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Report to the Governor: Public Water System Capacity Development Program

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Water Supply Division
Texas Commission on Environmental Quality
State Revolving Fund
SFR-074/14
September 2014



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EXECUTIVE SUMMARY

The Texas Commission on Environmental Quality (TCEQ) is the primary state agency authorized to enforce the federal 1996 Amendments to the Safe Drinking Water Act (SDWA). The TCEQ enforces the SDWA through the implementation of state and federal rules and regulations for public water systems. Through the close of fiscal year 2014 (FY14), the TCEQ was also the agency responsible for the general supervision and oversight of water utilities.

The 1996 reauthorization of and Amendments to the federal Safe Drinking Water Act 1420 (c) (3) states:

Not later than 2 years after the date on which a state first adopts a capacity development strategy under this subsection, and every 3 years thereafter, the head of the state agency that has primary responsibility to carry out this title in the state shall submit to the Governor a report that shall also be available to the public on the efficacy of the strategy and progress made toward improving the technical, managerial and financial capacity of public water systems in the state.

This fifth report to the Governor accounts for the TCEQ's implementation and enforcement authority for the drinking water program. This report will be made available to the public on the TCEQ's web site.

BACKGROUND

Although the public drinking water and the utilities programs had begun interacting informally long before their merger under the Texas Natural Resource Conservation Commission (predecessor agency to the TCEQ) in 1992, a formal initiative to address the viability of drinking water systems began in Texas in 1994.

After the 1996 Amendments to the SDWA were adopted, the TCEQ renewed its commitment to this initiative under the Capacity Development Program through funding from the available set-asides from the SDWA's Drinking Water State Revolving Fund (DWSRF) which allows the state to set aside a portion of the capitalization grant to develop, implement, and maintain the program. The SDWA, along with provisions in Senate Bill 1 from the 1997 Texas Legislative Session and Senate Bill 2 from the 2001 Texas Legislative Session, provides the federal and state statutory framework to advance the viability of public water systems. From on-site financial, managerial, and technical assistance (FMT) to training and direct financial support available through the DWSRF, Texas is conducting a wide range of activities to promote the ability of public water systems to comply with drinking water standards.

DWSRF PROGRAM

The Drinking Water State Revolving Fund (DWSRF) program helps to ensure that Texas drinking water supplies remain safe and affordable and

that drinking water systems that receive funding will have assistance available to ensure that the system will be properly operated and maintained. After the 1996 Amendments to the SDWA were adopted, the United States Environmental Protection Agency (EPA) required states to submit strategies addressing financial, managerial, and technical issues for new and existing public water systems. The EPA approved the TCEQ strategy for new public water systems on July 16, 1999, and the EPA approval of the TCEQ strategy for existing public water systems followed on July 6, 2000, making Texas eligible to receive a yearly DWSRF capitalization grant between \$50 and \$70 million to be managed jointly between the TCEQ and the Texas Water Development Board (TWDB) as part of the DWSRF program. The TWDB was given the authority to manage the DWSRF loan fund and to make loans to water systems. The TCEQ as the state primacy agency was given the authority to enforce the provisions of the SDWA and to access the set-aside grants within the DWSRF capitalization grant to support its activities in support of the DWSRF program.

The DWSRF loan program funds projects to address public health priorities and assist water systems in achieving compliance with the SDWA. This is done by providing low-interest loans to public water systems. Projects eligible for DWSRF loan financing include investments to upgrade or replace infrastructure, address violations of federal or state health standards, prevent future violations of standards, and provide the public with safe drinking water. Prioritized lists of eligible projects being considered for financing from the DWSRF are included in the Intended Use Plan (IUP).

THE DWSRF LOAN PROGRAM OBJECTIVES:

- Address public health priorities
- Achieve compliance with the Safe Drinking Water Act
- Assist systems in providing affordable drinking water and
- Maintain the long-term viability of the fund.

DWSRF SET-ASIDES

Section 1452 of the Safe Drinking Water Act (SDWA) authorizes states to use a portion of the federal Capitalization Grant to set-aside funds to support various drinking water programs. As much as 31% of a State's federal Capitalization grant can be used for a combination of Administrative Activities (4%), Technical Assistance (2%), State Program Management (10%) and Local Assistance (15%).

Through the use of set-aside grants, emphasis also is placed on the development of state prevention programs, including source water protection, and capacity development.

CAPACITY DEVELOPMENT STRATEGY

The current Capacity Development Strategy for the state was approved in 1999 and 2000 for new and existing systems. This strategy is designed to promote the viability of public water system by enhancing public water system financial, managerial and technical capacity and encouraging compliance with the SDWA. TCEQ implements this Strategy through a variety of activities including on-site financial, managerial, and technical assistance (FMT), public water system training, source water protection assessment and reporting, plan and exception review and various other activities.

The TCEQ promotes developing and maintaining financial, managerial, and technical capacity of individual and regional public water systems through four main objectives of the TCEQ's Capacity Development Program which are:

- Ensuring that new systems are viable;
- Assessing the viability of existing systems;
- Improving the viability of existing systems; and
- Assisting nonviable systems in restructuring.

CURRENT ACTIVITIES

During State Fiscal Year 2012 and 2013 TCEQ applied for and received set-aside funds from the 2% and 10% set-asides. These federal grant funds were used to implement the Capacity Development Program. During State Fiscal Year 2014, the TCEQ applied for and received the 2%, 10%, and a portion of the 15% set-asides grant. The 15% set-aside consists of 100% federal grant funds required by the SDWA to be used to address source water protection, wellhead protection and capacity development needs at the local level.

The TCEQ performed the activities in support of the Capacity Development Program using set-aside funding during FY12 -14 including the management of a contract with a financial, managerial, and technical assistance contractor to provide onsite assistance free to water and wastewater systems throughout Texas, analysis and ranking of DWSRF Intended Use Plan applicants, creation of FMT capacity reports for DWSRF loan applicants, creating opportunities for asset management training to public water systems, comprehensive performance evaluations of surface water systems, analysis and tracking of rule-exception requests, emergency

preparedness plans, engineering plans and other applications for public water systems, supplying equipment to public water systems in support of the lead and copper rule program, and assistance to public water systems in the development of water conservation and drought contingency programs.

