LAWS RELATING TO WATER CONSERVATION IN TEXAS

by

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I. INTRODUCTION

The Texas Legislature has the power to pass all such laws as may be appropriate to effect "[t]he conservation and development of all of the natural resources of this State, and development of parks and recreational facilities, including . . . the conservation and development of its . . . water." Tex. Const. art. XVI, § 59(a). Water conservation is one strategy in the development of a comprehensive water policy. In Texas, water "conservation" is defined in Sections 11.002 and 15.001 of the Texas Water Code as

- (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.

As can be seen below, many water conservation laws and regulations are evolving from voluntary programs to mandatory requirements that may place severe burdens on water suppliers and the customers they serve.

II. TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ("TCEQ") CONSERVATION POWER

A. CONSERVATION REQUIREMENTS FOR WATER RIGHTS

1. Water Conservation Plans

Water conservation plans are required of both new applicants and existing permit holders. Section 11.1271(a) of the Texas Water Code provides that the TCEQ "shall require from an applicant for a new or amended water right the formulation and submission of a water conservation plan and the adoption of reasonable water conservation measures, as defined by Subdivision (8)(B), Section 11.002" of the Texas Water Code. Texas Water Code Ann. § 11.1271(a) (Vernon 2006). Municipal, industrial, and other appropriators with water rights of 1,000 acre-feet a year or more, and irrigation appropriators with water rights of 10,000 acre-feet a year or more are required to "develop, submit, and implement a water conservation plan, consistent with the appropriate approved regional water plan, that adopts reasonable water conservation measures as defined by Subdivision (8)(B), Section 11.002" of the Texas Water Code. Texas Water Code Ann. § 11.1271(b) (Vernon 2006).

Water conservation plans have been a part of the State's water policy for many years. In 1985, the Texas Legislature passed legislation that required retail water suppliers that receive state funding and all recipients of new water rights or amendments to existing water rights to implement a water conservation plan and/or adopt a drought contingency plan. The Legislature strengthened and expanded these conservation measures through S.B. 1, which was passed in

1997. See 1997 Tex. Gen. Laws 1010 (Senate Bill 1). S.B. 1 contained water conservation provisions requiring municipal and industrial water-rights holders of 1,000 acre-feet or more a year and irrigation water-rights holders of 10,000 acre-feet or more a year to develop, submit, and implement water conservation and drought contingency plans. *Id.*

Then in 2003, H.B. 2660 established minimum levels of conservation in water conservation plans. See 2003 Tex. Gen. Laws 688 (House Bill 2660). H.B. 2660 required the TCEQ and the Texas Water Development Board ("TWDB") to jointly develop model water conservation programs for different types of water suppliers that suggest best-management practices. Id. Target goals for model water conservation programs, developed as a result of the TCEQ and TWDB implementation of this provision in H.B. 2660, are not enforceable requirements. See also Texas Water Code Ann. § 11.1271(d) (Vernon 2006).

Today, because of this legislation, all applicants for new or amended water rights must now develop and submit a water conservation plan and adopt reasonable conservation measures. See Texas Water Code Ann. § 11.1271(a) (Vernon 2006). The only exemptions to this requirement are applications to impound water solely for in-place use, for emergency use, and for temporary use. See 30 Tex. Admin. Code § 295.9(5) (2006). An application submitted without a conservation plan is administratively incomplete. See 30 Tex. Admin. Code § 295.9 (2006). For a water conservation plan to be administratively complete, the plan must meet all minimum requirements contained in Title 30, Texas Administrative Code, Chapter 288. All water conservation plans required to be submitted to the TCEQ with an application for a new or amended water-rights permit or to the TWDB with an application for financial assistance must include specific, quantified, 5-year and 10-year targets for water savings. See Texas Water Code Ann. § 11.1271(c) (Vernon 2006). The entity preparing the plan establishes the targets. Id. Targets must include goals for water-loss programs and goals for municipal use in gallons per capita per day ("gpcd"). Id.

2. Drought Contingency Plans

Section 11.1272 of the Texas Water Code requires wholesale and retail public water suppliers and irrigation districts to develop drought contingency plans consistent with the appropriate approved regional water plan to be implemented during periods of water shortages and drought. See Texas Water Code § 11.1272 (Vernon 2006). As with water conservation plans, an application submitted without a drought contingency plan is administratively incomplete, and the TCEQ is prohibited from considering the application until the plan is submitted. See 30 Tex. Admin. Code § 295.9 (2006).

