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Report Requirements

he TCEQ's Biennial Report to the Legislature is published every December prior to a regular legislative session, as required by the Texas Water Code, Section 5.178. This submission to the 85th Legislature also contains other information and reports that are required by statute:

- Description of cooperative research efforts, page 22 [Water Code 5.1193]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).
- Waste exchange information, page 38 [Texas Health and Safety Code Section 361.0219(c)]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).
- Revenue spending from solid waste disposal and transportation fees, page 45 [THSC 361.014(a) and (b)]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).
- Assessment of complaints received, page 47 [Water Code Section] 5.1773]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).
- Permit time-frame reduction process, page 54 [Government Code, Section 2005.007]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).
- Office of Public Interest Counsel evaluation of performance measures, page 62 [Water Code Section 5.2725]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).
- Study on water basins without a watermaster, page 75 [Water Code Sections 11.326(g) and (h)]. This information was last published in December 2014 in the Biennial Report to the 84th Legislature (SFR-57/14).

Agency Mission and Philosophy

Mission

The Texas Commission on Environmental Quality strives to protect our state's public health and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

Philosophy

To accomplish our mission, we will:

- base decisions on the law, common sense, sound science, and fiscal responsibility;
- ensure that regulations are necessary, effective, and current;
- apply regulations clearly and consistently;
- ensure consistent, just, and timely enforcement when environmental laws are violated;
- ensure meaningful public participation in the decision-making process;
- promote and foster voluntary compliance with environmental laws and provide flexibility in achieving environmental goals; and
- hire, develop, and retain a high-quality, diverse workforce.

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From the Commission

Our Greatest Assets

The TCEQ's assets include 2,710 employees, 788,535 square feet under roof at headquarters, and 16 offices around the state; an air canister sample lab and a new water lab; almost 400 vehicles; and much more.

These are much more than numbers. These resources, and the employees who use them, enable the TCEQ to successfully pursue its mission of protecting our state's public health and natural resources consistent with sustainable economic development.

We commissioners are always impressed and often amazed by the knowledge, and professionalism and dedication of the people that make up the TCEQ. They care deeply about their contribution to the State of Texas, its environment, and its citizens. They continue to successfully serve our growing population without an increase in staff. We wish to express our gratitude for their hard work and let them know their contributions are recognized.

Air Quality Improving

Thanks to the largest air toxics monitoring network in the United States, plus the support of the Legislature through programs like the Texas Emissions Reduction Program, air quality continues to improve in most areas of the state. From 2000 to 2015, large stationary source NO_X emissions dropped 64 percent, while ozone levels decreased 28 percent. During this period, Texas population grew by almost 31 percent.

Water Planning Still a Priority

While most of the state was blessed with ample rainfall since 2015, the TCEQ continued to work with water systems to prepare for future droughts, and to ensure water quality. Addition of a Brazos River watermaster allows the agency to better engage water-right holders to conserve water in times of drought.

RESTORE Funding

Commissioner Baker was appointed by Gov. Abbott to oversee the implementation of the RESTORE program, distributing funding made available from the Deepwater Horizon tragedy. There will be more than \$550 million to help our coastal ecosystem and the Texas economy.

Actions Based on Sound Science

Gov. Abbott appointed Jon Niermann as commissioner on Oct. 1, 2015. Commissioner Niermann brings a wealth of knowledge of environmental issues. He represented the TCEQ at the state Attorney General's office in both enforcement and defense cases, including a number of cases against the U.S. Environmental Protection Agency.

Where it is supported by sound science and common sense, the TCEQ will continue to oppose the EPA's unnecessary and unlawful regulations.

Texans can be assured the TCEQ is taking these steps, and many more, to preserve the Texas environment and the health of Texas' growing population for generations to come.

As our statewide conservation campaign states:

Let's Take Care of Texas—it's the only one we've got.

Toby Baker

Commissioner

Bryan W. Shaw, Ph.D., P.E.

Buyan W. Shear

Chairman

Jon Niermann

Commissioner

CHAPTER ONE

Agency Highlights

s the state's environmental agency, the Texas Commission on Environmental Quality is engaged with every region of the state. Agency employees in the Austin headquarters and 16 field offices are immersed every day in a wide spectrum of issues related to air and water quality, water supply, and waste management. The agency is also active in promoting pollution prevention and educating Texans about protecting the environment.

During the fiscal years of 2015 and 2016, the TCEQ found itself dealing with an ongoing drought, which was resolved by flooding; a new public-health challenge, in the Ebola outbreak; and more stringent federal air standards. However, the agency continues to experience successes in air quality, including innovative uses of state-of-the-art technology. In addition, the agency has a new commissioner and is working to implement the RESTORE Act, which will result in much-needed funding for the Texas coast following the massive Deepwater Horizon oil spill.

All of these activities are occurring against a backdrop of the state's fast-growing population and expanding economy. The TCEQ has responded with initiatives adapted to changing times and challenges, while continuing its dedication to protecting public health and the state's natural resources.

New Commissioner

Gov. Greg Abbott appointed Jon Niermann to the TCEQ's three-member panel, with Niermann assuming his duties on Oct. 1, 2015. His six-year term expires in 2021. Niermann came to the TCEQ after nearly seven years with the Texas Attorney General's Office, where he served as chief of the Environmental Protection Division (since 2012). Before that, Niermann worked as an environmental attorney with the law firm of Baker Botts in Austin. In these various roles, Niermann worked closely with the TCEQ, among other agencies. His responsibilities included enforcement actions, permitting issues, rulemaking, and rule challenges, such as of unnecessary and unlawful regulations from the EPA.

Restoring Texas' Coast

Through the federal RESTORE Act, more than \$550 million in grants will be available to Texas for ecosystem restoration, economic recovery, and the promotion of tourism in the state's Gulf Coast region. These federal grant programs are financed by the administrative and civil penalties assessed against the parties responsible for the 2010 Deepwater Horizon oil spill in the Gulf of Mexico, including BP. Texas will also compete with the other four Gulf states for an additional \$1.6 billion in grants. The RESTORE grant funds will be available to Texas through 2033. On behalf of Commissioner Toby Baker, who serves as Texas' representative on the RESTORE Council, which oversees implementation of the act, the TCEQ has been developing a program for allocating RESTORE Act funds in the state and to implement and manage the various federal grant programs in Texas that were created by the RESTORE Act.

To date, in collaboration with the Governor's Office, Commissioner Baker and TCEQ staff have moved forward in implementing the following initiatives under the RESTORE Act:

- Selected two centers of excellence (in 2015): Texas
 OneGulf, a consortium led by Texas A&M University Corpus Christi; and Subsea Systems Institute, a
 consortium led by the University of Houston.
- Participated in the process to review projects submitted by RESTORE Council members for funding under the comprehensive component.
- Developed federal grant applications for submission to the RESTORE Council for four Texas projects selected for funding under the comprehensive component.
- Posted a request for project application submissions to be funded under the direct component.
- Submitted planning-assistance grant requests under two components of the RESTORE Act: direct and spill impact.

- Established a website, www.restorethetexascoast.org, to present information on RESTORE-related activities.
- Conducted listening sessions and grant workshops throughout the Texas coastal region (in late 2015) to receive information from the public on priorities and to offer information on submitting applications, respectively.

These activities will continue and expand as necessary to ensure that the state has a robust grant program prepared to maximize the use of RESTORE funds.

TCEQ Responds to Historic Flooding

Major droughts are often broken by heavy floods. Texas, which suffered one of the worst droughts in its history from 2009 to 2014, was no exception. When muchneeded rain started to refill reservoirs in the spring of 2015, it just kept coming and coming, and soon turned into a series of devastating floods that continued into the summer of 2016.

During the severe floods of this past year, numerous dams in Texas saw their emergency spillways engaged at one time or another. To a dam engineer, a properly engaged spillway is an amazing engineering achievement, but to a person living nearby, water flowing over a spillway can be terrifying. To help reassure a concerned public, TCEQ Dam Safety Program engineers worked around the clock to respond to concerns about dams and to provide dam owners with technical assistance and guidance. They also informed public officials that most dams were working as designed. TCEQ engineers investigated and tracked dams affected by flooding to ensure that appropriate safety measures were in place and that dam repairs were addressed.

In response to the widespread flooding, the TCEQ also deployed staff around the state to help with flood response and recovery efforts. As a member of the State Emergency Management Council, the TCEQ was activated eight times to serve around the clock at the State Operations Center in Austin under the state's Incident Command System Infrastructure Branch, for a total of 60 days.

During this time, the TCEQ worked with public drinking water facilities to determine issues, provide technical assistance, track boil-water notices, and ensure that safe drinking water was available to all citizens affected by flooding. The TCEQ also sent members of its Disaster Response Strike Team into the flood-affected areas as the

water was receding to conduct site visits at industrial facilities that handle hazardous substances, to help determine the integrity of these facilities.

One of the most challenging and critical parts of the flood-recovery process is the proper management of the enormous amount of debris left behind in the aftermath of floods. This debris contains wood, household hazardous waste, white goods, and other hazardous materials. All of the waste must be sorted for proper disposal. TCEQ staff conducted outreach to county emergency-management contacts, county judges, mayors, and other local governmental officials to offer assistance and guidance with flood-related activities, such as locating and constructing temporary debris-management sites, obtaining needed authorizations to burn vegetative debris, and appropriately recycling and disposing of waste. The TCEQ also provided the authorizations for temporary debris-management sites, which are a critical component in the Federal Emergency Management Agency reimbursement process for local governments.

Improving Water Planning through Innovation

With Texas' population expected to reach almost 46 million by 2060, and because of the recent long-lasting drought, Texans have had to plan far in advance to sustain communities, businesses, industries, and the environment. Because of these challenges—especially the drought—public water systems have begun to turn to less conventional sources of water.

Desalination continues to gain attention as communities seek to treat brackish water. For this reason, the TCEQ initiated rulemaking to streamline the approval process for public water systems wanting to conduct desalination of brackish water. In July 2015, the rules for desalination using either reverse osmosis or nanofiltration membranes became effective. The new rules offer a streamlined approach for the approval of desalination technologies by removing the requirement to submit an exception request, which is otherwise required when approving the use of innovative and alternative treatment technologies.

In addition, some communities have sought to make seawater potable. In response, the 84th Texas Legislature passed House Bills 2031 and 4097 in 2015 to provide an expedited permitting process related to seawater desalination. In 2016, the agency proposed rules to expedite permitting and related processes for the diversion of seawater and the discharge of both treated seawater and

waste resulting from the desalination process, as well as address seawater desalination for industrial purposes.

Other public water systems are exploring the option of direct potable reuse to meet their water needs. The TCEQ has reviewed and approved three such facilities. Texas was the first state to have a direct potable reuse system up and running. TCEQ engineers and scientists provide needed expertise to guide public water systems through the process of selecting innovative treatment technologies to ensure that the treated water is safe for human consumption.

Water Study Addresses Funding Needs

The Texas Legislature directed the TCEQ to conduct a study of the primary water account to address revenue short-falls. The TCEQ assembled a cross-agency team to assess water programs in terms of each program's workload, the revenues generated, and benefits to fee payers. Using that information, the agency identified the programs that generate insufficient revenue to meet their costs and developed a methodology to determine the level of rates that would generate revenue in proportion to the agency's workload and fee-payer benefits. The study will be available to the legislature in 2017 as it considers funding from water fees.

New Watermaster for the Brazos

A watermaster was appointed for the Brazos River Basin, including and below Possum Kingdom Lake, in 2015. After hosting a series of public meetings and setting up an advisory committee, the Brazos River Watermaster Program began operations on June 1, 2015. Since then, staff has communicated with 79 percent (738) of the waterrights holders, representing about 98.9 percent of the authorized diversions within the watermaster jurisdiction.

Toxicologist Recognized for Research on Chromium

In 2016, the Society of Toxicology, a distinguished international association, recognized two papers by TCEQ toxicologist Joseph "Kip" Haney as among the best of peer-reviewed risk-assessment research published in 2015. The society, which is dedicated to furthering the science of toxicology and has members in more than 60 countries, picked two of Haney's research papers on hexavalent chromium. Haney's studies, which were both published in

Regulatory Toxicology and Pharmacology, outline a new method for determining a safe level of hexavalent chromium in groundwater using data from laboratory animals. The good news for Texans and the rest of the country is that Haney's work confirms that the federal drinking water standard for chromium protects health.