Many divisions and workgroups within the TCEQ work with public water systems, including Water Supply, Regional Areas, Enforcement, Environmental Law, Litigation, Border Affairs, Permitting and Registration (Operator Certification), and Environmental Assistance.

One of the TCEQ's benchmarks for meeting its objectives is the percentage of Texans that get their drinking water from a public water system meeting or exceeding safe drinking water standards. To achieve this benchmark, the TCEQ recognizes that the future of water systems depends on their ability to plan for and achieve long-term compliance.

At the close of FY14 there were 6,955 known active public water systems in Texas. Of the 6,955 known active public water systems, there were 4,643 active community water systems 908 active nontransient noncommunity systems; and 1,397 active transient noncommunity systems. The 4643 active community water systems are comprised of 2,259 retail water public utilities of which 1,446 are private investor-owned utilities; 1,070 are water districts; 976 are municipalities; 885 are non-profit water supply corporations, 76 are county water systems and 98 are Federal government water systems. Of these water systems, 97% are providing water to the people of Texas that meets or exceeds the safe drinking water standards. Similarly, 97% of the Texas population is served by a community public water system which is protected by a Cross-Connection Control Program.

SUPPLY AND DEMAND

The reduction of Texas' water supply sources continually presents new challenges to public water systems. Although these challenges may arise for many reasons, the primary reasons are due to drought and increased use due to population growth.

Due to extreme drought conditions in the State of Texas, the Governor issued an Emergency Disaster Proclamation for drought (Drought Disaster Proclamation) on July 5, 2011, certifying that exceptional drought conditions posed a threat of imminent disaster in specific counties in Texas. The Drought Disaster Proclamation has since been renewed monthly. The impact of the drought reached the apex in October 2011 when all 254 counties throughout Texas were affected. The height of the drought impact upon Texas during FY14 was 240 counties in November 2013. At the close of FY14, 117 counties were shown to be affected by drought.

ENSURING THAT NEW SYSTEMS ARE VIABLE

The first of the four TCEQ Capacity Development Program objectives is ensuring that new systems are viable. To accomplish this objective, the TCEQ screens applicants seeking to create or develop new stand-alone systems for overall operating capability. The TCEQ also considers whether or not a stronger system might be formed through service provided by an existing nearby water provider. The TCEQ's Capacity Development Program's objective of ensuring that new systems are viable results in the formation of new systems that possess sufficient FMT skills to provide continuous and adequate service.

Business plan reviews and financial and managerial (FM) assessments are important components in ensuring that new systems are viable. The TCEQ evaluates potential new stand-alone systems for revenue sufficiency; access to financial capital; fiscal management and controls; ownership accountability and staffing; and organization.

Prior to the submittal of engineering plans and specifications to the TCEQ, all proposed start-up, stand-alone public water systems are required to attempt to obtain water service from neighboring public water providers within one-half mile of the proposed area to be served. The proposed new public water systems must make a written request for service and pay any related application fees to the existing neighboring service provider(s). The neighboring system(s) must respond to the request indicating whether they do not want to serve or that they are unwilling to serve the requested area.

Proposed start-up retail public utilities applying to obtain a Certificate of Convenience and Necessity (CCN) must also demonstrate that they have attempted to obtain water service from a neighboring water system(s) or show that it would not be economically feasible to partner with an existing nearby system(s). To comply with this requirement, the applicant must investigate any system that is located within two miles of the intended service area of the proposed new stand-alone water utility.

Proposed new water districts that apply to the TCEQ for creation must also provide public notice and demonstrate FMT capability to the TCEQ to ensure viability. Water districts that finance water system improvements through the use of bonds must have the TCEQ's approval of the proposed project and funding. Another highlight of the TCEQ's Capacity Development Program's effort is evidenced in the continued success of the expedited bond review process which enables funding for water districts.

ASSESSING THE VIABILITY OF EXISTING SYSTEMS

The second of the four TCEQ Capacity Development Program objectives is assessing the viability of existing systems. Assessing the overall viability of a public water system provides valuable information about the collective

strengths and weaknesses of public water systems to the TCEQ, the EPA, the system owner(s), system operator(s), the customers, and funding agencies. The TCEQ's regional office staff conduct thousands of comprehensive compliance investigations, sanitary surveys, and consumer complaint investigations of public water systems. These investigations are followed by letters informing the systems of their compliance status and any violations of TCEQ rules and regulations observed by the regional inspector. This information helps the TCEQ and the systems assess vital technical and managerial capabilities.

In the event that enforcement action is required to ensure a public drinking water system is brought into compliance, that action is pursued through the administrative process and, if necessary through civil court. These actions typically culminate in administrative orders or judgments outlining appropriate corrective action(s).

The TCEQ's sampling and monitoring program assesses the water quality of public water systems around the state. Water quality monitoring includes analyzing and reporting both microbiological and chemical water quality samples.

As required by the SDWA, the DWSRF includes a requirement that all public water systems interested in being considered as applicants be assessed and ranked by the TCEQ for an *Intended Use Plan* (IUP). Each year the TCEQ assesses the health and compliance factors as well as certain physical deficiencies of IUP applicants. This assessment results in a ranked list of public water systems that the TWDB uses to determine eligibility for funding under the DWSRF loan program.

Health and compliance factors are components of the DWSRF IUP ranking process. The health and compliance factors allow for a ranking related to the risk of the population exposed. The combined factor is composed of weighted points for primary violations of maximum contaminant levels, treatment technique violations, certain secondary violations, and population. Systems proposing to solve the most serious water quality and quantity problems are ranked higher on the IUP and given highest priority to use the fund.