Drought contingency plans required by the TCEQ must include specific, quantified targets for water-use reductions to be achieved during periods of water shortages and drought. See Texas Water Code Ann. § 11.1272(c) (Vernon 2006). The TCEQ has promulgated separate rules describing the requirements of drought contingency plans for municipal uses by public water suppliers, for irrigation use, and for wholesale water suppliers. See 30 Tex. Admin. Code §§ 288.20-.22 (2006).

3. Finding of "Reasonable Diligence" to Achieve Water Conservation by TCEQ

Even after submitting the required water conservation plans and drought contingency plans, the TCEQ shall grant the water right permit application only if "the applicant has provided evidence that reasonable diligence will be used to avoid waste and achieve water conservation as defined by Subdivision (8)(B), Section 11.002" of the Texas Water Code. Texas Water Code Ann. § 11.134(b)(4) (Vernon 2006). This statute grants the TCEQ the power to deny a water right permit application if it determines that the applicant has not used reasonable diligence to use "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." Texas Water Code Ann. § 11.002(8)(B) (Vernon 2006). Based upon its review of the conservation plan, the TCEQ may also prescribe the implementation of reasonable water conservation measures. See 30 Tex. Admin. Code § 297.50(c) (2006). "Any water conservation measures prescribed by the commission shall be implemented as required by the terms and conditions of a commission order or water right, or by rule." Id.

These provisions make the applicant's success in receiving a water right permit contingent on their willingness to adopt the TCEQ's conservation measures. The applicant must submit a water conservation plan and/or drought contingency plan with its application or it is incomplete as a matter of law. Then the TCEQ can deny the application simply if it finds the applicant has not provided "reasonable diligence" to achieve water conservation. The TCEQ can also prescribe water conservation measures and the applicant must implement them as a condition of its water right.

B. CONSERVATION REQUIREMENTS FOR INTERBASIN TRANSFERS

Texas Water Code, Section 11.085 states that "[n]o person may take or divert any state water from a river basin . . . and transfer such water to any other river basin without first applying for and receiving a water right or an amendment to a permit, certified filing, or certificate of adjudication from the commission authorizing the transfer." Texas Water Code Ann. § 11.085(a) (Vernon 2006). The commission may grant, in whole or in part, an application for an interbasin transfer only to the extent that the "applicant for the interbasin transfer has prepared a drought contingency plan and has developed and implemented a water conservation plan that will result in the highest practicable levels of water conservation and efficiency achievable within the jurisdiction of the applicant." Texas Water Code Ann. § 11.085(l)(2) (Vernon 2006).

Under this statute, the TCEQ has the power to deny an interbasin transfer solely on the basis of the applicant's water conservation plan. Unfortunately the statute's language as to the standard for water conservation plans is extremely vague and gives no concrete guidance as to what is required. An applicant can only guess as to what the "highest practicable levels of water conservation and efficiency achievable within the jurisdiction" entails. The Water Conservation Implementation Task Force, which was created by the Texas Legislature in Senate Bill 1094 in an effort to realize water conservation's full potential, stated that what constitutes the "highest

practicable levels of water conservation and efficiency achievable within the jurisdiction of the applicant" is a matter to be decided by the TCEQ on a case-by-case basis. See http://www.twdb.state.tx.us/assistance/conservation/taskforceFAQ.asp.

III. TWDB ASSISTANCE PROGRAMS CONTINGENT ON ADOPTION OF CONSERVATION MEASURES

A. WATER LOAN ASSISTANCE PROGRAM

Water conservation program requirements and regulations are key factors in water application processes. Before the TWDB grants the application or provides any financial assistance under an application for the Water Loan Assistance Program, it shall "require an applicant to adopt or to have already implemented a program of water conservation for the more efficient use of water that incorporates the practices, techniques, or technology prescribed by Subdivision (9)(B), Section 15.001" of the Texas Water Code. Texas Water Code Ann. § 15.106(b) (Vernon 2006). The board must also determine that the applicant's program of water conservation "will meet reasonably anticipated local needs and conditions." *Id.* All of the water conservation plans required under Section 15.106 must include "specific, quantified 5-year and 10-year targets for water savings." Texas Water Code Ann. § 15.106(b-1) (Vernon 2006). The entity preparing the plan shall establish the targets, and the "[t]argets must include goals for water loss programs and goals for municipal use in gallons per capita per day." *Id.*