Resolution of EPA Objections to Discharge Permits

The TCEQ successfully resolved several objections from the EPA—which could have hindered growth in parts of the state—in the implementation of the Texas Pollutant Discharge Elimination System Program. In response to EPA objections regarding permit requirements for pH and whole effluent toxicity, the TCEQ developed evaluation procedures for permit applications that would obviate future objections.

The TCEQ is currently working with the EPA regarding objections over temperature limitations in permits that authorize thermal discharges. The EPA agreed to withdraw its objections as the TCEQ works with stakeholders to establish temperature screening procedures. Since January 2015, the TCEQ has successfully resolved 105 EPA objections and continues to make progress toward the remainder. Timely renewal of permits for existing facilities ensures compliance with new water quality standards and updated regulations.

Air Quality Successes

The EPA sets National Ambient Air Quality Standards for six criteria pollutants: ozone, carbon monoxide (CO), sulfur dioxide (SO $_2$), nitrogen dioxide (NO $_2$), coarse and fine particulate matter (PM $_{10}$ and PM $_{2.5}$), and lead. After making huge strides in air quality in the past few decades, Texas meets the NAAQS levels for most criteria pollutants across the state, with the notable exception of ozone.

Ozone design values are the measurement used by the EPA to determine attainment or nonattainment for the federal ozone standard. The EPA calculates the ozone design values using a three-year rolling average. The 2015 ozone design values, based on 2013, 2014, and 2015 measurement data, are lower in many areas of the state. In fact, Dallas-Fort Worth, at 83 parts per billion, and Houston, at 80 ppb, are now both measuring attainment of the 1997 eight-hour ozone standard of 84 ppb. In addition, both areas are measuring attainment for the older, one-hour standard for peak levels of

ozone. However, both the Dallas-Fort Worth and Houston-Galveston-Brazoria areas are designated nonattainment for the 2008 eight-hour ozone NAAQS of 75 ppb.

In addition, the 2015 ozone levels show that many areas of Texas with monitors are meeting the more stringent 2015 eight-hour standard of 70 ppb. Despite a growing population, nearly all the nonattainment or near-nonattainment areas of the state have resumed their steady decrease in ozone.

From 2000 to 2015, the population in Texas increased significantly—mostly notably in the Houston area, with a 41 percent increase—while the eight-hour ozone levels improved as follows:

- Dallas-Fort Worth area: 19 percent ozone reduction
- Tyler-Longview-Marshall area: 33 percent ozone reduction
- Austin-Round Rock area: 24 percent ozone reduction
- Houston area: 29 percent ozone reduction
- Beaumont-Port Arthur area: 22 percent ozone reduction
- Corpus Christi area: 22 percent ozone reduction

Seven of the state's 13 areas that have had at least 15 years of regulatory ozone monitoring recorded their lowest or tied their lowest ozone values in 2015. The three areas that do not have at least 15 years of monitoring data—Waco, Killeen-Temple, and Amarillo—also recorded their lowest ozone values in 2015.

Expanding Use of Pollution- Detection Technology

The TCEQ continues to seek out and use innovative approaches to find solutions that result in reduced emissions. The agency now has 10 years of experience using optical gas-imaging cameras, a cutting-edge tool for pollution detection. This technology has proven to be highly effective in the detection of volatile organic compounds (VOCs), particulate matter, and thermal differences in multi-media applications. The optical gas-imaging camera allows staff to immediately communicate incidents of potential unauthorized emissions to facility personnel, fostering quick resolution. The camera is being used extensively by TCEQ staff throughout the state to address environmental issues that affect air quality.

Texas also contracts with a company to conduct aerial surveys. Additional ground-based assessments and investigations are conducted on sites where emissions are detected during the aerial surveys. In fiscal 2015, the TCEQ

transitioned from an infrequent, area-wide approach of conducting aerial optical gas-imaging camera surveys to a more targeted and more frequent approach, allowing TCEQ resources to go to areas where known problems exist and where potential impacts to the public are greater. In fiscal 2015 and 2016, five focused flyover events occurred throughout the Eagle Ford Shale region. As a result, more than 200 follow-up investigations were conducted at facilities where emissions were spotted.

With the recent purchase of eight additional optical gas-imaging cameras made possible by funding from the 84th Texas Legislature, the TCEQ now possesses 20 of these cameras for use during investigations and environmental assessments, and for mobile monitoring applications. This increase allows the TCEQ to distribute the equipment throughout the state. The resulting convenience of access permits staff to respond more quickly to events wherever they occur. While these cameras are primarily used with oil and natural-gas sites, the TCEQ continues to explore additional uses for the cameras at chemical plants, landfills, truck loading and unloading facilities, and other sources of VOC and particulate matter, including metal-recycling operations.

To maximize the effectiveness of the optical gasimaging camera, the TCEQ dramatically increased staff development. In fiscal 2015, the agency implemented an intensive, specialized OGIC Certification and Recertification Program that meets and exceeds the industry standard in order to train new staff and to keep experienced staff up-to-date on the latest TCEQ protocols and technological advancements in thermography. The TCEQ OGIC Training Program certified 76 operators throughout fiscal years 2015 and 2016, saving the agency more than \$100,000 in training costs. The TCEQ also continues to invest in external training for its more advanced technical experts, who share their knowledge with other TCEQ staff.

The camera is only one tool used to assist the agency in its investigations, monitoring, emergency response, and special projects. The TCEQ has also invested in other handheld monitoring equipment, such as toxic-vapor analyzers and photoionization detectors, which investigative staff use to screen for possible environmental impacts. As monitoring and testing technology continues to advance, the TCEQ has implemented and strengthened processes in which new technologies are continually examined and existing equipment is continually reassessed, in order to ensure that the agency takes advantage of technology that best suits its needs and most effectively uses its resources.

Audit Program Enhances Enforcement Efforts

The TCEQ's traditional enforcement efforts are enhanced by voluntary environmental self-audits conducted at facilities under the Texas Environmental, Health, and Safety Audit Privilege Act. Texas is one of several states that has an audit program in addition to the EPA policy on selfdisclosure. This legislation encourages businesses and governments to perform comprehensive assessments of compliance with environmental laws, regulations, and permits for their own facilities. The audit act provides two incentives for conducting systematic voluntary evaluations of compliance with environmental laws and regulations: a limited evidentiary privilege and immunity from penalties. Organizations that participate in the audit act are required to notify the TCEQ of their intent to self-audit and then fully disclose and resolve violations identified by the audit. In fiscal years 2015 and 2016, the TCEQ received 3,690 notices of audit and 2,724 disclosures of violation. The TCEQ ensures that all violations disclosed under this program are corrected.

TCEQ Takes In Chemical Reporting Program

On Sept. 1, 2015, the Texas Tier II Chemical Reporting Program was transferred from the Texas Department of State Health Services to the TCEQ, pursuant to HB 942. On March 1, 2016, the Tier II program finished its first annual reporting period at the TCEQ with 78,302 chemical reports received from the regulated community. As of August 2016, staff had handled 4,467 phone calls and completed audits on 78,273, or 99 percent, of the 78,439 chemical inventory reports received during this reporting period. The Tier II program worked with facilities to correct report deficiencies for 10,155 facilities that either submitted partial or incorrect information or did not make the correct fee payments. By August 2016, deficiencies at more than 7,443 facilities had been resolved. Also during fiscal 2016, the TCEQ conducted a total of 39 field investigations at all the ammonium nitrate storage facilities.

Helping Communities Plan

As a part of legislative implementation, the TCEQ also created a grant program to help local emergency planning committees fulfill their responsibilities under the Emergency Planning and Community Right-to-Know Act. The program

began accepting applications from Texas LEPCs on July 22, 2016. The program will award up to \$4.42 million to Texas LEPCs during its first year in fiscal 2017 and up to \$210,000 annually after that.

Increasing Transparency

In 2015, the Texas Legislature passed Senate Bill 20, requiring reforms in state agency contracting. The TCEQ has met the legislative intent to increase accountability and transparency, and ensure a fair and competitive process through a number of improvements, such as establishing a portal that allows the public to access contract documents and conducting extensive staff training on new requirements. The TCEQ also deployed an application to accelerate the number of agency records that are available to the public online. Imaging of agency records, a multi-year project, is focused on more frequently requested records. In addition, the TCEQ has begun converting microfilm associated with public-information requests into electronic records to facilitate online public access.

Reaching Out to Underserved Businesses

The TCEQ implemented aggressive Disadvantaged Business Enterprise and Historically Underutilized Business outreach and contract compliance programs. The agency received an EPA Administrator's Award for its DBE program in fiscal 2014. In fiscal 2015, the State Auditor's Office assessed the TCEQ's HUB program as "97 percent fully compliant." During the past five years, the TCEQ's HUB utilization averaged about 34 percent. Among agencies with more than \$5 million in total expenditures, the TCEQ routinely ranks among the top 25 in HUB utilization. The TCEQ ranked 10th in fiscal 2015, and fifth during the semiannual fiscal 2016 reporting period. The TCEQ participated in 33 and 29 outreach events in fiscal 2015 and 2016, respectively, providing current and potential HUBs with training and information on accessing opportunities in procurement and contracting in the State of Texas.

Take Care of Texas Broadens Reach

The TCEQ's public-awareness program, Take Care of Texas, encourages all Texans to help keep the state's air and water clean, conserve water and energy, and reduce waste. In 2015, Take Care of Texas debuted its first



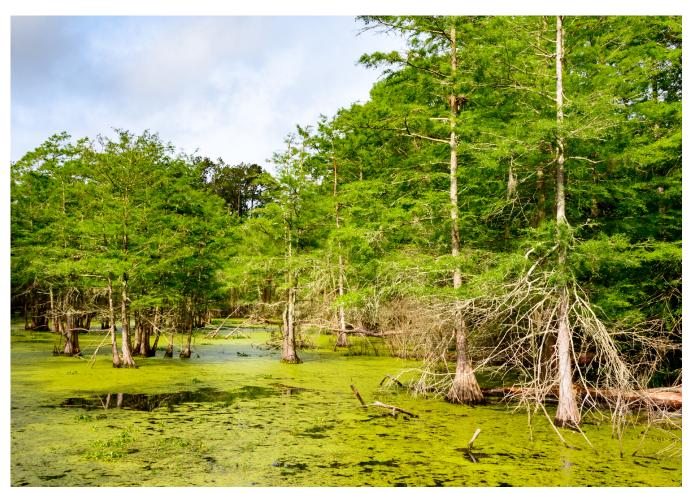
TakeCareOfTexas.org

Spanish-language public-service announcement, featuring the Grammy award winner Rick Treviño. Like longtime spokesperson Kevin Fowler, Treviño donated his talents and wrote and produced a jingle, which was recorded in both English and Spanish. Fowler himself also recorded a new PSA. All three announcements encourage Texans to conserve water and help keep the air clean. In the first year, the radio spots aired 13,484 times, and the TV spots were shown 9,815 times, both earning an impressive amount of free media. In 2016, Fowler's TV PSA and Treviño's Spanish TV PSA have aired more than 6,100 times.

Also new in 2015, Take Care of Texas hosted its first How Do You Take Care of Texas? Elementary School Art Contest, along with partner Samsung Austin Semiconductor. The 16 K-5 students who created the most inspirational artwork depicting positive ways they help protect the state's natural resources were awarded Samsung tablets or a laptop. The contest generated 2,636 entries in 2015, and increased to 3,991 entries when the contest was repeated in 2016. Samsung agreed to continue the partnership in 2017.

In September 2015, Take Care of Texas launched a new partnership with the Boy Scouts of America Capitol Area Council. Scouts can earn a Take Care of Texas patch by completing several environmental merit badges and volunteering toward a conservation project. In addition, scouts can earn a Take Care of Texas pin by also completing a conservation project and presenting the project results. The patch and pin are now also available in the Sam Houston Area Council, Bay Area Council, and South Texas Council.

In January 2016, Take Care of Texas partnered with the Girl Scouts of Central Texas to create the first Take Care of Texas Girl Scout patch. The award reflects a commitment to both learning and educating others on how they can take care of the environment. The patch is now available also to Girl Scouts of Northeast Texas and Girl Scouts of Greater South Texas.



C H A P T F R T W O

Agency Activities

he following summarizes the agency's fiscal 2015 and 2016 activities regarding enforcement, air and water quality, water availability, waste management, and environmental assistance.