After a public water system has been ranked on the IUP and invited to participate in the DWSRF loan program, a detailed assessment is conducted by the TCEQ and includes a field evaluation and a review of the system's compliance history and current compliance status. For a system to receive funding, the assessment report must show that the applicant currently possesses the overall capability to operate or that the project proposed for funding will provide the applicant with the overall capability to operate.

State legislation enacted in 1999 allows the TWDB to require entities interested in obtaining funding for water or wastewater projects from the Economically Distressed Area Program to first get the TCEQ to assess their overall capability to operate a system. Similar to the DWSRF assessments, these include a field assessment and a review of the system's compliance history and current compliance status.

Each utility that applied for an amendment to their CCN service area was assessed to ensure the existing utility possesses the FMT to provide continuous and adequate service to the proposed area. Final orders to amend an existing CCN may require improvements be made to ensure the system remains viable and in compliance.

Until August 31, 2014, the TCEQ had original jurisdiction over the rates and services of investor-owned utilities, and had appellate jurisdiction over the rates of water supply corporations, water districts, and out-of-city customers of municipally owned retail public utilities. On September 1, 2014, the TCEQ transferred the responsibility for the water utility rate, Sale, Transfer, and Merger and Certificate of Convenience and Necessity (CCN) programs to the Public Utility Commission (PUC) of Texas. During the rate-approval process, the TCEQ staff assessed the utility's overall asset management strategy and capability to cover its cost of service so the utility could maintain and operate the system, and to earn a reasonable rate of return on the utility's investment.

The TCEQ staff review district creations and bond applications to determine whether a project is feasible, practicable, and beneficial to the district. Certain districts are required to file an annual audit report which must certify that water district personnel received the required training and state whether there is any indication to ensure feasible.

The TCEQ Drinking Water Protection Team generates source water susceptibility assessment reports as a component of the Source Water Assessment and Protection program. As of May 1, 2014, this changed to the Drinking Water Technical Review Team. These source water assessments help public drinking water systems protect their sources by generating information regarding each system's susceptibility to source water contamination. The assessments are provided to water system management for inclusion in Consumer Confidence Reports and subsequent implementation of local source water protection programs.

IMPROVING THE VIABILITY OF EXISTING SYSTEMS

The third of the four TCEQ Capacity Development Program objectives is improving the viability of existing systems. Improving the viability of water systems requires communication and teamwork. The TCEQ communicates with thousands of water system operators, managers, and customers each year. Regional and central office staff provide a wide variety of assistance

over the phone, through written correspondence, and the TCEQ's web site. Opportunities for personal interaction are further facilitated by training workshops and the popular "TCEQ Technical Assistance Room" featured at the TCEQ's Water Supply Division's Annual Public Drinking Water (PDW) Conferences.

Each year, during the annual 2-day PDW conference, the TCEQ and the regulated community have the opportunity to communicate face-to-face. The PDW Conference consists of approximately 40 lecture-style presentations on topics such as: Preparing for Drought, Rainwater Harvesting, Distribution System Optimization, Enforcement Response Policy, Ground Water Rule/Concentration Time Studies, Funding Coordination, Source Water Protection, Water Hauler Rules, Regionalization and Cross-Connection Control. Other presentations given by water industry professionals included: Water Sector Approach to Process Control System Security, Water Loss and Conservation in Texas, Water System Safety, Texas Water Development Board Update, Public Utility Commission Update, Ground Water Flow Modeling, Quantifying Nitrifying Microorganisms in the Distribution System, Aquifer Storage and Recovery, Ground Water Levels in Texas, The future of Meter Reading and Emergency Preparedness.

In addition to the presentations, water system operators, managers, and staff have the opportunity to participate in hands-on PDW Conference Workshops providing attendees experience with the TCEQ's public water system information database available to the public Texas Drinking Water Watch (TDWW), drought coordination, funding coordination, distribution optimization for disinfection by-products control, laboratory stakeholder meeting, Lead and Copper Rule, monitoring plans, electronic data reporting, Consumer Confidence Reports (CCR), surface water monthly operating reports (SWMOR), cross connection control, pump maintenance and water quality testing.

During the last three years, the Water Supply Division has hosted an annual Public Drinking Water Conference (PDW Conference). On August 7-8, 2012 the ninth PDW Conference featured the recurring theme of "Information and Tools for Public Water Systems and Utilities." A total of 933 people attended the conference, including 112 TCEQ staff and 122 exhibitors and outside speakers, with the remaining 699 attendees consisting of water system operators, board presidents, managers, and engineers from across the state coming to learn more about drinking water. TCEQ staff gave 31 presentations on topics ranging from utility financing, plan review requirements, emerging issues for both groundwater, and surface water, and stage two disinfection byproducts rules.

The Water Supply Division hosted the tenth Public Drinking Water Conference on August 6-7, 2013. A total of 857 people attended the conference, including 102 TCEQ staff and 116 exhibitors, outside speakers, with the remaining 639 attendees consisting of water operators, board presidents, managers, and engineers from across the state coming to learn more about drinking water. TCEQ staff gave 29 presentations on topics ranging from utility rate design, plan review requirements, emerging issues for groundwater and surface water, chemical controls, chemical monitoring and TCEQ rules on stage two disinfection byproducts.

The Water Supply Division hosted the eleventh Public Drinking Water Conference on August 5-6, 2014. A total of 876 people attended the conference, including 98 TCEQ staff and 130 exhibitors outside speakers, with the remaining 648 attendees consisting of water operators, board presidents, managers, and engineers from across the state coming to learn more about drinking water. TCEQ staff gave 26 presentations on topics ranging from drought preparedness planning to how to prepare for a TCEQ investigation.