B. WATER BOND INSURANCE PROGRAM

When an entity applies to participate in the water bond insurance program, created to insure holders of insured bonds in the event of default or impending default, efficient water conservation is a condition upon which its application can be judged. If the TWDB "finds that an applicant is not using water efficiently, the board may require the applicant to develop a conservation program to provide for more efficient use of water." Texas Water Code Ann. § 15.208(b) (Vernon 2006).

C. WATER POLLUTION CONTROL REVOLVING FUND

The water pollution control revolving fund is used to provide financial assistance to political subdivisions for construction of treatment works. Approval of an application for this fund requires a program of water conservation for the more effective use of water "in the same manner as required for approval of an application for financial assistance under Section 15.106" of the Texas Water Code. Texas Water Code Ann. § 15.607(b) (Vernon 2006).

D. PLUMBING IMPROVEMENT LOANS

The TWDB may approve a plumbing assistance loan to a political subdivision only if the application includes "a description of the water conservation methods to be used in the provision of water and wastewater service in the area the political subdivision proposes to affect by its plumbing improvement loan program." Texas Water Code Ann. § 15.735(a)(2) (Vernon



2006).

E. WATER INFRASTRUCTURE FUND

The water infrastructure fund may be used to pay for the implementation of water projects recommended through the state and regional water planning processes. Like the water pollution control revolving fund, approval of an application for this fund requires a program of water conservation for the more effective use of water "in the same manner as for approval of an application for financial assistance under Section 15.106 of the" Texas Water Code. Texas Water Code Ann. § 15.975(b) (Vernon 2006).

F. ASSISTANCE TO POLITICAL SUBDIVISIONS FOR WATER SUPPLY PROJECTS

Before the TWDB grants an application or provides any funds under an application for a water supply project, it shall require a political subdivision to "adopt a program of water conservation for the more efficient use of water that incorporates the practices, techniques, or technology prescribed by Subdivision (23)(B), Section 17.001," of the Texas Water Code. Texas Water Code Ann. § 17.125(b) (Vernon 2006). The water conservation plans must include specific, quantified 5-year and 10-year targets for water savings, the entity preparing the plan shall establish the targets, and the targets must include goals for water loss programs and goals for municipal use in gpcd. See Texas Water Code Ann. § 17.125(b-1) (Vernon 2006). The TWDB may not require a program of water conservation to be adopted under Subsection (b) of Section 17.125 if an emergency exists as determined by the board, the amount of financial assistance to be provided is \$500,000 or less, or the applicant demonstrates and the board finds that the submission of such a program is not reasonably necessary to facilitate conservation or conservation measures. See Texas Water Code Ann. § 17.125(c)(1)-(3) (Vernon 2006).

G. ASSISTANCE FOR WATER QUALITY ENHANCEMENT PURPOSES

When the TWDB grants an application or provides any funds under an application for assistance for water quality enhancement purposes, it shall require a political subdivision to "adopt a program of water conservation for the more efficient use of water that incorporates the practices, techniques, or technology prescribed by Subdivision (23)(B), Section 17.001," of the Texas Water Code. Texas Water Code Ann. § 17.277(b) (Vernon 2006). The water conservation plans must include specific, quantified 5-year and 10-year targets for water savings, the entity preparing the plan shall establish the targets, and the targets must include goals for water loss programs and goals for municipal use in gpcd. See Texas Water Code Ann. § 17.277(b-1) (Vernon 2006). The TWDB may not require a program of water conservation to be adopted under Subsection (b) of Section 17.277 if an emergency exists as determined by the board; the amount of financial assistance to be provided is \$500,000 or less; or the applicant demonstrates and the board finds that the submission of such a program is not reasonably necessary to facilitate conservation or conservation measures. See Texas Water Code Ann. § 17.277(c)(1)-(3) (Vernon 2006).

