater

If the client is proposing to export groundwater out of a groundwater conservation district to its project, the client will need to evaluate the district's rules regarding exportation of the water. Under Texas law, districts are not allowed to prohibit the exportation of groundwater out of the district. TEX. WATER CODE § 36.122(o). However, districts may impose a fee or surcharge for the exportation of the water, must consider the availability of water inside the district and in the proposed area receiving the water, must evaluate the effect of the transfer on the aquifer, and on existing permit holders and users within the district, must consider the approved regional and state water plans, and may specify a period for which the water may be transferred, although if construction on a conveyance system has been initiated within the initial permit period, the transferred period is automatically extended to at least 30 years. *Id.* As with production limits and spacing requirements, districts will have different approaches to permitting exportation permits, so it is important that these rules are fully evaluated to determine if it is both legally and financially feasible to obtain the exported water.

3. Methods of Conveyance of Groundwater Rights

The conveyance of groundwater rights, and associated permits, can take many forms: contract, lease, license, or deed.⁴ The types of conveyance documents needed to purchase the groundwater will vary depending on the nature of the transaction. For on-site production of groundwater, the client must obtain the right to use the surface of the land for access, testing, exploration, drilling, and development of the groundwater, as well as the right to capture, use, and produce the groundwater itself. *See* Susan M. Maxwell and Denise V. Cheney, *Groundwater Transactions*, in *ESSENTIALS OF TEXAS WATER RESOURCES* 390 (Mary K. Sahs ed., 2009). The conveyance can be in the form of a sale of the surface estate along with the associated groundwater. The client could buy only the groundwater rights and obtain an easement to use the surface estate for the production of the groundwater. The client could execute a groundwater production lease, similar to those used by the oil and gas industry, or the client could lease the groundwater for a term of years similar to other standard real property leases. The client could obtain a license to use the groundwater, which would be only the right to use the real property rather than a real property interest and can be terminated at the will of the licensor absent an agreement to the contrary. *Id.* at 389-398. The method of conveyance will depend on the nature of the client's project, and to what the landowner is willing agree.

3. Treated Water and Reclaimed Water

For many projects, and in many more urban locations, the best water supply options are treated water or reclaimed water. Treated water is water that a public water supply entity has treated to public drinking water standards. Cities often chose to purchase treated water from

⁴ It should also be noted that groundwater within the Edwards Aquifer Authority's jurisdiction is highly regulated, and an owner's rights to the groundwater is derived through the EAA permit issued. *See* Susan M. Maxwell and Denise V. Cheney, *Groundwater Transactions*, in *ESSENTIALS OF TEXAS WATER RESOURCES* 391 (Mary K. Sahs ed., 2009). Thus, the conveyance documents for transactions in the EAA may not be generally applicable to other transactions in the state. *Id.*

another larger water purveyor. By purchasing water already treated, the entity does not have to invest in water intake or treatment facilities, but will share those costs with the rest of the customers of the water purveyor. Like with surface water, treated water is usually obtained through a long-term wholesale water supply contract.