One of the highlights of the Water Supply Division's Public Drinking Water conferences is the "TCEQ Technical Assistance Room" where staff is available in an informal setting to answer specific questions from the water system operators and managers. Both the TCEQ and the attendees learn from the exchanges, forging a stronger partnership and understanding of the challenges faced by all involved in the drinking water business. The TCEQ learned from assistance providers and the public water system recipients that direct, on-site assistance is one of the most effective ways of improving the viability of existing public water systems.

FINANCIAL, MANAGERIAL AND TECHNICAL: ASSISTANCE CONTRACT

In an effort to improve the viability of public drinking water and wastewater systems throughout Texas, TCEQ offers contracted assistance at no charge for systems needing help to solve FMT operational problems. Many of these water and wastewater systems may have the potential for regulatory compliance violations if corrections are not made. This contracted free utility assistance is known as the FMT Assistance contract.

The FMT Assistance contract currently resides with the Texas Rural Water Association (TRWA) and has a detailed list of 84 tasks that can be assigned to a contractor. In FY11-FY14, 1,449 FMT Assistance assignments were made. The assignments included:

- Financial assistance: Developing and updating tariffs, rate analysis, funding sources;
- Managerial assistance: A joint project of the FMT contract and Homeland Security Counter Terrorism focused on using FMT

contractors and security funding to help systems too small for required Vulnerability Assessments and Emergency Response Plans, but with an interest in developing them;

- CCN applications preparation and board training;
- Technical assistance: Disinfection byproducts, arsenic, sampling, water loss;
- FMT assessments: Drinking Water State Revolving Fund applicants and others assessments as needed;
- Consolidation assessments and assistance: To encourage and assist in regionalization and to facilitate consolidation of systems; and
- EPA Needs assessments.

FINANCIAL, MANAGERIAL AND TECHNICAL: ONSITE ASSISTANCE SUCCESS STORIES

During FY13-14, the TCEQ FMT Assistance contract was able to work with Mooreville Water Supply Corporation (WSC) through multiple referrals for onsite assistance. Over time and through communication and cooperation, Mooreville WSC has been greatly improved. This relationship between the TCEQ and the Mooreville WSC first began in the Technical Assistance room of the PDW Conference when the WSC board president shook hands and shared a smile with the FMT Assistance contract program manager. Mooreville WSC is a community water system that serves a population of approximately 135 thru 65 connections. With one well, Mooreville WSC faced several issues including decreased well production as well as ongoing water quality due to possible 'oil-film' infiltration from an unknown source. In addition the small WSC noted the need for upgrades to their distribution system and limited revenues. Soon after the system experienced well failure.

In September 2013, the FMT program assisted with a consolidation assessment to investigate a long term solution. Although the system had an interconnection with a neighboring system, it was temporary connection. FMT staff explored consolidation options with all neighboring water systems and attended a regional emergency planning meeting to locate a long term solution. In fall of 2013 through March 2014, during four separate onsite visits, the FMT program assisted the system with drought contingency planning, investigating funding options, identifying a funding agency, consultant evaluation guidance and assistance with completion of the funding application through the Texas Water Development Board. In March 2014, the Mooreville Water Supply Corporation was approved for grant funding in the amount of \$1,744,690 through the Texas Water Development Board Economically Distressed Areas Program to construct a twelve mile transmission line to purchase treated water from a neighboring

public water system to obtain a reliable source of water. In addition the funds will also be used to replace water meters to address water loss issues.

Another FMT Assistance contract success story resulted through multiple referrals for onsite assistance. Once again, over time and through continued communication and cooperation, Harris County Fresh Water Supply District has been greatly improved. The relationship between the TCEQ and the Harris County Fresh Water Supply District first began when a concerned resident of the district called the TCEQ and was connected to the FMT Assistance contract program manager. In September 2012, FMT staff provided board training on rates and financial integrity. In addition FMT staff contacted the City of Baytown and BAWA to address the past due amount. FMT staff advised Harris County FWSD 1A board members of the default situation as well as possibility to make payment arrangements. The Harris County FWSD 1A board subsequently made payment arrangements. In July 2013, FMT staff provided additional board training assistance including budgeting and rate study assistance and specific training in “Board Responsibilities, Accountability, & Trustworthiness.” In addition the Harris County FWSD 1A worked to resolve the board member eligibility requirements. The successful board training of the Harris County FWSD 1A led to an improved rate structure, payment of past due bill to the City of Baytown, and improved customer relations.

FINANCIAL, MANAGERIAL AND TECHNICAL: CONSOLIDATION ASSESSMENT SUCCESS STORY

In 2013, FMT staff provided assistance to investor owned utility Farrar Water Supply Corporation. The system serves approximately 35 connections. Owner of the system expressed continued struggles to operate and manage the system and indicated the system did not generate the needed revenues to pay for required sampling or hire a licensed operator. From February to May 2013 FMT staff provided onsite assistance to address compliance issues ranging from chemical sampling, lack of licensed operator, operating reports, and rates. During this time the system owner expressed interest in no longer operating or owning the system. FMT staff presented the consolidation opportunity to several utilities who declined the opportunity except for Lass Utility. A meeting was facilitated between the Farrar WSC and Lass Utility owner. During the meeting they discussed the details of the proposed consolidation and FMT staff answered questions regarding the process. During the meeting both parties reached an agreement and expressed a commitment to consolidate as soon as possible. As part of the agreement Lass Utility will operate, maintain, and manage the system until completion and approval of the Sale, Transfer, or Merger application.

FINANCIAL, MANAGERIAL AND TECHNICAL: DROUGHT

As a result of drought, the TCEQ FMT Assistance contract has increased assignments to the FMT contractors to help public water systems investigate alternate water sources, implement drought contingency and water conservation plans and address water loss.

FINANCIAL, MANAGERIAL AND TECHNICAL: UTILITY DROUGHT MANAGEMENT WORKSHOPS

In addition to the emergency planning workshops, to increase the capacity development of public water systems impacted by drought, TCEQ staff and their FMT contractors put on four Utility Drought Management Workshops during FY12-14 in Round Rock, Abilene, Wichita Falls, and Llano. Participants included water utility managers, operators, consultants, funding agencies and city council and board members. The underlying theme of the workshops was the importance of planning and communication for managing drought. Specific topics included state drought conditions, available assistance, utility rate setting, funding sources, customer relations, what TCEQ considers during compliance inspections and utilities' board member responsibilities. Attendees received operator training credit for each seminar.