H. TEXAS WATER RESOURCES FUND

Before the TWDB grants an application or provides any funds under an application for assistance from the Texas Water Resources Fund, it shall require an applicant to "adopt a program of water conservation for the more efficient use of water that incorporates the practices, techniques, or technology prescribed by Subdivision (23)(B), Section 17.001," of the Texas Water Code. Texas Water Code Ann. § 17.857(b) (Vernon 2006). The water conservation plans must include specific, quantified 5-year and 10-year targets for water savings, the entity preparing the plan shall establish the targets, and the targets must include goals for water loss programs and goals for municipal use in gpcd. See Texas Water Code Ann. § 17.857(b-1) (Vernon 2006). The TWDB may not require a program of water conservation to be adopted under Subsection (b) of Section 17.857 if an emergency exists as determined by the board, the amount of financial assistance to be provided is \$500,000 or less, or the applicant demonstrates and the board finds that the submission of such a program is not reasonably necessary to facilitate conservation or conservation measures. See Texas Water Code Ann. § 17.857(c)(1)-(3) (Vernon 2006).

I. AGRICULTURAL WATER CONSERVATION BOND PROGRAMS

When the TWDB grants an application or provides any funds under an application for assistance from the Agricultural Water Conservation Bond Program, it shall require an applicant to "adopt a program of water conservation for the more efficient use of water that incorporates the practices, techniques, or technology prescribed by Subdivision (23)(B), Section 17.001," of the Texas Water Code. Texas Water Code Ann. § 17.899(b) (Vernon 2006). The water conservation plans must include specific, quantified 5-year and 10-year targets for water savings, the entity preparing the plan shall establish the targets, and the targets must include goals for water loss programs and goals for municipal use in gpcd. See Texas Water Code Ann. § 17.899(b-1) (Vernon 2006). The TWDB may not require a program of water conservation to be adopted under Subsection (b) of Section 17.899 if an emergency exists as determined by the board, the amount of financial assistance to be provided is \$500,000 or less, or the applicant demonstrates and the board finds that the submission of such a program is not reasonably necessary to facilitate conservation or conservation measures. See Texas Water Code Ann. § 17.899(c)(1)-(3) (Vernon 2006).

IV. GROUNDWATER CONSERVATION DISTRICTS

A groundwater conservation district may require a "water conservation plan or a declaration that the applicant will comply with district's management plan," and/or "a drought contingency plan" to be included in a permit or permit amendment application for a groundwater well. Texas Water Code Ann. § 36.113(c)(4), (7) (Vernon 2006). Before granting or denying a permit of permit amendment, the district shall consider whether "the applicant has agreed to avoid waste and achieve water conservation." Texas Water Code Ann. § 36.113(d)(5) (Vernon 2006).

V. WATER CONSERVATION IMPLEMENTATION TASK FORCE

A. HISTORY AND TASKS

The Interim Report of the Texas Joint Committee on Water Resources to the 78th Legislature recommended that the TWDB and the Planning Groups work together to develop recommendations on how to define and evaluate water-use efficiency measures needed for regional water planning. In response to that recommendation, Senate Bill 1094 created the Water Conservation Implementation Task Force ("WCITF") in order to review, evaluate, and recommend optimal levels of water-use efficiency and conservation for all of Texas. The WCITF was charged by Senate Bill 1094 to complete and submit a report to the legislature and a best management practices guide to state leadership by November 1, 2004. Senate Bill 1094 was effective immediately after passage and a report was submitted to the legislature as requested on November 1, 2004. The WCITF was abolished as of January 1, 2005.

B. BEST MANAGEMENT PRACTICES

1. Development of Best Management Practices

The WCITF was charged to review, evaluate, and recommend optimum levels of water use efficiency and conservation for the state by identifying, evaluating, and selecting best management practices ("BMPs") for municipal, industrial, and agricultural water uses and evaluating the costs and benefits for the selected BMPs. To accomplish this task, the WCITF developed a BMPs Guide consisting of 21 municipal, 14 industrial, and 20 agricultural BMPs. The Task Force also evaluated the proper role for state funding of incentive programs that could facilitate the implementation of BMPs.