Enforcement

Environmental Compliance

The TCEQ enforcement process begins when a violation is discovered during an investigation at the regulated entity's location, through a review of records at agency offices, or as a result of a complaint from the public that is subsequently verified by the agency as a violation. Enforcement actions may also be triggered after submission of citizencollected evidence.

In a typical year, the agency will conduct about 105,000 routine investigations and investigate about 4,000 complaints to assess compliance with environmental laws.

When environmental laws are violated, the agency has the authority in administrative cases to levy penalties up to the statutory maximum—as high as \$25,000—per day, per violation. Civil judicial cases carry penalties up to \$25,000 per day, per violation, in some programs.

In fiscal 2015, the TCEQ issued 1,681 administrative orders, which required payments of over \$12.6 million in penalties and over \$3.5 million for Supplemental Environmental Projects (SEPs). The average number of days from initiation of an enforcement action to completion (order approved by the commission) was 236 days.

In fiscal 2016, the TCEQ issued 1,404 administrative orders, which required payments of approximately \$9 million in penalties and \$3.2 million for SEPs. The average number of days from initiation of an enforcement action to completion (order approved by the commission) was 260 days.

The TCEQ can also refer cases to the state attorney general. In fiscal 2015, the AG's office obtained 46 judicial orders in cases referred by the TCEQ or in which the TCEQ was a party. These orders resulted in more than \$16.1 million in civil penalties. In fiscal 2016, the AG's office obtained 31 judicial orders, which resulted in approximately \$1.4 million in civil penalties.

Additional enforcement statistics can be found in the agency's annual enforcement report, available online at <www.tceq.texas.gov/goto/aer>.

Orders that have been approved by the commission and have become effective are posted on the agency's website, as are pending orders not yet presented to the commission.

Supplemental Environmental Projects

When the TCEQ finds a violation of environmental laws, the agency and the regulated entity often enter into an agreed administrative order, which regularly includes the assessment of a monetary penalty. The penalties collected do not stay at the agency, but instead go to state general revenue.

One option under state law, however, gives regulated entities a chance to direct some of the penalty dollars to local environmental improvement projects. By agreeing that penalty amounts can be used for a SEP, the violator can do something beneficial for the community in which the environmental offense occurred. Such a project must reduce or prevent pollution, enhance the environment, or raise public awareness of environmental concerns.

The agency has a list of preapproved SEPs, which consists of projects that have already received general approval from the commission. The list includes nonprofits and governmental agencies that sponsor activities such as cleaning up illegal dump sites, providing first-time adequate water or sewer service for low-income families, retrofitting or replacing school buses with cleaner emission technologies, removing hazards from bays and beaches, and improving nesting conditions for colonial water birds.

A regulated entity that meets program requirements may propose its own custom SEP if the proposed project

is environmentally beneficial and the party performing the SEP was not already obligated or planning to perform the SEP activity before the violation occurred. Additionally, the activity covered by a SEP must go beyond what is already required by state and federal environmental laws.

The Texas Water Code gives the TCEQ the discretion to allow local governments cited in enforcement actions to use SEP money to achieve compliance with environmental laws or to remediate the harm caused by the violations in the case. This compliance SEP may be offered to governmental authorities such as school districts, counties, municipalities, junior-college districts, river authorities, or water districts.

Other than compliance SEPs, a SEP cannot be used to remediate a violation or any environmental harm caused by a violation, or to correct any illegal activity that led to an enforcement action.

TCEQ Enforcement Orders

	Number of Orders	Assessed Penalties	Orders with SEPs	SEP Funds
FY2015	1,681	\$12.6 million	187	\$3.5 million
FY2016	1,404	\$9 million	177	\$3.2 million

Compliance History

Since 2002, the agency has rated the compliance history of every owner or operator of a facility that is regulated under certain state environmental laws.

An evaluation standard has been used to assign a rating to approximately 353,000 entities regulated by the TCEQ that are subject to the compliance-history rules. The ratings take into consideration prior enforcement orders, court judgments, consent decrees, criminal convictions, and notices of violation, as well as investigation reports,

notices, and disclosures submitted in accordance with the Texas Environmental, Health, and Safety Audit Privilege Act. Agency-approved environmental management systems and participation in agency-approved voluntary pollution-reduction programs are also taken into account.

An entity's classification comes into play when the TCEQ considers not only enforcement but also permit actions, the use of unannounced investigations, and participation in innovative programs.

Each September, regulated entities are classified or reclassified to reflect the previous five years. Ratings below 0.10 receive a classification of "high," which means those entities have an above-satisfactory compliance record with environmental regulations. Ratings from 0.10 to 55.00 merit "satisfactory" for having generally complied. Ratings greater than 55.00 result in an "unsatisfactory" classification, because these entities performed below minimal acceptable performance standards.

An entity with no compliance information for the last five years will not receive a classification and is therefore unclassified.

Critical Infrastructure

In 2011, the TCEQ created the Critical Infrastructure Division within the Office of Compliance and Enforcement. This division combines elements from the OCE that are critical to the agency's responsibilities under the Texas Homeland Security Strategic Plan. The division seeks to ensure compliance with environmental regulations and, during disasters, to support regulated critical infrastructures that are essential to the state and its residents. This duty includes not only responding to disasters but also aiding in recovery from them.

The division's programs are Homeland Security, Dam Safety, and Emergency Management Support.

Compliance-History Designations

	September 2015		September 2016		
Classifications	Number of Entities Subject to Compliance-History Rules	Percent	Number of Entities Subject to Compliance-History Rules	Percent	
High	40,145	10.23	36,025	10.21	
Satisfactory	10,519	2.68	10,127	2.87	
Unsatisfactory	1,240	0.32	906	0.26	
Unclassified	40,414	86.77	305,765	86.66	
Total	392,318	100	352,823	100	

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Homeland Security

The Homeland Security Section coordinates communications during disaster response with federal, state, and local partners; conducts threat assessments to the state's critical infrastructure; participates in the state's counterterrorism task forces; oversees the Tier II Chemical Reporting Program; and, coordinates the BioWatch program in Texas. The latter is a federally funded initiative aimed at early detection of bioterrorism agents.

The Homeland Security Section is also responsible for compliance at the disposal site for low-level radioactive waste in Andrews County. The operator of the disposal site is Waste Control Specialists, Inc. (radioactive-material license RO4100). The site's compact waste facility was authorized to accept waste in April 2012.

The Homeland Security Section maintains two full-time resident inspectors at the low-level radioactive waste site to accept, survey, and approve the disposal of each shipment. Each disposal is documented in an investigation report. The following shipments of low-level radioactive waste were inspected and successfully disposed of in the compact waste facility:

• fiscal 2015: 219 shipments

• fiscal 2016: 129 shipments

Dam Safety

The Dam Safety Program monitors and regulates private and public dams in Texas. The program periodically inspects dams that pose a high or significant hazard and issues recommendations and reports to the dam owners to help them maintain safe facilities. The program ensures that these facilities are constructed, maintained, repaired, or removed safely.

High- or significant-hazard dams are those at which loss of life could occur if the dam should fail.

On Sept. 1, 2013, a new state law exempted a large number of dams from the Dam Safety Program. These dams had to meet all of the following criteria:

- be privately owned,
- be classified either "low hazard" or "significant hazard,"
- have a maximum capacity less than 500 acre-feet,
- be within a county with a population of less than 350,000, and
- be outside city limits.

As a result, the law permanently exempted 3,227 dams. In 2016, Texas had 3,984 state-regulated dams; of those, 1,274 were high-hazard dams and 409 were significant-hazard dams. The remaining dams were classified as low hazard.

As of August 2016, 72 percent of all high- and significant-hazard dams had been inspected during the past five years. About 134 of the inspected dams are in either "fair" or "poor" condition. The majority of owners have begun making repairs, as funds are available.

In addition to inspections, the Dam Safety Program conducts workshops—primarily for dam owners and engineers—on emergency action plans and dam maintenance. Emergency management personnel also attend. Three workshops were conducted in fiscal 2016.

Emergency Management Support

The TCEQ's 16 regional offices form the basis of the agency's support for local jurisdictions addressing emergency and disaster situations. For that reason, Disaster-Response Strike Teams (DRSTs), organized in each regional office, serve as the TCEQ's initial and primary responding entity during a disaster within the respective regions. Team members come from various disciplines and have been trained in the National Incident Management System, Incident Command System, and TCEQ disaster-response protocols.

The agency's Emergency Management Support Team (EMST), based in Austin, was created to build greater disaster-response capabilities within each TCEQ region and to support the regions when necessary. The EMST will join the regional DRST during a disaster response.

The EMST is also responsible for maintaining preparedness, assisting with the development of the DRSTs in each region by providing enhanced disaster preparedness training, and maintaining sufficiently trained personnel so that response staff can rotate during long-term emergency events.

Tier II Chemical Reporting Program

House Bill 942, 84th Legislature, was signed into law by Governor Abbott on June 16, 2015. The legislation transferred the Tier II Chemical Reporting Program from the Texas Department of State Health Services (DSHS) to the TCEQ effective Sept. 1, 2015, including the transfer of 11 full-time-equivalent positions, equipment, and resources from the DSHS. A new position was also created to develop and administer a Tier II Grant Program.

The Texas Tier II Chemical Reporting Program is the state repository for annual hazardous-chemical inventories, called Texas Tier II Reports, required under the Emergency Planning and Community Right-to-Know Act.

Texas Tier II Reports contain detailed information on chemicals that meet or exceed specified reporting thresholds at any time during a calendar year. The Tier II reporting system identifies facilities and owner-operators, and collects detailed data on hazardous chemicals stored at reporting facilities within the state. There are over 77,000 facilities in the data system. A total of 78,439 Tier II reports were received for the reporting period of Jan. 1–March 1, 2016.

Accredited Laboratories

The TCEQ only accepts regulatory data from laboratories accredited according to standards set by the National Environmental Laboratory Accreditation Program (NELAP) or from laboratories that are exempt from accreditation, such as a facility's in-house laboratory.

The analytical data produced by these laboratories are used in TCEQ decisions relating to permits, authorizations, compliance actions, enforcement actions, and corrective actions, as well as in characterizations and assessments of environmental processes or conditions.

All laboratories accredited by the TCEQ are held to the same quality-control and quality-assurance standards. TCEQ laboratory accreditations are recognized by other states using NELAP standards and by some states that do not operate accreditation programs of their own.

In August 2016, the number of laboratories accredited by the TCEQ was 272.

Sugar Land Laboratory

The TCEQ Sugar Land Laboratory, which is accredited by NELAP, serves the agency's 16 regional field offices. The laboratory performs routine analyses that support the environmental-monitoring programs of the TCEQ, river authorities, and other environmental partners.

The Sugar Land Laboratory supports monitoring operations for the TCEQ's air, water, and waste programs through laboratory analysis of surface water, wastewater, sediments, sludge samples, and airborne particulate matter for a variety of environmental contaminants.

The laboratory also analyzes samples collected as part of investigations conducted by the agency's Office of Compliance and Enforcement. The laboratory develops

analytical procedures and performance measures for accuracy and precision, and maintains a highly qualified team of analytical chemists, laboratory technicians, and technical support personnel.

The laboratory generates scientifically valid and legally defensible test results under its NELAP-accredited quality system. Analytical data are produced using methods approved by the EPA. The laboratory standards used for these methods are traceable to national standards, such as the National Institute of Standards and Technology and the American Type Culture Collection.

With the rapid transmission of electronic data, the TCEQ can upload results directly to program databases.

Edwards Aquifer Protection Program

As a karst aquifer, the Edwards Aquifer is one of the most permeable and productive groundwater systems in the United States. The regulated portion of the aquifer crosses eight counties in south central Texas, serving as the primary source of drinking water for more than 2 million people in the San Antonio area. This replenishable system also supplies water for farming and ranching, manufacturing, generation of electric power using steam, mining, and recreation.

The aquifer's pure spring water also supports a unique ecosystem of aquatic life, including a number of threatened and endangered species.

Because of the unusual nature of the aquifer's geology and biology—and its role as a primary water source—the TCEQ requires an Edwards Aquifer protection plan for any regulated activity proposed within the recharge, contributing, or transition zones. Regulated activities include construction, clearing, excavation, or anything that alters the surface or possibly contaminates the aquifer and its surface streams. Best management practices are mandatory during and after construction to treat stormwater in the regulated areas.