EMERGENCY DRINKING WATER TASK FORCE: DROUGHT ASSISTANCE

The Emergency Disaster Proclamation by the Governor prompted the implementation of Annex A of the State of Texas Drought Preparedness Plan. To help implement the plan, formation of the Emergency Drinking Water Task Force (Task Force) was initiated. The Task Force is chaired by the Texas Division of Emergency Management and TCEQ. Other members of the Task Force include the Texas Department of Agriculture and the TWDB. The TCEQ monitors public water systems and provides targeted outreach for water systems experiencing critical conditions. Public Water Systems that self-report a water supply of 180 days or less are designated as High Priority Drought systems.

The TCEQ's Water Supply Division (WSD) assists drought affected public water systems by expediting reviews for plans and specifications, alternative technology exceptions, technical assistance, and bond applications for water related projects. These projects include drilling additional wells, extending surface water intakes to deeper waters, and interconnections with adjacent water systems. The TCEQ's WSD also coordinates emergency assistance to public water systems with other state agencies on a weekly basis through the Emergency Drinking Water Task Force (Task Force). The Task Force collaboratively provides technical assistance, identify alternative water sources, and identify funding sources for drought stricken systems.

The primary role of the Task Force is to support the local jurisdictions' efforts to secure a reliable source of drinking water, including: providing technical assistance through FMT Assistance contract and TCEQ staff phone calls, identifying alternative sources of water, identifying funding sources, identifying and implementing alternate water conservation measures, facilitating the funding application processes, and expediting permitting processes. Throughout FY12 to present, the Task Force meets weekly to discuss the above issues. The Task Force primarily concentrated on dealing with public water systems self-reporting less than 180 days of water. Task Force members attended multiple meetings with entities experiencing serious drought related issues. These entities included, but were not limited to, the City of Robert Lee, City of Groesbeck, City of Odessa, White River Municipal Water District, Millersview-Doole Water Supply Corporation, City of Lawn, City of Florence and Pendleton Harbor Utility Corporation. The Task Force has provided drought assistance to over a hundred entities since the drought began in 2010.

EMERGENCY DRINKING WATER TASK FORCE: SUCCESS STORIES

White River Municipal Water District (MWD) is a wholesale public water system that serves approximately 12,000 customers in Crosbyton, Garza and Dickens Counties in West Texas. Prior to the drought, the system relied on surface water from White River Lake. As the drought worsened, the lake dropped to zero percent capacity. During the summer of 2012, multiple entities served by the district applied for disaster relief funding through the Texas Department of Agriculture to develop a well field. By October 2013, eleven wells were operational. Shortly after this, the district was no longer able to pump water from White River Lake. Due to the cooperation between cities, counties and local council of governments, these 12,000 residents continue to have drinking water.

The Pendleton Utility Corporation was a small investor owned utility that experienced severe water supply shortages during the fall of 2011. On September 30, 2011 the owners of Pendleton Utility Corporation called TCEQ to report a 45 day supply of water remaining at their intake in the Toledo Bend Reservoir. The owners had implemented extreme measures to maintain water supply and were working on several contingency plans to deal with the loss of water supply at their intake. In previous years the owners had attempted to sell the water system with no luck and even tried unsuccessfully to give it away.

After renewed attempts to give the system away failed, the owners notified the TCEQ of their intent to abandon the system. The TCEQ notified the Pendleton Harbor Home Owners Association (HOA) to discuss taking over the water system. Because they understood the seriousness of the situation, the HOA directors reluctantly agreed to take over the water system. The TCEQ worked through its Environmental Assistance division's EnvironMentor and WSD's FMT Assistance programs to help coordinate

the formation of a WSC and the transfer of the CCN from Pendleton Utility Corporation to the newly formed Pendleton Harbor water system. Through a grant provided by the Texas Department of Agriculture the newly formed Pendleton Harbor water system is now providing water service through an interconnection with the G-M Water Supply Corporation (G-M) of Hemphill, Texas.

EMERGENCY DRINKING WATER TASK FORCE: FINDING ALTERNATE WATER SOURCES

Lower Colorado River Authority Spicewood Beach WSC is a retail public water system that serves approximately 1,300 customers in Burnet County in Central Texas. Prior to the drought, the system relied on groundwater wells located near Lake Travis west of Austin. Due to declining lake levels the water level in the wells began declining significantly in 2011. The system contacted TCEQ for assistance in early 2012. Two of their wells became nonoperational and their sole source well was struggling to meet demands. The system implemented stringent water conservation measures and began primarily relying on potable water hauled using TCEQ approved water haulers. Disaster relief funding from TDA was awarded to the system to construct a surface water treatment plant and drill two wells considered groundwater under the influence of surface water. By June 2014 the systems new surface water treatment plant and two wells were operational and the system was no longer hauling water to supplement available water supplies.

In order to find alternate water sources, there has been a growing interest in desalination; the TCEQ has taken action to facilitate streamlined approval for these facilities. In 2013, TCEQ implemented a new process that allows the use of computer modeling as an alternative to on-site pilot studies for the approval of groundwater desalination systems. TCEQ has also initiated rulemaking to amend TCEQ rules to streamline the public water system treatment plan construction approval process for brackish water desalination.

In addition, the TCEQ is currently reviewing a number of innovative water supply projects. The ongoing drought conditions across Texas have required public water systems to evaluate using raw water sources that have not been considered in the past. One of the alternate raw water sources is not just reclaiming effluent from municipal wastewater treatment plants (WWTP) for non-potable uses such as irrigation and industrial uses, but providing additional treatment to remove chemical contaminants and the higher concentrations of microbiological contaminants found in WWTP effluents so that it is safe for human consumption.