The WCITF has stated that the practices contained in the BMPs Guide are only voluntary efficiency measures that save a quantifiable amount of water, and that applying a mandatory set of BMPs throughout Texas would not be appropriate.

See http://www.twdb.state.tx.us/assistance/conservation/taskforceFAQ.asp. However, several sections of the Texas Water Code have been used in conjunction with the Task Force's BMPs Guide to make BMPs at the very least strong guidelines for conservation enforcement.

2. Best Management Practices and Water Rights Permitting

As previously mentioned, all applicants for new or amended water rights must now develop and submit a water conservation plan, and wholesale and retail public water suppliers and irrigation districts are required to develop drought contingency plans. See Texas Water Code Ann. §§ 11.1271-11.1272 (Vernon 2006). The Texas Water Code directs the TCEQ and the TWDB to jointly develop model conservation and drought contingency programs for different types of water suppliers that suggest "best management practices for accomplishing the highest practicable levels" of water conservation, efficiency, and use reductions achievable. See Texas Water Code Ann. §§ 11.1271(e), 11.1272(e) (Vernon 2006). Therefore, although technically an applicant does not have to use the WCITF's BMPs in their water conservation or drought

contingency plan, the model plans developed by the TCEQ and the board include these BMPs. The TCEQ shall grant the application only if the applicant has provided evidence that reasonable diligence will be used to avoid waste and achieve water conservation, and based upon its review of the conservation plan, the TCEQ may also prescribe the implementation of reasonable water conservation measures. See TEXAS WATER CODE ANN. § 11.134(b)(4) (Vernon 2006); 30 TEX. ADMIN. CODE § 297.50(c) (2006).

3. Best Management Practices and Interbasin Transfers

The Texas Water Code, Section 11.085(1)(2), states that the TCEQ may grant, in whole or in part, an application for an interbasin transfer only to the extent that the "applicant for the interbasin transfer has prepared a drought contingency plan and has developed and implemented a water conservation plan that will result in the highest practicable levels of water conservation and efficiency achievable within the jurisdiction of the applicant." TEXAS WATER CODE ANN. § 11.085(1)(2) (Vernon 2006). Because the Texas Water Code gives no definition of what the "highest practicable levels of water conservation and efficiency achievable within the jurisdiction" entails, many feel that the BMPs Guide has been and will continue to be used by the TCEQ as a benchmark for making that determination. Sections 11.1271(e) and 11.1272(e) of the Texas Water Code in fact state that "best management practices" are to be developed by the TCEQ and the TWDB "for accomplishing the highest practicable levels" of water conservation, efficiency, and use reductions achievable. See TEXAS WATER CODE ANN. §§ 11.1271(e), 11.1272(e) (Vernon 2006). The WCITF has stated that what constitutes the highest practicable levels of water conservation and efficiency achievable within the jurisdiction of the applicant is a matter to be decided by the TCEQ on a case-by-case basis, and that the WCITF is not attempting to make that determination through its BMPs Guide or its water conservation targets or goals. See http://www.twdb.state.tx.us/assistance/conservation/taskforceFAQ.asp.

4. Best Management Practices and TWDB Applications for Assistance

Although BMPs that are developed by the WCITF are not required to be incorporated into water conservation plans submitted as part of the applications for assistance of the TWDB assistance programs previously discussed, the TWDB rules require certain minimum standards in those conservation plans. See 31 Tex. Admin. Code § 363.15(c)(1) (2006). If an applicant meets those minimum requirements, the application can still be denied or the amount of assistance lowered. The executive administrator of the TWDB reviews all the water conservation plans submitted as part of an application for financial assistance for a project and determines if the plans are adequate. See 31 Tex. Admin. Code § 363.15(a) (2006). The TWDB additionally may revise the amount and conditions of its financial commitment after considering the water conservation plan. See 31 Tex. Admin. Code § 363.15(b) (2006).