Each year, the TCEQ receives hundreds of plans to be reviewed by the Austin and San Antonio regional offices. Since 2012, the agency has experienced a dramatic increase in the number of plans submitted for review as a result of increased development in both regions. The TCEQ reviewed 723 plans in fiscal 2015 and 822 plans in fiscal 2016.

In addition to reviewing plans for development within the regulated areas, agency personnel conduct compliance investigations to ensure that best management practices are appropriately used and maintained. The staff also performs site assessments before the start of regulated activities to ensure that aquifer-recharge features are adequately identified for protection.

Air Quality

Changes to Standards for Criteria Pollutants

The federal Clean Air Act requires the EPA to review the standard for each criteria pollutant every five years to ensure that it achieves the required level of health and environmental protection. Federal clean-air standards, or the National Ambient Air Quality Standards (NAAQS), cover six air pollutants: ozone, particulate matter, carbon monoxide, lead, nitrogen dioxide, and sulfur dioxide. Attaining the ozone standard continues to be the biggest air quality challenge in Texas.

As Texas develops proposals—region by region—to address air quality issues, it submits the revisions to the EPA in the State Implementation Plan (SIP).

Ozone Compliance Status

Ground-level ozone, a component of smog, is not emitted directly into the air, but forms through a reaction of nitrogen oxides and volatile organic compounds in the presence of sunlight. The major sources of NO_X and VOC emissions are industrial facilities, electric utilities, car and truck exhaust, and chemical solvents.

Identifying control measures that are reasonable—as well as technologically and economically feasible—has presented a challenge for the TCEQ, considering the magnitude of emission reductions already achieved under previous ozone standards.

On May 21, 2012, the EPA published final designations for the 2008 eight-hour ozone standard of 0.075 parts per million (ppm). The Dallas–Fort Worth area was designated "nonattainment," with a "moderate" classification and the Houston-Galveston-Brazoria area was designated "nonattainment," with a "marginal" classification. The attainment demonstration and reasonable further progress SIP revisions for the DFW 2008 eight-hour ozone nonattainment area were adopted in June 2015. The DFW area is required to attain the 2008 eight-hour

ozone standard by July 20, 2018; the HGB area was required to do so by July 20, 2015, but did not attain by that date. It is anticipated that the EPA will reclassify the HGB area to moderate nonattainment in December 2016. The HGB area's new attainment deadline will presumably be July 20, 2018, with a 2017 attainment year, which is the year that the area must attain the applicable standard. The submission of the HGB SIP revision for the EPA's reclassification is Jan. 1, 2017.

Currently, the EPA has approved the state's redesignation substitute for the HGB area one-hour ozone nonattainment area and has proposed approval for the one-hour DFW ozone nonattainment area as well as the 1997 eight-hour ozone nonattainment areas for HGB and DFW. If approved, the redesignation substitute replaces the previous designation.

Ozone Compliance Status

Area of Texas	2008 Eight-Hour Ozone	Attainment Deadline
Houston-Galveston-Brazoria	Marginal	7/20/2015
Dallas–Fort Worth	Moderate	7/20/2018
Beaumont–Port Arthur, El Paso, Austin, Corpus Christi, Victoria, San Antonio, East Texas, Waco	Attainment	n/a

Note: The Houston-Galveston-Brazoria area includes the counties of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. The Dallas–Fort Worth area includes the counties of Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant, and Wise.

2015 Eight-Hour Ozone Standard

In October 2015, the EPA finalized the 2015 eight-hour ozone standard of 0.070 parts per million. State recommendations that are due to the EPA on Oct. 1, 2016 will be based on the latest complete monitoring data available at that time (2013 through 2015). The EPA will make final designations by Oct. 1, 2017, and will use design values from 2014 through 2016.

2010 Sulfur Dioxide Standard

The EPA revised the sulfur dioxide (SO_2) NAAQS in June 2010, adding a one-hour primary standard of 75 parts per billion. In July 2013, the EPA designated 29 areas in 16 states in nonattainment of the 2010 standard, none of



ypes of Sources

Emissions that affect air quality can be characterized by their sources.

Point sources: industrial facilities such as refineries and cement kilns

Area sources: dry cleaners, gasoline stations, and residential heating

On-road mobile sources: cars and trucks

Non-road mobile sources: construction equipment and engines, such as locomotives

which are in Texas. On March 3, 2015, a U.S. District Court Order set deadlines for the EPA to complete designations for the SO_2 NAAQS. It requires that EPA designate by July 2, 2016, any areas monitoring violations or with the largest SO_2 sources fitting specific criteria for SO_2 emissions. A subsequent court deadline for some of these areas to be designated has been extended to Aug. 31, 2016, for some sources and Oct. 30, 2016, for other sources. Sources with more than 2,000 tons per year of SO_2 emissions not designated in 2016 will be designated based on modeling data by December 2017 or monitoring data by December 2020. Currently, there are no areas in Texas monitoring nonattainment for SO_2 and not all SO_2 -emission sources have ambient monitors nearby.

Per the August 2015, 2010 SO₂ NAAQS Data Requirements Rule (DRR), Texas identified 25 sources with 2014 SO₂ emissions of 2,000 tons per year or more. The EPA was notified of these on Jan. 15, 2016. On April 22, 2016 the TCEQ requested revision of the list down to 24 sources, and the EPA concurred on May 16, 2016. The DRR required Texas to inform the EPA by July 1, 2016 of the approach to air quality characterization planned for each of the 24 source locations listed. For any of those 24 sources that will not be designated in July, August, or October 2016 and that the TCEQ intends to evaluate with modeling, the protocols were also due by July 1, 2016, completed analyses are due by Jan. 13, 2017, and ongoing annual emission-inventory review and reporting to the EPA is required. Where the TCEQ intends to evaluate sources through ambient monitoring, the DRR requires appropriately sited monitors in operation by Jan. 1, 2017. Information about these planned monitoring sites was submitted to the EPA by July 1, 2016 as part of the TCEQ's Annual Monitoring Network Plan. The TCEQ's 2016 plan, which includes information about the new SO₂ monitoring sites planned, was presented for public comment on May 16, 2016.

2008 Lead Standard

In 2008, the EPA revised the primary standard for lead from 1.5 to 0.15 micrograms per cubic meter (µg/m³), measured in total suspended particulate matter. Effective in late 2010, a portion of Collin County—surrounding the Exide Technologies facility for recycling lead-acid batteries in Frisco—was designated "nonattainment" for the 2008 lead standard.

After the commission adopted the Collin County Attainment Demonstration SIP Revision and Exide's agreed order, Exide elected to permanently close operations at its Frisco Battery Recycling Center. Most structures at the site have been demolished. Compliance with the lead standard is based on 36 three-month rolling averages. Between Jan. 1, 2013, and Dec. 31, 2015, the Collin County area did not have a three-month rolling average above the lead NAAQS. Therefore, the area achieved compliance with the 2008 lead NAAQS as of Dec. 31, 2015. The TCEQ has developed a request to the EPA that the Frisco lead nonattainment area be redesignated to attainment based on 36 months of monitoring data below the federal standard. The commission approved proposal to request redesignation of Collin County to attainment for the 2008 lead NAAQS on April 27, 2016. Adoption of the SIP revision is scheduled for October 2016.

Particulate-Matter Standards

The final rule for PM NAAQS was announced on Dec. 14, 2012. For particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM $_{2.5}$), the EPA lowered the annual primary standard to 12 µg/m³ and retained the current 24-hour primary standard of 35 µg/m³ using a three-year annual average. The EPA retained the current standard for particles with an aerodynamic diameter less than or equal to a nominal

10 micrometers (PM_{10}). Existing secondary standards for both PM_{2.5} and PM₁₀ were also retained. No counties in Texas are currently designated "nonattainment" nor are in maintenance status for the primary annual and 24-hour PM_{2.5} standards.

On Dec. 18, 2014, the EPA issued final area designations for the 2012 PM_{2.5} NAAQS. The EPA designated all areas of Texas unclassifiable or in attainment. However, the El Paso area is classified as a moderate nonattainment area for the PM₁₀ standard. El Paso was one of the original areas designated in nonattainment in 1990 under the amendments to the federal Clean Air Act and is influenced by natural events such as windstorms.

In April 2015, the newest near-road monitors became operational in DFW and HGB. Monitors in the Austin-Round Rock and San Antonio areas will be operational on Jan. 1, 2017. In 2015, the TCEQ's Monitoring Division deployed new ambient-air-monitoring equipment in Edinburg. The device has equipment for monitoring PM_{2.57} PM₁₀₁ and meteorology and meets federal requirements.

Evaluating Health Effects

TCEQ toxicologists meet their goals of identifying chemical hazards, evaluating potential exposures, assessing human health risks, and communicating risk to the general public and stakeholders in a variety of ways. Perhaps most notably, the TCEQ relies on health- and welfare-protective values developed by its toxicologists to ensure that both permitted and monitored airborne concentrations of pollutants stay below levels of concern. Values for over 98 pollutants have been derived so far. Texas has received compliments from numerous federal agencies and academic institutions, and many other states and countries use the TCEQ's values.

TCEQ toxicologists use the health- and welfare-protective values it derives for air monitoring—for example, air-monitoring comparison values (AMCVs)—to evaluate the public-health risk of millions of measurements of air-pollutant concentrations collected from the ambient-airmonitoring network throughout the year.

When necessary, the TCEQ also conducts health effects research on particular chemicals with limited or conflicting information. In fiscal 2016 and 2017, specific work evaluating arsenic, particulate matter, and ozone was completed. This work can inform the review and assessment of human-health risk of air, water, or soil samples collected during investigations and remediation, as well as aid in communicating health risk to the public.

Finally, toxicologists communicate risk and toxicology with the public, state and federal legislators and their committees, the EPA, other government agencies, the press, and judges during legal proceedings. This often includes input on EPA rulemaking, including the NAAQS, through written comments, meetings, and scientific publications.

Air Pollutant Watch List

The TCEQ oversees the Air Pollutant Watch List activities that result when ambient pollutant concentrations exceed these protective levels. The TCEQ routinely reviews and conducts health-effects evaluations of ambient air monitoring data from across the state by comparing air-toxic concentrations to their respective AMCVs or state standards. The TCEQ evaluates areas for inclusion on the Air Pollutant Watch List where monitored concentrations of air toxics are persistently measured above AMCVs or state standards.

The purpose of the watch list is to reduce air-toxic concentrations below levels of concern by focusing TCEQ resources and heightening awareness for interested parties in areas of concern.

The TCEQ also uses the watch list to identify companies with the potential of contributing to elevated ambient air-toxic concentrations and to then develop strategic actions to reduce emissions. An area's inclusion on the watch list results in more stringent permitting, priority in investigations, and in some cases increased monitoring.

Eight areas of the state are currently on the watch list published online at <www.tceq.texas.gov/toxicology/apwl>.

In fiscal 2016, the TCEQ delisted two watch list areas (Dallas and Texas City) and expects to delist another in September 2016 (Beaumont). The TCEQ is also evaluating an additional area (Galena Park) to determine whether the improvements in air quality are expected to be maintained. No new areas have been added to the watch list since 2007.

Oil and Gas: Boom of Shale Plays

The TCEQ continues to collect monitoring data from oil and gas production areas, including the Barnett Shale and Eagle Ford Shale.

The TCEQ conducts in-depth measurements at shale formations to evaluate the potential effects. The TCEQ continues to conduct surveys and investigations at oil and gas sites using optical gas imaging camera (OGIC) technology and other monitoring instruments.

The monitoring, on-site investigations, and enforcement activities in the shale areas also complement increased air-permitting activities. However, with the downturn in the price of oil and natural gas, air permitting for oil and gas sites has slowed to some degree. The additional field activities include additional stationary monitors, increased collections of ambient air canister samples, flyovers using OGIC imaging, targeted mobile monitoring, and investigations (routine and complaint-driven).

One vital aspect in responding to shale-play activities is the need for abundant and timely communications with all interested parties. The TCEQ has relied on community open houses, meetings with county judges and other elected officials, workshops for local governments and industry, town-hall meetings, legislative briefings, and guidance documents. The agency also maintains a multimedia website (see <www.TexasOilandGasHelp.org>) with links to rules, monitoring data, environmental complaint procedures, and regulatory guidance.

shale play is a defined geographic area containing an organic-rich, fine-grained sedimentary rock with specific characteristics. The shale forms from the compaction of silt and clay-size mineral particles commonly called "mud."