The City of Wichita Falls was granted temporary conditional approval to send Direct Potable Reuse (DPR) treated water to their customers

beginning in July 2014. The surface water reservoirs that the City relies on continue to decline as the drought for this region of the state continues. TCEQ staff in the Water Supply Division and from the Abilene Regional Office provided significant technical assistance to the City during the review process of the City's Temporary Emergency DPR Project. Technical assistance included on-site trouble-shooting of the City's membrane treatment plant, assistance with developing Standard Operating Procedures for the DPR project, and real-time feedback during the second full-scale verification test.

EMERGENCY DRINKING WATER TASK FORCE DROUGHT WORKSHOPS

TCEQ hosted six drought emergency planning workshops across the state throughout FY12-14 to provide local government officials, board members and water system operator's information and tools to prevent and mitigate water outages.

Workshop presentation topics included: the status and severity of the continuing drought in Texas, an explanation of emergency processes and the role of different agencies, a discussion of the Task Force's role and work, available tools and resources including, the Financial, Managerial and Technical (FMT) Assistance contract and related onsite follow-up assistance, the TCEQ EnviroMentor Program, funding agencies, the Texas Water Infrastructure Coordination Committee (TWICC), instruction on how to develop an emergency plan including interconnections, drilling emergency wells, and conservation. The drought emergency planning workshops featured representation from TCEQ, TDEM, TWDB, TWICC, the Texas Department of Agriculture (TDA), local river authorities and ground water conservation districts had booths to provide additional information before and after the presentations.

OPERATOR CERTIFICATION PROGRAM

During fiscal years 2012 and 2013, the TCEQ continued to provide public water system operator licensing examinations, approve water system operator training, and issue and renew public water system operator licenses. As of August 31, 2014, there were 16,317 licensed water operators in Texas. For the period September 1, 2011 through August 31, 2014, the TCEQ has administered 15,834 water operator license exams, has issued 6,148 new water operator licenses, and has renewed 11,195 water operator licenses.

IMPROVING THE VIABILITY OF EXISTING SYSTEMS: OTHER ACTIVITIES

Plans and specifications for new public water systems or system expansion and alterations are required to be submitted for review and approval. This review assists systems in making sure they meet applicable rules and regulations. During FY12-FY14, TCEQ staff received 5,715 and reviewed a total of 5,246 plans.

The TCEQ manages the Texas Optimization Program, which is a voluntary program designed to enhance the overall operating ability of any existing utility and the performance of that utility's surface water treatment plants without major capital improvements. The goal of the program is to reduce the risk of waterborne disease by reducing the number of pathogenic organisms that pass through a treatment plant. The program provides in-depth assistance, training, and recognition to participating entities. The TCEQ is also working to enhance optimization of groundwater systems through the Area-Wide Optimization Program.

Each year, the TCEQ provides managerial and technical support to public water systems by contracting with a vendor to collect water samples for chemical analysis from public water systems. During the past three fiscal years, 48,321 samples were collected in FY12, there were 47,951 samples were collected in FY13, and 55,516 samples collected in FY14. The TCEQ provides public water systems with notices of violations and information on notification; sampling; and other requirements based on the water sample results. Information from source water assessments can be used to assist existing public water systems by helping to identify systems that need additional or reduced monitoring based on potential sources of contamination.

The TCEQ developed model drought contingency plans for small systems. The plans are available on the TCEQ's website to assist public water systems in meeting the drought contingency plan submittal requirements. The TCEQ provides assistance across the state in drought plan preparation and enforcement and reviews drought and water conservation plans for compliance.

The TCEQ assists public water systems in meeting the requirement to provide customers with Consumer Confidence Reports (CCRs) by providing training, generating the reports and a template. This report allows systems to make their customers aware of the quality of their drinking water. In the past, the TCEQ generated the complete report for systems and provided them by mail. The TCEQ now requests that systems access and update the CCRs via the internet. TDWW has the capability to provide each public water system with their customer base. The public water system adds information to the TDWW generated report and then delivers the CCR to their customers.

The TCEQ encourages and provides assistance to public water systems to help them come into compliance. If enforcement action is necessary, it may result in a compliance schedule. Failure to comply may result in penalties, temporary management, or receivership to ensure compliance.

ASSISTING NONVIABLE SYSTEMS IN RESTRUCTURING

The fourth TCEQ Capacity Development Program objective is assisting nonviable systems in restructuring as required in Senate Bill 1 enacted during the 75th Texas Legislative session in 1997. The TCEQ offers assistance in restructuring noncompliant, nonviable systems through regionalization and consolidation. The EPA refers to regionalization as system partnership solutions ranging from informal cooperation, such as mentoring programs, to ownership transfer with managerial and/or physical consolidation. The TCEQ defines consolidation as the physical combination of the operations and/or physical plants of two or more existing or proposed water and wastewater systems. The goals of regionalization and consolidation are to achieve the best service at reasonable rates that will ensure that the system is maintained for the long term.

TCEQ offers free consolidation assessments through the FMT Assistance contract for officials or owners of systems who may be looking into the possibility of getting out of the water or wastewater business by consolidating their system with a nearby system. In those circumstances, TCEQ will assign the contractor to assess the feasibility of two or more systems working together, possibly to the point of a merger. If consolidation is determined to be feasible and recommended, TCEQ will then assign the contractor to assist the parties throughout the process to completion.

At the request of a public water system or on the agency's own initiative, the TCEQ can conduct a FMT Assistance contract consolidation assessment to determine whether neighboring water systems should consider a partnership. To conduct a consolidation assessment, the TCEQ staff or its contractor contacts the public water systems to determine if a partnership is feasible and if the systems can reach an agreement on how to structure the partnership since the TCEQ cannot compel consolidation. First, it is determined if the entities are interested in participating in examining regionalization or restructuring options. If there is interest, the TCEQ or the contractors will facilitate community meetings to identify funding issues and possible solutions, as well as assist with any permits or other approvals necessary.