C. RECOMMENDATIONS

In addition to developing BMPs, the WCITF also made water conservation-related recommendations to the Texas Legislature. The WCITF adopted a standard methodology for determining gpcd. Per-capita water use, generally described in terms of gpcd, is the average amount of water used by each person in a population served by a water utility. Per-capita water

use is directly related to a water utility's population and service profile. The WCITF recommended that all retail public water suppliers that are required to prepare and submit water conservation plans consider a minimum annual reduction of 1 percent in total gpcd, based upon a five-year rolling average, until such time as the entity achieves a total gpcd of 140 or less. The Task Force also recommended a statewide goal to reduce total statewide water demand to an average of 140 gpcd. The WCITF recognized that a simple comparison of per capita water use among Texas municipal water providers that may have significant differences in climate, geography and source water characteristics, as well as in their service and population profiles may, without additional data and analysis, could lead to inaccurate conclusions about comparative water use efficiencies among those municipal water providers.

The WCITF also recommended passage of legislation establishing performance standards for toilets to ensure that toilets sold in the state cannot be retrofitted so that they waste water. The Task Force expressed support for the creation of a statewide public awareness program for water conservation.

VI. ENFORCEMENT OF WATER CONSERVATION REQUIREMENTS

A. TCEQ REQUIREMENTS TO DO A PLAN: SETTING GOALS

The TCEQ requires water conservation plans for municipal uses by public water suppliers, industrial or mining use, agricultural use, and wholesale water supplier applications. The requirements for the plan differ depending on the type of entity that is filing the plan.

1. Requirements for Public Water Supply Water Conservation Plans

Public water suppliers must file a water conservation plan that includes several minimum requirements. The plan must include a utility profile, a program for universal metering, a program of continuing public education regarding water conservation, a water rate structure, a reservoir system operations plan, a means of implementation and enforcement, a metering device, and documentation of coordination with the regional water planning groups. See 30 Tex. Admin. Code § 288.2(a)(1) (2006). Specific, quantified five-year and ten-year targets for water savings to include goals for water loss programs and goals for municipal use must be included in the plan, in gpcd. See 30 Tex. Admin. Code § 288.2(a)(1)(C) (2006). Additional requirements and strategies must be included in the water conservation plan if the service area has a population of more than 5,000 or if they are necessary to achieve the stated water conservation goals of the plan. See 30 Tex. Admin. Code §§ 288.2(a)(2), (3) (2006).

2. Requirements for Industrial or Mining Use Water Conservation Plans

Water conservation plans for industrial or mining use must include a description of the use of the water in the production process, including how the water is diverted and transported from the source of supply, how the water is utilized in the production process, and the estimated quantity of water consumed in the production process and therefore unavailable for reuse, discharge, or other means of disposal. See 30 Tex. ADMIN. CODE § 288.3(a)(1) (2006). The plan must also



include a description of the device or method to be used to account for the amount of diverted water, equipment or process modifications to improve water use efficiency, an accounting for water loss in the water distribution system, and any other water conservation practice, method, or technique which the user shows to be appropriate for achieving the goals of the water conservation plan. See 30 Tex. Admin. Code §§ 288.3(a)(4)-(7) (2006). Specific, quantified five-year and ten-year targets for water savings and the basis for the development of such goals must also be noted in the water conservation plan. See 30 Tex. Admin. Code § 288.3(a)(3) (2006).

3. Requirements for Agricultural Use Water Conservation Plans

Agricultural use water conservation plan requirements differ depending on the type of agricultural use. If it is for an agricultural user other than irrigation, the plan must include a description of the use of the water in the production process, including how the water is diverted and transported from the source of supply, how the water is utilized in the production process, and the estimated quantity of water consumed in the production process and therefore unavailable for reuse, discharge, or other means of disposal. See 30 TEX. ADMIN. CODE § 288.4(a)(1)(A) (2006). The plan must also include a description of the device or method to be used to account for the amount of diverted water, equipment or process modifications to improve water use efficiency, an accounting for water loss in the water distribution system, and any other water conservation practice, method, or technique which the user shows to be appropriate for achieving the goals of the water conservation plan. See 30 Tex. Admin. Code §§ 288.4(a)(1)(D)-(G) (2006). Specific, quantified five-year and ten-year targets for water savings and the basis for the development of such goals must also be noted in the water conservation plan. See 30 Tex. Admin. Code § 288.4(a)(1)(C) (2006). Agricultural water use conservation plans for more than one user must also include a system inventory of the supplier's structural facilities, management practices, and a user profile. See 30 Tex. ADMIN. CODE § 288.4(a)(3) (2006).