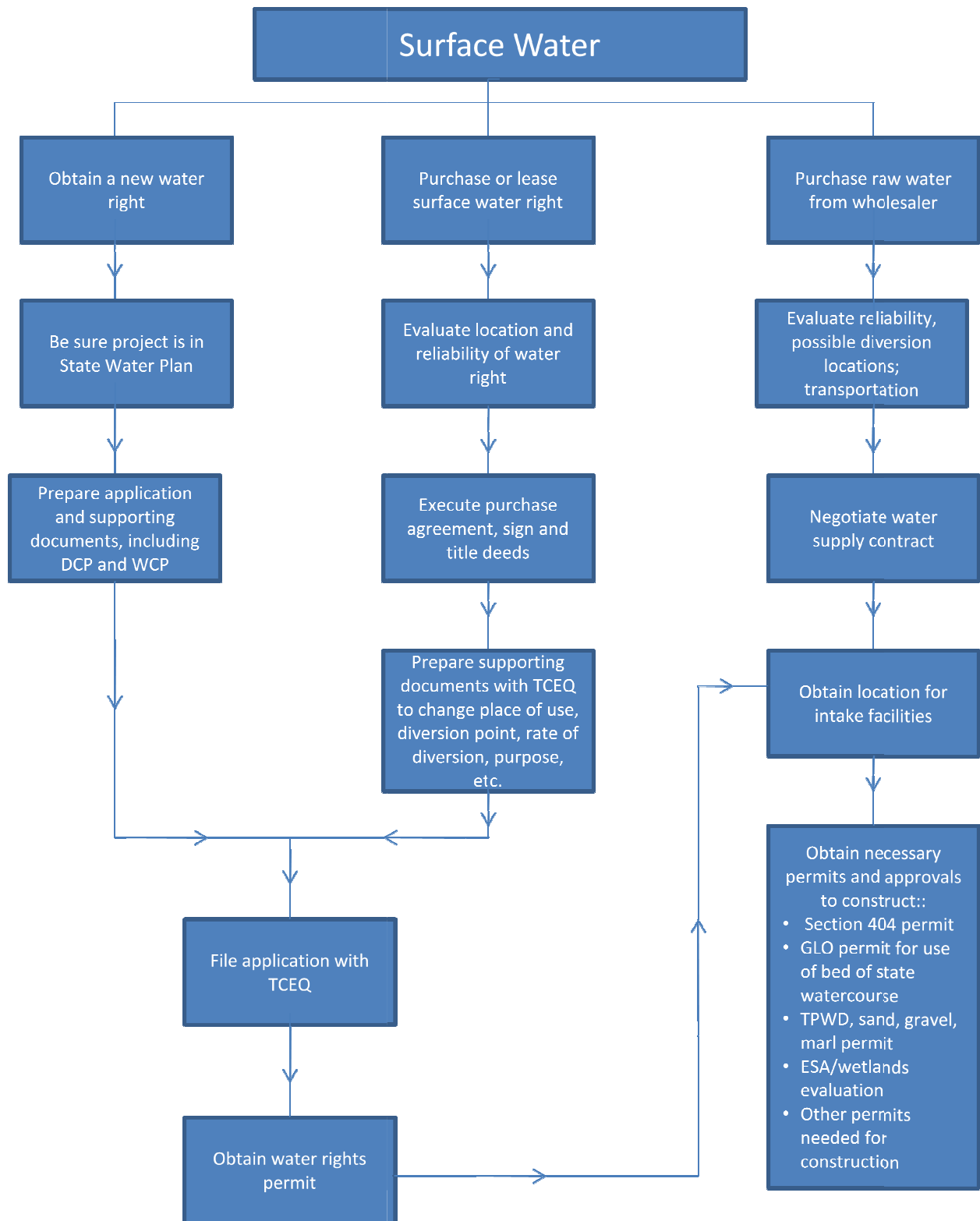
Reclaimed water is wastewater effluent that has been treated to a high quality, and thus suitable for certain types of uses. *See* 30 TEX. ADMIN. CODE Ch. 210. For example, cities will often use reclaimed water to water golf courses or irrigate football and soccer fields. Reclaimed water can be used for industrial purposes as well. Recently, many cities have been approached to sell their reclaimed water for oil and gas well fracturing purposes.

For a person other than the provider of the reclaimed water to use this type of water directly, the provider must notify the executive director and obtain written approval to provide the reclaimed water. The notification must include (1) a description of the intended use of the reclaimed water; (2) a clear indication of the means for compliance with Chapter 210 of the TCEQ's rules, including documentation that a user will be apprised of their responsibilities as a part of the water supply contract or other binding agreement; (3) evidence in a water supply contract or other binding agreement of the provider's authority to terminate reclaimed water use that is noncompliant with the TCEQ's rules; and (4) an operation and maintenance plan that is required under ordinance or is to be a part of the water supply contract or other binding agreement that prevents cross contamination, implements measure to prevent unauthorized access to the reclaimed water facilities, monitoring provisions, maintenance schedules, training and safety plans, and contingency plans for system failures. *Id.* at § 210.4. Also, reclaimed water transferred from a provider to a user must be done on a demand only basis so that the water is not provided during times when it cannot be beneficially used. *Id.* § 210.7. Thus, when preparing a contract for the purchase of reclaimed water, it is important that the agreement contain the provisions required by the TCEQ.

III. Conclusion

It is impossible in one paper to outline all of the possible water supply scenarios that a person could explore for his or her project. Many of the options available depend entirely on location and the water available in that location. The available options will also be limited by the type of project that the person is exploring. A water supply for a city will look very different than a water supply for an irrigator. Nevertheless, it is important to examine all of the sources of available and, if necessary, use several sources in combination with each other.

Steps to Obtain Surface Water Supply



Steps to Obtain a Groundwater Supply