In some instances, nonviable water systems are encouraged to restructure or regionalize through enforcement actions. This action facilitated the use of receiverships; authorized the requirement that public water systems and utilities have business plans; and enhanced TCEQ authority to order system interconnects, place a utility or public water system under supervision, or appoint a temporary manager to operate troubled or failing water systems and utilities. After sale or transfer, the system benefits from improved FMT resources.

In conjunction with the Office of the Attorney General of Texas, (OAG) the TCEQ supervises 21 utilities at the close of FY14 that have been court-ordered into receivership as part of a TCEQ enforcement action for drinking water or wastewater violations. Since the close of FY11, 3 public water system receivership cases have been closed because new owner of the previously abandoned systems were located and approved. The TCEQ staff and the FMT Assistance contractors provided worked closely with these systems to help bring them out of receivership.

AT-RISK SYSTEMS

In FY14, the TCEQ continues working with “At Risk Systems” to track and address water and wastewater systems that are at risk of failing, and to assist the systems before they require a referral for the appointment of a receiver. The workgroup consists of TCEQ staff from the Water Supply, Water Quality, Enforcement, Litigation, Environmental Law, and Field Operations Support divisions and the OAG.

THE “AT-RISK” PROJECT

When a water system fails, it is often due to financial or managerial weaknesses that culminate in technical violations which are difficult to overcome without significant assistance, funding, enforcement actions and restructuring. If the water system is a community water system, failure can pose a serious threat to public health because the customers are left without a source of drinking water and water for sanitation. For investor-owned utilities, the TCEQ has the enforcement mechanism through the Water Code to appoint a temporary manager or receiver to keep the water system running while looking for a permanent solution. This availability is one of the tools available to help assist nonviable public water systems in restructuring, which is one of the capacity development program objectives. The use of a temporary manager or receiver is very valuable but extremely resource intensive and is used only when necessary. In an attempt to prevent water system failures and subsequent abandonment of such systems, the TCEQ has developed an “at risk” workgroup to serve as a mechanism for identifying potential nonviable investor-owned water systems, assessing the FMT capabilities of these existing systems, and providing, as needed, FMT consolidation assessments and assistance.

RULES AND REGULATIONS

The TCEQ's Water Supply Division identified several rulemaking projects as discussed in the following paragraphs to implement legislative acts from the 82nd Legislature, 2011, Regular Session, and the 83rd Legislature, 2013, Regular Session.

HB 2694 (4.23, 5.01, 6.04 and Art. 9), HB 3002, SB 1361: Aquaculture Definition, Water Fee Repealer, Water District Financial Reporting, and Water Rate Notice implemented legislation to: reflect the increase to certain exemption thresholds from \$100,000 to \$250,000 for water districts filing financial reports in lieu of full audits; add "Aquaculture" to the definition of "Agriculture" and to remove aquaculture from the definition of "Industrial Use;" repeal the TCEQ's Certificates of Public Convenience and Necessity (CCN) and rate change application filing fees; and, address water rate notice issues. This rulemaking was effective on August 30, 2012.

HB 805 and Federal Ground Water Rule, Total Organic Carbon Rule, and EPA Method 334.0 implemented legislation relating to emergency preparedness plans while also making the state's rule consistent with the federal Ground Water Rule and the federal Total Organic Carbon Rule and address an inconsistency with federal rules that resulted when the United States Environmental Protection Agency adopted Method 334.0 for continuous chlorine residual analyzers. This rulemaking was effective on November 8, 2012.

HB 679, HB 1901, SB 18, SB 512, SB 573, SB 914, and SB 1234: Utilities and Districts implemented legislation that: allowed a district's board to grant a contract manager authority to approve change orders that increase or decrease the contract amount by \$50,000 or less; provided an exemption from the executive director's approval for bonds issued by a public utility agency; further limited the eminent domain power of a Municipal Utility District outside of its boundaries; redefined the qualifications of supervisors of a Fresh Water Supply District; granted a CCN to a retail public utility within the corporate limits of the municipality or its extraterritorial jurisdiction without the municipality's consent under certain conditions if the municipality does not consent to the inclusion of the CCN before the 180th day after a landowner or retail public utility has formally requested service from the municipality; provided additional criteria which the TCEQ shall consider before granting the CCN to the retail public utility; specified that the TCEQ may not extend a municipality's CCN beyond its extraterritorial jurisdiction if a landowner elects to opt-out of a CCN and specified the counties in which the opt-out provision does not apply; stipulated that a CCN applicant that has land removed from the requested area because a landowner elected to opt-out may not be required to provide service to the removed land for any reason; changed the requirements for when the TCEQ may revoke a CCN; shortened the review period for certain types of expedited revocation requests; created a process allowing a landowner owning at least a 25-acre tract to request an expedited release from a CCN in certain counties; established the criteria for requesting an expedited release of a CCN; allowed an exemption from executive director approval for bonds issued by a conservation and reclamation district located in at least three counties that has the rights,

powers, privileges, and functions applicable to a river authority; and to allow a municipal management district to include within its creation petition a descriptive name followed by the phrase "improvement district" and verifiable landmarks in its boundary description. This rulemaking was effective on April 19, 2013.

HB 3372, HB 3391, and SB 1073: Rainwater implemented legislation that: allowed a rainwater harvesting system that is connected to a public water system to be used for indoor potable purposes; required that a person who intends to connect an affected rainwater harvesting system to a public water system for potable purposes give written notice to the municipality or the owner or operator of the public water system; and, required that at each residence or facility where water from a rainwater harvesting system is used for potable purposes and where there is a connection to a public water system, the public water system must ensure that the rainwater harvesting system is installed and maintained by a master plumber or journeyman plumber licensed by the Texas State Board of Plumbing Examiners and who holds a Water Supply Protection Specialist endorsement issued by the Texas State Board of Plumbing Examiners. This rulemaking was effective on September 12, 2013.