If the water conservation plan is for an irrigation user, the TCEQ requires a description of the irrigation production process which shall include, but is not limited to, the type of crops and acreage of each crop to be irrigated, monthly irrigation diversions, any seasonal or annual crop rotation, and soil types of the land to be irrigated. See 30 Tex. Admin. Code § 288.4(a)(2)(A) (2006). In addition to the requirements of a regular agricultural use conservation plan, an irrigation user water conservation plan also includes a description of the irrigation method or system and equipment, scheduling the timing or measuring of the water applied, the land improvements for retaining or reducing runoff, and the tailwater recovery and reuse. See 30 Tex. Admin. Code §§ 288.4(a)(2)(B)-(K) (2006).

4. Requirements of Water Conservation Plans for Wholesale Water Suppliers

Wholesale water suppliers must file a water conservation plan that includes several minimum requirements. The plan must include a description of the wholesaler's service area, a description as to which practices or devices will be utilized to measure the amount of water diverted, a monitoring and record management program, and a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system. See 30 Tex. Admin.

CODE § 288.5(1) (2006). Specific, quantified five-year and ten-year targets for water savings including, where appropriate, target goals for municipal use must be included in the plan, in gpcd for the wholesaler's service area. See 30 Tex. Admin. Code § 288.5(1)(C) (2006). Additional requirements for the plan include a reservoir systems operation plan, a means for implementation and enforcement, and documentation of coordination with the regional water planning groups. See 30 Tex. Admin. Code §§ 288.5(1)(H)-(J) (2006). Each successive wholesale customer after official adoption must also develop and implement a water conservation plan or water conservation measures using the applicable elements. See 30 Tex. Admin. Code §§ 288.5(1)(G) (2006).

5. Requirements of Water Conservation Plans Submitted with a Water Rights Application

All water conservation plans required to be submitted to the TCEQ with an application for a new or amended water-rights permit must include specific, quantified, 5-year and 10-year targets for water savings. See Texas Water Code Ann. § 11.1271(c) (Vernon 2006). The entity preparing the plan establishes the targets. Id. Targets must include goals for water-loss programs and goals for municipal use in gpcd. Id. A water conservation plan submitted with an application for a new or additional appropriation of water must include data and information which supports the applicant's proposed use of water with consideration of the water conservation goals of the water conservation plan. See 30 Tex. Addin. Code § 288.7(a)(1) (2006). This data and information must also evaluate conservation as an alternative to the proposed appropriation, and evaluate any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management. See 30 Tex. Addin. Code §§ 288.7(a)(2), (3) (2006).

B. WATER SUPPLIERS CAN MAKE "REASONABLE" CONSERVATION RULES

1. "Reasonable" Rules

"Each person, association of persons, corporation, and district authorized by law to carry out irrigation powers that is conserving or supplying water for any of the purposes authorized by this chapter may make and publish reasonable rules relating to water conservation, as defined by Subdivision (8)(B), Section 11.002, of this code." Texas Water Code Ann. § 11.037(b). This section allows water suppliers to make and enforce conservation rules on their users. There is no limit to the severity of these rules; they are only required to be "reasonable."

2. Civil Penalties; Penalty Provisions

A water district is a political subdivision endowed with the functions, powers, authority, rights, and duties that will permit it to accomplish the purposes for which it was created. See Texas Water Code Ann. § 49.211. The legislature recodified the statutory provisions governing most types of districts into Chapter 49 of the Texas Water Code. A district's statutory purpose may include water supply, wastewater treatment, storm water control, irrigation, navigation, fire fighting, and development of parks and recreational facilities. A district may adopt and enforce a variety of reasonable rules and regulations addressing water conservation. See Texas Water



CODE ANN. § 49.004(a). A violator of district rules is subject to reasonable penalties, besides any other state penalties. See Texas Water Code Ann. § 49.004(b). A district may employ its own agents who may enter any public or private property within the boundaries of the district for inspecting or investigating conditions relating to "compliance with any rule, regulation, permit, or other order of the district." Texas Water Code Ann. § 49.221(b).