The TCEQ continues to evaluate its statewide network for air quality monitoring and, when needed, will expand those operations. Fifteen automatic-gas-chromatograph monitors operate in the Barnett Shale area, along with numerous other instruments that monitor for criteria pollutants. In addition, 16 VOC canister samplers (taking samples every sixth day) are located throughout TCEQ Region 3 (Abilene) and Region 4 (Dallas–Fort Worth).

In South Texas, the agency has established a precursor ozone monitoring station in Floresville (Wilson County), which is north of the Eagle Ford Shale, that began operating on July 18, 2013. A monitoring station has also been established in Karnes City, which is located in Karnes

County, and was activated on Dec. 17, 2014. Karnes County continues to lead the Eagle Ford Shale play in production and drilling activities. The data from these new monitoring stations is used to help determine whether the shale oil and gas play is contributing to ozone formation in the San Antonio area. It should be noted that existing statewide monitors located within oil and gas plays show no indications that these emissions are of sufficient concentration or duration to be harmful to residents.

Regional Haze

Guadalupe Mountains and Big Bend national parks are Class I areas of Texas identified by the federal government for visibility protection, along with 154 other national parks and wilderness areas throughout the country. Regional Haze is a long-term air quality program requiring states to establish goals and strategies to reduce visibility-decreasing pollutants in the Class I areas and meet a "natural conditions" visibility goal by 2064. In Texas, the pollutants influencing visibility are primarily NO_X, SO₂, and PM. Regional Haze program requirements include updated plans due to the EPA every 10 years and progress reports due to the EPA every five years in between plan updates, to demonstrate progress toward natural conditions.

The Texas Regional Haze SIP revision was submitted to the EPA on March 19, 2009. The plan projected that Texas Class I areas will not meet the 2064 "natural conditions" goal due to emissions from the eastern United States and international sources. On Jan. 5, 2016, the EPA finalized a partial disapproval of the 2009 SIP revision and issued a federal implementation plan effective Feb. 4, 2016. Texas filed a legal challenge to the EPA's action in the U.S. Court of Appeals for the 5th Circuit on Feb. 29, 2016. On July 15, 2016, the $5^{\rm th}$ Circuit stayed the EPA's FIP pending the resolution of the lawsuit. The FIP requires emissions control upgrades or emissions limits at eight coal-fired power plants in Texas. The EPA also approved the Texas Best Available Retrofit Technology (BART) rule with regard to non-electric utility generating units, but due to continuing issues with the Cross-State Air Pollution Rule, the EPA could not take action on BART requirements for electric utility generating units (EGUs). The EPA has recently initiated action to develop a FIP to address BART for 28 Texas EGUs. Per a consent decree with environmental groups, the proposed BART FIP is scheduled for December 2016 with final rulemaking scheduled for 2017.

The first five-year progress report on regional haze was submitted to the EPA in March 2014. It contained:

- a summary of emissions reductions achieved from the plan
- an assessment of visibility conditions and changes for each Class I area in Texas that Texas may have an impact on
- an analysis of emissions reductions by pollutant
- a review of Texas' visibility monitoring strategy and any necessary modifications

On April 25, 2016, the EPA proposed a new rule to update aspects of the Regional Haze program. The proposed rule would:

- strengthen requirements for consultation with federal land managers
- extend Reasonably Attributable Visibility Impairment requirements to all states to address situations where a single source or small number of sources affect visibility in a Class I area
- extend the SIP submission deadline for the second planning period from July 31, 2018 to July 31, 2021
- adjust the submission deadline so that second progress reports would be due by Jan. 31, 2025
- remove the requirement for progress reports to be SIP revisions

It is anticipated that the rule will be final in late 2016.

Clean Power Plan

On Oct. 23, 2015, the EPA published final Clean Power Plan rules and proposed federal plan and model rules. The CPP establishes emission guidelines for carbon dioxide (CO₂) under federal Clean Air Act Section 111(d). The CPP applies to existing fossil fuel-fired EGUs that commenced construction on or before Jan. 8, 2014. Section 111(d) requires each state to develop "standards of performance" for existing stationary sources and a plan to achieve those standards. Standard of performance is defined as "the degree of emission limitation achievable through the application of the best system of emission reduction (taking into account the cost of achieving such reduction)." The EPA's final plan relies on three building blocks:

1. heat-rate improvement: efficiency improvements on coal-fired units

- redispatch to existing natural gas combined-cycle plants: shifting generation from coal-fired and other higher CO₂ emitting units to these plants
- 3. renewable energy: expand low- or zero-carbon energy generation.

States can either adopt the unit-type specific standards of performance that the EPA established in the final CPP rule, or the states can assign different standards on an individual unit basis provided the state plan shows compliance with the EPA-assigned statewide $\rm CO_2$ standards. Under the second option, the state can either meet a statewide rate-based standard in pounds of $\rm CO_2$ per megawatt-hour or a statewide mass-based standard in total tons of $\rm CO_2$.

On Feb. 9, 2016, the U.S. Supreme Court issued a stay of the CPP final rule, until all appeals to the court are finished. This stays all deadlines of the rule, such as the state submission dates (Sept. 6, 2016 and Sept. 6, 2018), the initial compliance date of Jan. 1, 2022, and the final compliance date of Jan. 1, 2030. On Sept. 27, 2016, the D.C. Circuit Court heard oral arguments.

Major Incentive Programs

The TCEQ implements several incentive programs aimed at reducing emissions, including the Texas Emissions Reduction Plan, the Texas Clean School Bus Program, and Drive a Clean Machine.

Texas Emissions Reduction Plan

The TERP gives financial incentives to owners and operators of heavy-duty vehicles and equipment for projects that will lower nitrogen oxides (NO $_{\rm X}$) emissions. Because NO $_{\rm X}$ is a leading contributor to the formation of ground-level ozone, reducing these emissions is key to achieving compliance with the federal ozone standard. Recently added incentive programs also support the increase in the use of alternative fuels for transportation in Texas.

• The Diesel Emissions Reduction Incentive Program has been the core incentive program since the TERP was established in 2001. DERI incentives have focused largely on the ozone nonattainment areas of Dallas–Fort Worth and Houston-Galveston-Brazoria. Funding has also been awarded to projects in the Tyler-Longview-Marshall, San Antonio, Beaumont–Port Arthur, Austin, Corpus Christi, El Paso, and Victoria areas. From 2001 through August 2016, the DERI program awarded more than \$1 billion for the upgrade or replacement of 17,629 heavy-duty

- vehicles, locomotives, marine vessels, and pieces of equipment. Over the life of these projects, 171,945 tons of NO_X are projected to be reduced, which in 2016 equated to 43.29 tons per day.
- The Texas Clean Fleet Program funds replacement of diesel vehicles with alternative-fuel or hybrid vehicles. From 2010 through August 2016, 20 grants funded 472 replacement vehicles for a total of \$38.8 million. These projects included a range of alternative-fuel vehicles, including propane school buses, natural gas garbage trucks, hybrid delivery vehicles and garbage trucks, and electric vehicles. These projects are projected to reduce NO_X by about 498 tons over the life of the projects.
- The Clean Transportation Triangle Program (CTTP) provides grants to support the development of a network of natural gas vehicle-fueling stations. The program was originally aimed at fueling stations along the interstate highways connecting the Houston, Dallas, Fort Worth, and San Antonio areas. The eligible areas were expanded by the Legislature in 2013 to include counties within the triangle formed by those interstate highways, as well as other areas also eligible under the DERI Program. From 2012 through August 2016, the CTTP funded 34 grants for a total of \$11.6 million.
- The Texas Natural Gas Vehicle Grants Program provides grants for the replacement or repower of heavy- or medium-duty diesel- or gasoline-powered vehicles with natural gas−powered vehicles and engines. Eligible vehicles must be operated in the counties designated under the CTTP. From 2012 through August 2016, the program funded 103 grants to replace 963 vehicles for a total of \$44 million. These projects are projected to reduce more than 1,572 tons of NO_X over the life of the projects. The program is accepting applications first come, first served through May 2017.
- The **Alternative Fueling Facilities Program** provides grants for the construction, reconstruction, or acquisition of facilities to store, compress, or dispense alternative fuels in areas of Texas designated as "nonattainment." From 2012 through August 2016, the program funded 69 grants for a total of \$12.8 million.
- The primary objective of the New Technology Implementation Grant Program is to offset the incremental cost of the implementation of existing technologies

- that reduce the emission of pollutants from facilities and other stationary sources that may also include energy-storage projects in Texas. From 2010 through August 2016, the program funded six grants for a total of \$9.75 million.
- The **Drayage Truck Incentive Program** was established by the Legislature in 2013 to fund the replacement of drayage trucks operating at seaports and railyards in Texas nonattainment areas with newer, less-polluting drayage trucks. Through August 2016, the program funded nine grants for the replacement of 47 vehicles, for a total of \$3.9 million.

In addition, the TERP program implemented a short-term program established by the Legislature in 2013 that ended in fiscal 2015:

• The Light-Duty Purchase or Lease Incentive Program provided up to \$2,500 for the purchase of a light-duty vehicle operating on natural gas, liquefied petroleum gas, or plug-in electric drive. Through August 2015, the program provided incentives for the purchase of 1,896 electric plug-in vehicles and 196 vehicles operating on compressed natural gas or propane, for a total \$4.65 million. The program expired in August 2015.

Texas Clean School Bus Program

The Texas Clean School Bus Program provides grants for technologies that reduce diesel-exhaust emissions inside the cabin of a school bus. The program also offers educational materials to school districts on other ways to reduce emissions, such as idling reduction. From 2008 to August 2016, the Texas Clean School Bus Program used state and federal funds to reimburse approximately \$33 million in 227 grants to retrofit about 7,497 school buses in Texas.

TERP grants and activities are further detailed in a separate report, *TERP Biennial Report 2015-2016* (TCEQ publication SFR-079/16).

Drive a Clean Machine

The Drive a Clean Machine program (see www. driveacleanmachine.org) was established in 2007 as part of the Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (LIRAP) to repair or remove older, higher emitting vehicles. The Drive a Clean Machine program is available to qualifying vehicle owners in participating counties in the areas of Houston-Galveston-Brazoria, Dallas–Fort Worth, and Austin–Round Rock.

The counties in these areas conduct annual inspections of vehicle emissions. From the program's debut in December 2007 through August 2016, qualifying vehicle owners have received more than \$194 million. This funding helped replace 57,474 vehicles and repair 40,895 vehicles.

Local Initiative Projects

The Local Initiative Projects (LIP) program was established in 2007 to provide funding to counties participating in the LIRAP for implementation of air quality improvement strategies through local projects and initiatives. Projects are matched dollar-for-dollar by the local government, although the TCEQ may reduce the match for counties implementing programs to detect vehicle-emissions fraud (currently set at 25¢/dollar). From the LIP program's debut in December 2007, more than \$31 million has been appropriated to fund eligible projects in the participating counties. Recently funded projects include vehicle-emissions enforcement task forces; traffic-signal synchronization, networking, and management systems; and bus transit services.

Environmental Research and Development

The TCEQ supports cutting-edge scientific research to expand knowledge about air quality in Texas. The agency's Air Quality Research Program (AQRP) continues to be engaged in a range of projects, which built upon scientific research on air quality from the previous biennium.

The AQRP was a major participant in the field study called DISCOVER-AQ (Deriving Information on Surface Conditions from Column and Vertically Resolved Observations Relevant to Air Quality). During the summer of 2013, NASA aircraft conducted a series of flights over Texas. The aircraft carried cutting-edge scientific instruments and collected over 50 hours of measurements of gaseous and particulate pollution, primarily in the Houston area.

As part of this major study designed to gain a better understanding of the factors that control air quality in Texas, additional ground-based air quality measurements were made simultaneously by researchers from collaborating organizations. This expansive data set and information collected during the study have been undergoing in-depth analysis, including extensive photochemicalmodeling exercises during the past biennium. Many of the key findings include new insights into the complexities of air quality in the Houston area.

Other important air quality research carried out through the AQRP has included.