HB 2781: Rainwater Harvesting implemented legislative changes to the Texas Health and Safety Code (THSC), §341.042 related to structures that are connected to a public water system and have a rainwater harvesting system. Some of the changes required by HB 2781 were implemented in another rulemaking which was in progress when HB 2781 passed. This rulemaking was effective on February 20, 2014.

HB 1814, §2 (2011) and HB 252, HB 1973, and SB 1086, §1 and §2 (2013): Water Shortage Reporting and Fire Flow implemented legislation that required: retail public utilities and the system(s) that provides the utility's wholesale water service to provide the commission a report on the status of their water supply once the supply is less than 180 days; and a utility to maintain a sufficient water flow and pressure to fire hydrants located in the municipality or the municipality's extraterritorial jurisdiction for purposes of emergency fire suppression. This rulemaking was effective on September 11, 2014.

HB 738, HB 1050, HB 1461, HB 2704, and SB 902: Utilities and Districts will implement the statutory changes from those bills to reflect the legislative changes to the powers, duties, and administration of water districts, specifically in the areas of: municipal utility district creation provisions; contracting; issuance of bonds and bond anticipation notes; audit filings; impact fees; and, recreational facilities. Additionally, this rulemaking will require retail public utilities notify their customers of water loss reported in the water loss audit filed with the Texas Water

Development Board under TWC, §16.0121. As of September 25, 2014, this rulemaking is an on-going project.

HB 1600 and SB 567: Public Utility Commission Transfer. This future rulemaking will implement the majority of the rule changes necessary due to the transfer of the utilities and rates program from the TCEQ to the Public Utility Commission, effective September 1, 2014. Once the Public Utility Commission has adopted its remaining utilities and rates program rules, the TCEQ will begin amending its existing rules

HB 1600, §2.96, and SB 567, §§1, 4, 95, and 96; Federal Revisions; and Staff-Initiated Rule Efficiencies: This rulemaking proposes to remove one requirement within its rules as the TCEQ no longer has jurisdiction over CCNs following the transfer of the utilities and rates program from the TCEQ to the Public Utility Commission, effective September 1, 2014. Additionally, this rulemaking will address federal changes to the lead and Escherichia Coli thresholds while also proposing to provide clarification on and streamlining of existing state rules for desalination, chloramination and other drinking water matters. The majority of the rule changes to implement HB 1600 and SB 567 will occur under another rulemaking. As of September 25, 2014, this rulemaking is an on-going project.

ONGOING COORDINATION IN SUPPORT OF CAPACITY DEVELOPMENT

FUNDING COORDINATION: TEXAS WATER INFRASTRUCTURE COORDINATION COMMITTEE (TWICC)

The Texas Water Infrastructure Coordination Committee (TWICC) is comprised of state and federal funding agencies, technical assistance providers, water and waste water trade organizations and regulatory agencies. The purpose of the TWICC is to identify and develop solutions to water and wastewater infrastructure compliance issues and to seek affordable, sustainable and innovative funding strategies for the protection of public health and the efficient use of government resources in Texas. Through the coordination efforts of the TWICC, our common goals are to spend all state and federal funds allocated to Texas each year, provide a forum for all funding agencies and regulators to communicate with and educate each other regarding funding objectives and explore joint funding opportunities in a timely manner, create a more efficient process to prevent duplicative funding and provide a faster turn-around of applications for funding, share knowledge of FMT capabilities and capacity development potential for all systems and leverage shared resources effectively to promote reasonable and cost-effective projects, coordinate funding decisions to help satisfy overlapping missions, discuss and potentially unify funding criteria, and to coordinate funding packages for water and wastewater systems.

Field assistance providers, including the TCEQ FMT Assistance contractors, work on-site with rural communities and small water system utilities at no charge to the community or the water system to: improve environmental and community health, develop sustainable water and wastewater facilities, increase the capability of local leaders to address current and future water system needs, gain and stay in compliance with federal and state utility regulations, and secure financing for capital and improvement project funding.

TWICC membership includes: the Border Environmental Cooperation Commission, Community Resource Group, Secretary of State, TCEQ, Texas Department of Rural Affairs, TWDB, United States Department of Agriculture – Rural Development, Texas Rural Water Association, EPA, trade Associations, and other interested entities.

SMALL BUSINESS AND LOCAL GOVERNMENT ASSISTANCE: ASSET MANAGEMENT WORKSHOPS

During FY12-14, the TCEQ's Small Business and Local Government Assistance (SBLGA) section has worked to provide Asset Management planning assistance to water systems culminating in a series of five Asset Management workshops across the state. The purpose of these workshops is to encourage systems to plan, prevent, and prepare for potential system failures. Concepts such as maintenance, measuring water levels, developing best management practices, and identifying alternate source options are presented to an audience consisting of county judges, city managers, mayors, and operators within 150 miles of each workshop location.

The TCEQ provides outreach through numerous presentations at trade organizations, conferences and training programs. The groups receiving this service include the American Water Works Association, Texas Water Utility Association, Texas Rural Water Association, National Association of Regulatory Utility Commissioners, Independent Water and Sewer Companies of Texas, Texas Water Conservation Association, TCEQ's Drinking Water Advisory Work Group, Association of State Drinking Water Administrators, and the Association of Water Board Directors.

CAPACITY DEVELOPMENT: THE ULTIMATE GOAL

The 1996 reauthorization/Amendments of the federal Safe Water Drinking Act 1420 (c)(3) require this report on the achievements of the Capacity Development Program every three years. The ultimate goal of the Capacity Development Program is to ensure that our current capacity to deliver safe, reliable water is not only maintained, but is expanded to meet our future needs. The Capacity Development Program focuses support on public water systems, as they strive to maintain and expand their financial, managerial, and technical capacity, recognizing that all three types of capacity are vital.