C. ENFORCEABILITY OF WATER CONSERVATION WHOLESALERS

Many wholesaler water suppliers include water conservation provisions in their new and renewed contracts with their customers. The terms and conditions in the contract specify the required conservation measures for each client. These enforcement provisions often include deadlines for compliance with plan requirements, and specify penalties for clients failing to meet these requirements in the specified time. Examples of penalties for conservation violations under the contract are reductions in water supply or a surcharge on all charges for water.

D. CITY WATER CONSERVATION POWERS

When a city's charter expressly provides for it, a city may exercise its police powers, which include reasonable protection of public health, safety or morals. The broad authority that homerule cities have to protect public health includes water quality protection. Home-rule cities also find authority to protect water quality in the Texas Water Code, Section 26.177, and the Texas Local Government Code, Section 401.002. Pursuant to Chapter 54 of the Local Government Code, the city is authorized to adopt such policies necessary to preserve and conserve its water resources.

Cities can enforce water conservation ordinances in a variety of ways. A city can seek an injunction that "prohibits specific conduct that violates the ordinance" or "requires specific conduct that is necessary for compliance with the ordinance." Texas Local Govt. Code Ann. § 54.016. Civil penalties for a violation of an ordinance can also be imposed. See Texas Local Govt. Code Ann. §§ 54.001, 54.017(b).

VII. OTHER WATER CONSERVATION BILLS AND PROVISIONS

The Texas Legislature has extended its influence by using several other bills to impose water conservation on the public over the years. In 1991, the Texas Legislature adopted the State Water Savings Performance Standards for Plumbing Fixtures Act, which established low-flow performance standards for plumbing fixtures sold in Texas, including toilets, showerheads, faucet aerators, and urinals. The Federal Energy Policy Act of 1992 established certain plumbing-efficiency standards nationally, including the 1.6-gallon-per-flush toilet standard.

In 2003, the Texas Legislature passed several other water-conservation-related bills. House Bill 645 prohibited the creation or enforcement of certain restrictive covenants that undermine water conservation. See 2003 Tex. Gen. Laws 1024 (House Bill 645). It prohibited a property owners' association from including or enforcing a provision in a dedicatory instrument that prohibits or restricts a property owner from installing rain barrels or a rainwater harvesting system, or

implementing efficient irrigation systems, including underground drip or other drip systems. *Id.* House Bill 1152 authorized water-supply corporations and sewer-service corporations to establish and enforce customer water conservation measures. *See* 2003 Tex. Gen. Laws 512 (House Bill 1152). Prior to the passage of House Bill 1152, nonprofit water-supply corporations did not have the authority that water-supply districts and municipalities, as governmental entities, had to enact mandatory customer water-use practices, such as lawn watering restrictions and prohibition of wasteful water-use practices. House Bill 1152 amended the Texas Water Code to provide nonprofit water-supply corporations the statutory authority to enforce reasonable customer water conservation practices and to prohibit wasteful or excessive water use by allowing assessment of reasonable penalties. *Id.*

The Texas Legislature also passed House Bill 3338 in 2003 requiring retail public water utilities to perform water audits in order to increase water conservation in Texas. See 2003 Tex. Gen. Laws 744 (House Bill 3338). Every five years, a retail public utility providing potable water is required to perform and file with the TWDB a water audit computing the utility's most recent annual system water loss. Id. The TWDB was directed to develop appropriate methodologies and submission dates for the required water audits for specific categories of retail public water utilities and, by doing so, ensure that compliance is financially feasible for the category of public utility for which it is developed. House Bill 3338 authorized the TWDB to provide certain financial assistance to political subdivisions for water-supply projects only if the required water audit has been completed and filed. Id.

VIII. WATER CONSERVATION PROGRAM REQUIRED FOR LEASE FOR AGRICULTURAL OR GRAZING PURPOSES

Under Section 51.131(a) of the Texas Natural Resources Code, the Commissioner of the General Land Office may require the lessee to implement a soil and water conservation plan approved by the commissioner. The commissioner, in reviewing a plan, and the lessee, in implementing a plan, may be assisted by the United States Department of Natural Resources Conservation Service.

IX. CONCLUSION

The thrust of recent legislation has increased emphasis on water conservation. Water conservation in Texas continues to be a dominating component of several sections in the Texas Water Code. The recent focus of legislation has moved from suggestions and incentives to requirements and enforcement. This shift will have long-range economic and financial impact on Texas citizens.