- a series of projects designed to better characterize biogenic emissions including investigating impacts of drought conditions on ozone formation in Texas, improving land cover and emissions factors for biogenic isoprene for Texas air quality simulations, and incorporating space-borne observations
- targeted improvements in the global fire emissions model used to simulate the role of fires in air quality
- an assessment of remote sensing technologies to evaluate flare performance
- a comprehensive report that summarizes the current state of scientific understanding of air quality in Texas based on findings from research projects carried out in 2010 through 2015
- improved characterizations of boundary layer meteorology using radar wind profiler and balloon sounding measurements
- an update and evaluation of the model algorithms needed to better predict formation of particulate matter from the isoprene emissions prevalent in eastern Texas and Louisiana
- a study of the Bermuda High, a key driver of largescale circulation patterns in southeastern Texas in summer, and its link to surface ozone in the Houston region

In addition to research carried out through the AQRP, the TCEQ used grants and contracts to support ongoing air quality research. Some notable projects have included:

- numerous projects using state-of-the science technology to assess and address emissions from oil and gas activities, including aerial surveys or flyovers using a helicopter with an infrared VOC camera as a screening tool and a study to estimate emissions of ozone precursors from mobile sources associated with activities at Eagle Ford
- continued sampling and analysis of particulate-matter chemical speciation, which is used to support documentation of exceptional impact at the Clinton Drive monitor in Houston and to quantify the contributions of African dust and smoke from southern Mexico and Central America
- continued analysis of biomass burning and the impact on ozone in Texas, and research-grade photochemical modeling to support exceptional-event technical demonstrations

- several projects designed to enhance the tools Texas uses to improve emissions inventories that reflect activities and sources in the state
- a series of projects designed to improve the technical mechanics of the photochemical model to enhance overall model performance
- investigations of tools for ozone-forecast modeling

The latest findings from these research projects help the state understand and appropriately address some of the challenging air quality issues faced by Texans as a result of changes to various standards for ambient air quality and other federal actions. These challenges are increasing, and addressing them will require continued emphasis on scientific understanding. This knowledge helps ensure that Texas adopts attainment strategies that are achievable, sound, and based on the most current science.

Water Quality

Developing Surface Water Quality Standards

Texas Surface Water Quality Standards

Under the federal Clean Water Act, every three years the TCEQ is required to review and, if appropriate, revise the Texas Surface Water Quality Standards. These standards are the basis for establishing discharge limits in wastewater permits, setting instream water quality goals for total maximum daily loads and setting forth criteria to assess instream attainment of water quality.

Water quality standards are set for major streams and rivers, reservoirs, and estuaries based on their specific uses: aquatic life, recreation, drinking water, fish consumption, and general. The standards establish water quality criteria for temperature, pH, dissolved oxygen, salts, bacterial indicators for recreational suitability, and a number of toxic substances.

The commission revised its water quality standards in fiscal 2014. Major revisions included:

- Addition of industrial cooling areas and revisions to mixing-zone provisions to aid implementation of thermal water quality standards in wastewater permitting.
- Revisions to toxicity criteria to incorporate new data on toxicity effects and local water quality characteristics that affect toxicity.
- Numerous revisions and additions to the uses and criteria of individual water bodies to incorporate

new data and the results of recent use-attainability analyses.

The revised standards must be approved by the EPA before being applied to activities related to the Clean Water Act. Although federal review of portions of the 2010 and the 2014 standards has yet to be completed, the TCEQ is proceeding with its 2017 triennial standards review. Two work-group meetings were held in the spring of 2016 to discuss potential revisions to the standards.

Use-Attainability Analyses

The Surface Water Quality Standards Program also coordinates and conducts use-attainability analyses to develop site-specific uses for aquatic life and recreation. The UAA assessment is often used to re-evaluate designated or presumed uses when the existing standards may need to be revised for a water body. As a result of aquatic life UAAs, site-specific aquatic-life uses and dissolved-oxygen criteria are proposed in the 2017 revision of the standards for individual water bodies.

A

use-attainability analysis (UAA) is a scientific assessment of the physical, chemical, biological, or recreational characteristics of a water body.

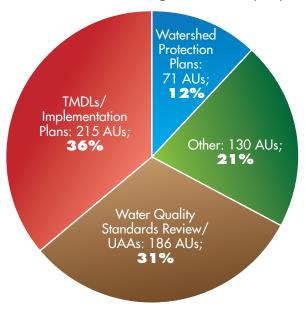
In 2009, the TCEQ developed recreational UAA procedures to evaluate and more accurately assign levels of protection for water recreational activities such as swimming and fishing. Since then, the agency has initiated more than 120 UAAs to evaluate recreational uses of water bodies that have not attained their existing criteria. Using results from recreational UAAs, the TCEQ is proposing site-specific contact recreation criteria for numerous individual water bodies in the 2017 Texas Surface Water Quality Standards revision.

Clean Rivers Program

The Clean Rivers Program administers and implements a statewide framework set out in Texas Water Code Section

Management Strategies for Restoring Water Quality

An assessment unit (AU) is the smallest geographic area used when evaluating surface water quality.



Total AUs with an assigned restoration strategy: 909

The TCEQ can address water quality impairments in a variety of ways. Selection of an appropriate restoration strategy is coordinated with stakeholders through watershed action planning.

Source: 2012 Texas Integrated Report

26.0135. This state program works with 15 regional partners (river authorities and others) to collect water quality samples, derive quality-assured data, evaluate water quality issues, and provide a public forum for prioritizing water quality issues in each Texas river basin. This program provides 60 to 70 percent of the data available in the state's surface water quality database used for waterresource decisions including revising water quality criteria, identifying the status of water quality, and supporting the development of projects to improve water quality.

Water Quality Monitoring

Surface water quality is monitored across the state in relation to human-health concerns, ecological conditions, and designated uses. The resulting data form a basis for policies that promote the protection and restoration of surface water in Texas.

Coordinated Routine Monitoring

Each spring, TCEQ staff meets with various water quality organizations to coordinate their monitoring efforts for the upcoming fiscal year. The TCEQ prepares the guidance and reference materials, and the Texas Clean Rivers Program partners coordinate the local meetings. The available information is used by participants to select stations and parameters that will enhance the overall coverage of water quality monitoring, eliminate duplication of effort, and address basin priorities.

The coordinated monitoring network, which is made up of about 1,800 active stations, is one of the most extensive in the country. Coordinating the monitoring among the various participants ensures that available resources are used as efficiently as possible.

Continuous Water Quality Monitoring

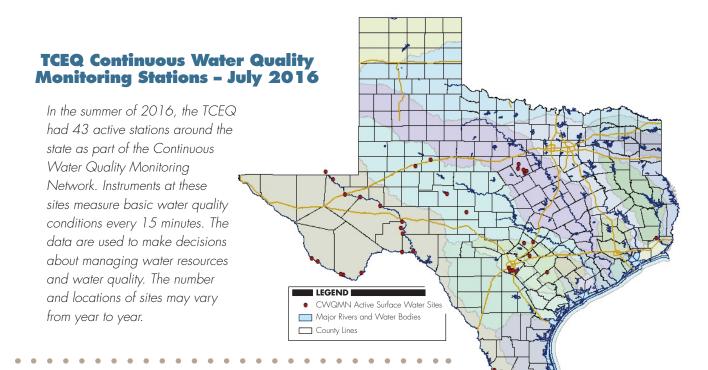
The TCEQ has developed—and continues to refine—a network of continuous water quality monitoring sites on priority water bodies. The agency maintains 40 to 50 sites in its Continuous Water Quality Monitoring Network (CWQMN). At these sites, instruments measure basic water quality conditions every 15 minutes.

CWQMN monitoring data may be used by the TCEQ or other organizations to make decisions about waterresource management, target field investigations, evaluate the effectiveness of water quality management programs such as TMDL implementation plans and watershedprotection plans, characterize existing conditions, and evaluate spatial and temporal trends. The data are posted at <www.texaswaterdata.org>.

The CWQMN is used to guide decisions on how to better protect certain segments of rivers or lakes. For example, from 2004 to 2014 the TCEQ developed a network of 14 CWQMN sites on the Rio Grande and the Pecos River, primarily to monitor levels of dissolved salts to protect the water supply in the Amistad Reservoir. The Pecos River CWQMN stations also supply information on the effectiveness of the Pecos River Watershed Protection Plan. These stations are operated and maintained by the U.S. Geological Survey through cooperative agreements with the TCEQ and the Texas State Soil and Water Conservation Board. Another use of such data is development of water quality models.

Assessing Surface Water Data

Every even-numbered year, the TCEQ assesses water quality to determine which water bodies meet the surface water



quality standards for their designated uses, such as contact recreation, support of aquatic life, or drinking-water supply. Data associated with 200 different water quality parameters are reviewed to conduct the assessment. These parameters include physical and chemical constituents, as well as measures of biological integrity.

The assessment is published on the TCEQ website and submitted as a draft to the EPA as the Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d) (found at <www.tceq.texas.gov/goto/2014-intrep>).

The report evaluates conditions during the assessment period and identifies the status of the state's surface waters in relation to the Texas Surface Water Quality Standards. Waters that do not regularly attain one or more of the standards may require action by the TCEQ and are placed on the 303(d) List of Impaired Water Bodies for Texas (part of the *Integrated Report*). The EPA must approve this list before its implementation by the TCEQ's water quality management programs.

Because of its large number of river miles, Texas can monitor only a portion of its surface water bodies. The major river segments and those considered at highest risk for pollution are monitored and assessed regularly. The 2014 Integrated Report was approved by the EPA in November 2015. In developing the report, water quality data was evaluated from 5,086 sites on 1,409 water bodies. The draft 2016 Integrated Report is currently under development.

Restoring Water Quality

Watershed Action Planning

Water quality planning programs in Texas have responded to the challenges of maintaining and improving water quality by developing new approaches to addressing water quality issues in the state. Watershed action planning is a process for coordinating, documenting, and tracking the actions necessary to protect and improve the quality of the state's streams, lakes, and estuaries. The major objectives are:

- To fully engage stakeholders in determining the most appropriate action to protect or restore water quality.
- To improve access to state agencies' decisions about water quality management and increase the transparency of that decision making.
- To improve the accountability of state agencies responsible for protecting and improving water quality.

Leading the watershed action planning process are the TCEQ, the Texas State Soil and Water Conservation Board, and the Texas Clean Rivers Program. Involving stakeholders, especially at the watershed level, is key to the success of the watershed action planning process.

Total Maximum Daily Load Program

The Total Maximum Daily Load Program is one of the agency's mechanisms for improving the quality of impaired

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surface waters. A TMDL is the total amount (or load) of a single pollutant that a receiving water body can assimilate within a 24-hour period and maintain water quality standards. A rigorous scientific process is used to arrive at practicable targets for the pollutant reductions in TMDLs.

This program works with the agency's water quality programs, other governmental agencies, and watershed stakeholders during the development of TMDLs and related implementation plans.

Bacteria TMDLs

Bacteria from human and animal wastes can indicate the presence of disease-causing microorganisms that pose a threat to public health. People who swim or wade in waterways with high concentrations of bacteria have an increased risk of contracting gastrointestinal illnesses. High bacteria concentrations can also affect the safety of oyster harvesting and consumption.

Of the 589 impairments listed in the 2014 Integrated Report for surface water segments in Texas, about half are for bacterial impairments to recreational water uses.

The TMDL Program has developed an effective strategy for developing TMDLs that protects recreational safety. The strategy, which relies on the engagement and consensus of the communities in the affected watersheds, has been initiated for 46 water bodies in seven different watersheds. Other actions are also taken to address bacteria impairments, such as recreational use-attainability analyses that ensure that the appropriate contact-recreation use is in place, as well as watershed-protection plans developed by stakeholders and primarily directed at nonpoint sources.

Implementation Plans

While a TMDL analysis is being completed, stakeholders are engaged in the development of an Implementation Plan, which identifies the steps necessary to improve water quality. These I-Plans outline three to five years of activities, indicating who will carry them out, when they will be done, and how improvement will be gauged. The time frames for completing I-Plans are affected by stakeholder resources and when stakeholders reach consensus. Each plan contains a commitment by the stakeholders to meet periodically to review progress. The plan is revised to maintain sustainability and to adjust to changing conditions.

Programmatic and Environmental Success

Since 1998, the TCEQ has been developing TMDLs to improve the quality of impaired water bodies on the federal

303(d) List, which identifies surface waters that do not meet one or more quality standards. In all, the agency has adopted 256 TMDLs for 179 water bodies in the state.

Based on a comparison of the 2012 and the 2014 Integrated Reports, water quality standards were attained for five impaired assessment units addressed by the TMDL Program.

From August 2014 to August 2016, the commission adopted TMDLs to address instances where bacteria had impaired the contact-recreation use. TMDLs were adopted for 24 surface water body segments consisting of 31 assessment units. A TMDL is developed for each assessment unit: Whiteoak Bayou (one), Armand Bayou (six), City of Austin watersheds (five), the Mission and Aransas Rivers (two), Upper San Antonio River (seven), Dickinson Bayou (three) and the East and West Forks of the San Jacinto River (seven). During that time, the commission also approved five I-Plans, for the city of Austin watersheds, Adams and Cow Bayous, the Upper Gulf Coast, the Upper San Antonio River, and the Mission and Aransas Rivers.

The Greater Trinity River Bacteria TMDL Implementation Plan is an example of successful community engagement to address bacteria impairments. Development of the I-Plan occurred through a stakeholder-driven process that included active public participation. Stakeholders engaged in the process represented a broad spectrum of authorities and interests including government, agriculture, business, conservation groups, and the public. The I-Plan identifies eight strategies for activities that address three TMDL projects.

Nonpoint Source Program

The Nonpoint Source Program administers the provisions of Section 319 of the federal Clean Water Act. Section 319 authorizes grant funding for states to develop projects and implement NPS management strategies to maintain and improve water quality conditions.

The TCEQ, in coordination with the Texas State Soil and Water Conservation Board (TSSWCB), manages NPS grants to implement the long and short-term goals identified in the Texas NPS Management Program. The NPS Program annual report documents progress in meeting the long- and short-term goals of the management program.

The NPS grant from the EPA is split between the TCEQ (to address urban and non-agricultural NPS pollution) and the TSSWCB to address agricultural and silvicultural NPS pollution. The TCEQ receives \$3 to \$4 million annually. About 60 percent of overall project costs are federally reimbursable; the remaining 40 percent comes from state

or local match. In fiscal 2016, \$3.7 million was matched with \$2.5 million, for a total of \$6.2 million.

The TCEQ solicits applications to develop projects that contribute to the NPS Program management plan. Typically, 10 to 20 applications are received, reviewed, and ranked each year. Because the number of projects funded depends on the amount of each contract, the number fluctuates. Seven projects were selected in fiscal 2015, and 13 in fiscal 2016. Half of the federal funds awarded must be used to implement watershed-based plans, comprising activities that include public outreach and education, low-impact development, construction and implementation of best management practices and inspection and replacement of on-site septic systems.

The NPS Program also administers provisions of Section 604(b) of the federal Clean Water Act. These funds are derived from State Revolving Fund appropriations under Title VI of the act. Using a legislatively mandated formula, money is passed through to councils of governments for water quality planning. In fiscal 2015, the program received \$647,000 in funding from the EPA and, in fiscal 2016, \$644,000.

Bay and Estuary Programs

The estuary programs are non-regulatory, community-based programs focused on conserving the sustainable use of bays and estuaries in the Houston-Galveston and Coastal Bend bays regions through implementation of locally developed comprehensive conservation management plans. Plans for Galveston Bay and the Coastal Bend bays were established in the 1990s by a broad-based group of stakeholders and bay user groups. These plans strive to balance the economic and human needs of the regions.

The plans are implemented by two different organizations: the Galveston Bay Estuary Program, which is a program of the TCEQ, and the Coastal Bend Bays and Estuaries Program, which is managed by a nonprofit authority established for that purpose. The TCEQ partially funds the CBBEP.

Additional coastal activities at the TCEQ include:

- Participating in the Gulf of Mexico Alliance, a partnership linking Alabama, Florida, Louisiana, Mississippi, and Texas. The TCEQ contributes staff time to implement the Governors' Action Plan, focusing on water resources and improved comparability of data collection among the states.
- Serving on the Coastal Coordination Advisory Committee and participating in the implementation of the state's Coastal Management Program to improve the management of coastal natural resource areas and

- to ensure long-term ecological and economic productivity of the coast.
- Directing, along with the General Land Office and the Railroad Commission of Texas, the allocation of funds from the Coastal Impact Assistance Program.
- Working with the General Land Office to gain full approval of the Coastal Nonpoint Source Program, which is required under the Coastal Zone Act Reauthorization Amendments.

Galveston Bay Estuary Program

The GBEP provides ecosystem-based management that strives to balance economic and human needs with available natural resources in Galveston Bay and its watershed. Toward this goal, the program fosters cross-jurisdictional coordination among federal, state, and local agencies and groups, and cultivates diverse, public-private partnerships to implement projects and build public stewardship.

GBEP priorities include:

- coastal habitat conservation
- public awareness and stewardship
- water conservation
- stormwater quality improvement
- monitoring and research

During fiscal 2015 and 2016, the GBEP worked to preserve wetlands and important coastal habitats that will protect the long-term health and productivity of Galveston Bay. To inform resource managers, the program conducted ecosystem-based monitoring and research, and worked with partners to fill data gaps. The GBEP collaborated with local stakeholders to create watershed-protection plans and to implement water quality projects. Its staff hosted the 10th State of the Bay Symposium in January 2016 and also continued to develop the Back to the Bay campaign, which strives to increase public awareness and stakeholder involvement and to reinforce the priorities of the Galveston Bay Plan.

In fiscal 2015 and 2016, about 3,086 acres of coastal wetlands and other important habitats were protected, restored, and enhanced. Since 2000, the GBEP and its partners have protected, restored, and enhanced a total of 27,131 acres of important coastal habitats.

Through collaborative partnerships established by the program, approximately \$6.00 in private, local, and federal contributions was levered for every \$1 the program dedicated to these projects.

Coastal Bend Bays and Estuaries Program

During fiscal 2015 and 2016, the CBBEP implemented 68 projects, including habitat restoration and protection in areas totaling 14,492 acres. Based in the Corpus Christi area, the CBBEP is a voluntary partnership that works with industry, environmental groups, bay users, local governments, and resource managers to improve the health of the bay system. In addition to receiving program funds from local governments, private industry, the TCEQ, and the EPA, the CBBEP seeks funding from private grants and other governmental agencies. In the last two years, the CBBEP secured more than \$9.75 million in additional funds to lever TCEQ funding.

CBBEP priority issues focus on human uses of natural resources, freshwater inflows, maritime commerce, habitat loss, water and sediment quality, and education and outreach. The CBBEP has also become active in water and sediment quality issues. The CBBEP's goal is to address 303(d)-listed segments so they meet state water quality standards.

Other areas of focus:

- conserving and protecting wetlands and wildlife habitat through partnerships with private landowners
- restoring the Nueces River Delta for the benefit of fisheries, wildlife habitat, and freshwater conservation
- environmental education and awareness for more than 8,000 students and teachers annually at the CBBEP Nueces Delta Preserve by delivering educational experiences and learning through discovery, as well as scientific activities
- enhancement of colonial-waterbird rookery islands by implementing predator control, habitat management, and other actions to help stem the declining populations of nesting coastal birds in the Coastal Bend and the Lower Laguna Madre
- supporting the efforts of the San Antonio Bay Partnership to better characterize the San Antonio Bay system and to develop and implement management plans that protect and restore wetlands and wildlife habitats

Drinking Water

Of the 6,715 public water systems in Texas, about 4,640 are community systems, mostly operated by cities. These systems serve about 96 percent of Texans. The rest are non-community systems—such as those at schools, churches, factories, businesses, and state parks.

The TCEQ makes data tools available online so the public can find information on the quality of locally produced drinking water. The Texas Drinking Water Watch <www.tceg.texas.gov/goto/dww> provides analytical results from the compliance sampling of public water systems. In addition, the Source Water Assessment Viewer <www.tceg.texas.gov/gis/swaview> shows the location of the sources of drinking water. The viewer also allows the public to see any potential sources of contamination, such as an underground storage tank.

All public water systems are required to monitor the levels of contaminants present in treated water and to verify that each contaminant does not exceed its maximum contaminant level, action level, or maximum residual disinfection level the highest level at which a contaminant is considered acceptable in drinking water for the protection of public health.

In all, the EPA has set standards for 102 contaminants in the major categories of microorganisms, disinfection byproducts, disinfectants, organic and inorganic chemicals, and radionuclides. The most significant microorganism is coliform bacteria, particularly fecal coliform. The most common chemicals of concern in Texas are disinfection by-products, arsenic, fluoride, and nitrate.

More than 54,000 water samples are analyzed each year just for chemical compliance. Most of the chemical samples are collected by contractors and then submitted to a certified laboratory. The analytical results are sent to the TCEQ and the public water systems.

Each year, the TCEQ holds a free symposium on public drinking water, which typically draws about 800 participants. The agency also provides technical assistance to public water systems to ensure that consumer confidence reports are developed correctly.

Any public system that fails to have its water tested or reports test results incorrectly faces a monitoring or reporting violation. When a public water system has significant or repeated violations of state regulations, the case is referred to the TCEQ's enforcement program.

Violations of Drinking-Water Regulations

	FY2015	FY2016	
Enforcement Orders	421	327	
Assessed Penalties	\$609,716	\$363,991	
Offsets by SEPs	\$3,695	\$6,687	

Note: The numbers of public water supply orders reflect enforcement actions from all sources in the agency.

The EPA developed the Enforcement Response Policy and the Enforcement Targeting Tool for enforcement targeting under the Safe Drinking Water Act. The TCEQ uses this tool to identify public water systems with the most serious health-based or repeated violations and those that show a history of violations of multiple rules. This strategy brings the systems with the most significant violations to the top of the list for enforcement action, with the goal of returning those systems to compliance as quickly as possible.

More than 96 percent of the state's population is served by public water systems producing water that meets or exceeds the National Primary Drinking Water Standards.

Review of Engineering Plans and Specifications

Public water systems are required to submit engineering plans and specifications for new water systems or for improvements to existing systems. The plans must be reviewed by the TCEQ before construction can begin. In fiscal 2015, TCEQ completed compliance review of 2,085 engineering plans and for public water systems and, in fiscal 2016, 2,038.

The agency strives to ensure that all water and sewer systems have the capability to operate successfully. The TCEQ contracts with the Texas Rural Water Association to assist utilities with financial, managerial, and technical expertise. About 770 assignments for assistance to utilities were made through this contract in fiscal year 2015, as were 590 assignments in fiscal 2016.

The agency reviews the creation of applications for general-law water districts and bond applications for water districts to fund water, sewer, and drainage projects. In fiscal 2015, the agency reviewed 506 water-district applications; in fiscal 2016, 430.

Wastewater Permitting

The Texas Pollutant Discharge Elimination System was delegated to the state in 1998 when the EPA transferred the authority of the National Pollutant Discharge Elimination System for issuing water quality permits in the state to Texas. The TPDES program issues municipal, industrial, and stormwater permits.

Industrial and Municipal Individual Permits

Industrial wastewater permits are issued for the discharge of wastewater generated from industrial activities. In

fiscal 2015, the TCEQ issued 138 industrial wastewater permits; in fiscal 2016, 164. Municipal wastewater permits are issued for the discharge of wastewater generated from municipal and domestic activities. In fiscal 2015, the TCEQ issued 659 municipal wastewater permits; in fiscal 2016, 585.

Stormwater Permits

Authorization for stormwater discharges are primarily obtained through one of three types of general permits: industrial, construction, and municipal. The TCEQ receives thousands of applications a year for coverage. To handle the growing workload, the agency has introduced online applications for some of these permitting and reporting functions.

Industry

The multi-sector general permit regulates stormwater discharges from industrial facilities. Facilities authorized under this general permit must develop and implement a stormwater pollution prevention plan, conduct regular monitoring, and use best management practices to reduce the discharge of pollutants in stormwater. The TCEQ receives about 137 notices of intent, no exposure certifications, and notices of termination a month for industrial facilities

Construction

The construction general permit regulates stormwater runoff associated with construction activities, which include clearing, grading, or excavating land at building projects. Construction disturbing five or more acres is labeled a "large" activity, while construction disturbing one acre or more but less than five acres is termed "small." The TCEQ currently receives about 649 notices of intent and 362 notices of termination a month for large construction activities.

Municipal

The TCEQ also regulates discharges from municipal separate storm-sewer systems (MS4s). This category applies to a municipality's system of ditches, curbs, gutters, and storm sewers that collect runoff, including controls for drainage from state roadways. The TCEQ has issued 26 individual MS4 permits. The remaining MS4s are authorized by general permit. MS4s must develop and implement a stormwater management plan.

	Number Affected (issued)		Rece (mor	Applications Received (monthly average)		Applications Received (total)	
	Fiscal 2015	Fiscal 2016	Fiscal 2015	Fiscal 2016	Fiscal 2015	Fiscal 2016	
Industrial (facilities) *	1,187	1,855	102	151	1,223	1,812	
Construction (large sites)	7,685	7,783	643	649	7,712	7,783	
MS ₄ s (public entities)	455	98	3	2	34	20	

^{*} Includes No-Exposure Certifications (NECs).

Water Availability

Responding to Drought

In recent years, Texas has experienced historic droughts. The drought of 2011 broke records, with 97 percent of the state in extreme or exceptional drought. By mid-2014, almost 45 percent of the state remained in severe, extreme, or exceptional drought. In comparison, by mid-2016, less than 2 percent of the state experienced abnormally dry conditions.

Agency Response and Assistance

The TCEQ has engaged in proactive steps to respond to extreme drought. It communicates information about drought conditions and permit suspensions to state leaders, legislative officials, county judges, county extension agents, holders of water-right permits, and the media.

This response is coordinated through the TCEQ's Drought Team, a multidisciplinary agency group that began meeting in 2010. The team issues updates on the status of drought conditions and agency responses. Agencies invited to team meetings are partners such as the Texas Department of Emergency Management, Texas Department of Agriculture, and Texas Water Development Board.

In addition, the multi-disciplinary Emergency Drinking Water Task Force was formed by the Texas Division of Emergency Management and facilitated by the TCEQ to respond to drought emergencies at public water systems. Once the TCEQ was notified or became aware that a water system was within 180 days of running out of water, the task force informed the appropriate local and

state officials, as well as the local TDEM district coordinator, who in turn notified the county emergency management coordinator, mayor, county judge, and appropriate state legislators. The task force met weekly at the height of the drought, and now—in 2016—meets biweekly, to discuss the systems being tracked and opportunities for outreach and assistance.

The agency continues to monitor a targeted list of public water systems that have a limited or an unknown supply of water remaining. Employees offer those systems financial, managerial, and technical assistance, such as identifying alternative water sources, coordinating emergency drinking-water planning, and finding

possible funding for alternative sources of water. The TCEQ also engages in outreach and assistance—specifically targeting public water systems—to help prevent systems from running out of water. The agency contacts public water suppliers to urge implementation of drought contingency plans. TCEQ staff offer assistance to any public water system continuing to experience critical conditions.

From 2011 to the present, the TCEQ has provided technical assistance to more than 100 public water systems by expediting approximately 360 requests for reviews of plans and specifications for drilling additional wells, moving surface water intakes to deeper waters, and finding interconnections with adjacent water systems, without compromising drinking-water quality and capacity of other systems.

In fiscal 2016, 680 public water systems in Texas had activated mandatory water restrictions, while another 415 relied on voluntary measures to cut back on water use. For the complete list, see <www.tceq.texas.gov/goto/pws-restrictions>.

Exploring New Supplies through Alternative Treatment

With Texas' population expected to reach almost 46 million by the year 2060, Texans have had to plan far in advance to sustain their water needs. Because of these challenges, public water systems have begun to use less-conventional sources of water and the TCEQ began reviewing a number of innovative water-supply projects, some of which had not previously been considered. The TCEQ has engineers and scientists with the expertise to

guide public water systems through selecting innovative treatment technologies and receiving approval for those technologies while ensuring that the treated water is safe for human consumption.

One alternative involves not only reclaiming effluent from municipal wastewater-treatment plants for non-potable uses such as irrigation and industry, but also adding additional treatment to remove chemical and microbiological contaminants to prepare the effluent for direct potable reuse.

Another alternative for some communities is to treat saline or brackish groundwater. For this reason, the agency initiated rulemaking to streamline construction approval for public water systems asking to conduct brackish-water desalination. In July 2015, after extensive input from the regulated community and interested stakeholders, the rules for desalination using either reverse-osmosis or nanofiltration membranes became effective. In the past, the use of reverse-osmosis membranes or other desalination techniques required either a site-specific pilot study, a pilot study at a site with similar water quality, or full-scale performance data from a site with similar water quality. The streamlined approach in the new rules allows the use of desalination technologies without an exception request. To further assist communities with decreased water supplies, the TCEQ offers concurrent reviews of designs and models.

In addition, marine desalination has been gaining attention as some communities seek to treat saline water to make it potable. In response, the 84th Texas Legislature passed House Bills 2031 and 4097 in 2015 to expedite permitting related to desalination of both marine seawater from the Gulf of Mexico and seawater from a bay or arm of the gulf. In 2016, the agency initiated a rulemaking to expedite permitting and related processes for such diversion of seawater and the discharge of both treated seawater and waste resulting from desalination, and to address industrial seawater desalination.

Water Rights

Water flowing in Texas creeks, rivers, lakes, and bays is state water. The right to use water may be acquired through appropriation via permitting as established in state law. The TCEQ reviews permit applications for new water for administrative and technical requirements related to conservation, water availability, and the environment. In fiscal 2015 and 2016, the agency processed 1,722 water-rights actions, including new permits and amendments, water-supply contracts, and transfers of ownership.

Because of limited water availability, some cities, governments, businesses, and individuals have begun turning to indirect reuse or groundwater as a source of supply. With indirect reuse or groundwater, an authority or individual may discharge effluent or groundwater into a stream, subsequently divert the effluent or groundwater, and use (or reuse) it for irrigation or some other purpose. These types of projects require a bed-and-banks authorization. A total of seven indirect reuse authorizations and amendments and nine bed and banks applications for groundwater conveyance were processed in fiscal years 2015 and 2016.

Since July 2015, the TCEQ has been conducting a critical review of water rights permitting and change of ownership processes that has resulted in changes that include allocating additional personnel authorized by the 84th Texas Legislature for the water-rights permitting program, strongly encouraging pre-application meetings to assist applicants in developing more complete applications, removing redundant internal processes, limiting time extensions granted to applicants to respond to requests for information, and implementing return policies when an applicant is unresponsive. The TCEQ continues to search for more improvements that will expedite permitting without neglecting any statutory responsibilities. The TCEQ is currently working to improve application forms and the instructional material available on its website. In addition, the TCEQ has engaged in outreach efforts to help water right-holders remain in compliance with statutory requirements for reporting water use. Whenever possible, the TCEQ has also reached out to water-rights stakeholders and has increased its presence and availability at water conferences and other events.

Texas Instream Flow Program

The Texas Instream Flow Program, established in 2001, is a collaboration between the TCEQ, the Texas Water Development Board, and the Texas Parks and Wildlife Department. The purpose of the program is to collect and evaluate instream-flow data and to conduct studies to determine instream-flow conditions necessary to support a sound ecological environment.

Instream-flow studies are ongoing in the lower San Antonio, middle and lower Brazos, middle Trinity, and lower Guadalupe river basins. Final recommendations of instream-flow studies of the lower San Antonio and middle and lower Brazos river basins are to be completed by the end of 2016. Data collection efforts are ongoing for the middle Trinity and lower Guadalupe river basins.

Evaluations of River Basins without a Watermaster

Under the Texas Water Code, the TCEQ is required every five years to evaluate river basins that do not have a watermaster program to determine whether a watermaster should be appointed. Agency personnel are directed to report their findings and make recommendations to the commission.

In 2011, the TCEQ developed a schedule for conducting these evaluations, as well as criteria for developing recommendations. The first year of evaluation, conducted in 2012, included the Brazos and Colorado river basins, along with the Brazos-Colorado and Colorado-Lavaca coastal basins. In 2013 the Trinity and San Jacinto river basins were evaluated; in 2014, the Sabine and Neches river basins.

In 2015, evaluations were conducted for the Red and Canadian river basins. For 2016 the fifth evaluation year, the TCEQ evaluated the Cypress Creek and Sulphur River basins. Through this process, the TCEQ received input from stakeholders on whether a new watermaster area was needed. One new area was identified through the petition process for the Brazos River Basin.

For more information, see Appendix D, "Evaluation of Water Basins in Texas without a Watermaster."

Brazos Watermaster

In April 2014, the TCEQ directed that a watermaster be appointed for a portion of the Brazos River Basin, which includes Possum Kingdom Lake and below. This directive was in response to a petition by 35 water-right holders in the basin.

The Brazos watermaster area contains over 900 water rights that authorize over 3 million acre-feet of water and 26 major reservoirs. Water is diverted in the Brazos watermaster area for many purposes, including municipal, industrial, agricultural, and mining use. Since June 2015, the staff has communicated with 79 percent (738) of the water-rights holders, representing approximately 98 percent of the authorized diversions within the watermaster's jurisdiction. Personnel continue to look for methods of reaching the remaining water-rights holders, but challenges include a lack of contact information and current addresses.

Texas Interstate River Compacts

Texas is a party to five interstate river compacts. These compacts apportion the waters of the Canadian, Pecos, Red, and Sabine rivers and the Rio Grande between the appropriate states. Interstate compacts form a legal foundation for the equitable division of the water of an interstate stream with the intent of settling each state's claim to the water.

Rio Grande Compact

The Rio Grande Compact, ratified in 1939, divided the waters of the Rio Grande among the signatory states of Colorado, New Mexico, and Texas from its source in Colorado to Fort Quitman, Texas. The compact did not contain specific wording regarding the apportionment of water in and below Elephant Butte Reservoir. However, the compact was drafted and signed against the backdrop of the 1915 Rio Grande Project and a 1938 U.S. Bureau of Reclamation contract that referred to a division of 57 percent to New Mexico and 43 percent to Texas. The compact contains references and terms to ensure sufficient water to the Rio Grande Project.

The project serves the Las Cruces and El Paso areas and includes Elephant Butte Reservoir, along with canals and diversion works in New Mexico and Texas. The project water was to be allocated by the 57:43 percent division, based on the relative amounts of project acreage

Rio Grande Watershed



originally identified in each state. Two districts receive project water: the Elephant Butte Irrigation District in New Mexico and El Paso County Water Improvement District No. 1 in Texas. The latter supplies the city of El Paso with about half of its water.

In 2008, after 20 years of negotiations, the two districts and the Bureau of Reclamation completed an operating agreement for the Rio Grande Project. The agreement acknowledged the 57:43 percent division of water and established a means of accounting for the allocation. The agreement was a compromise to resolve major issues regarding the impact of large amounts of groundwater development and pumping in New Mexico that affected water deliveries to Texas.

But significant compliance issues continue regarding New Mexico's water use associated with the Rio Grande Compact. In 2011, New Mexico took action in federal district court to invalidate the 2008 operating agreement. In response to the lawsuit and in coordination with the Legislative Budget Board and the Attorney General's Office, the Rio Grande Compact hired outside counsel and technical experts with specialized experience in interstate water litigation to protect Texas' share of water.

In January 2013, Texas filed litigation with the U.S. Supreme Court. A year later, the Supreme Court granted Texas' motion and accepted the case. Subsequently, on March 31, 2014, the Supreme Court granted the United States' motion for intervention.

As Texas develops factual information to support its position, evidence grows that New Mexico's actions have significantly affected, and will continue to affect, water deliveries to Texas. On Nov. 3, 2014, the Supreme Court appointed a special master in this case with authority to fix the time and conditions for the filings of additional pleadings, to direct subsequent proceedings, to summon witnesses, to issue subpoenas, and to take such evidence as may be introduced. The special master was also directed to submit reports to the Supreme Court as he may deem appropriate.

A "special master" is appointed by the Supreme Court to carry out actions on its behalf such as the taking of evidence and making rulings. The Supreme Court can then assess the special master's ruling much as a normal appeals court would, rather than conduct the trial itself. This is necessary as trials in the U.S. almost always involve live testimony and it would be too unwieldy for nine justices to rule on evidentiary objections in real time.

On Dec. 3, 2014, Elephant Butte Irrigation District filed a motion to intervene as a party to these proceed-

ings, and on April 22, 2015, El Paso County Water Improvement District No. 1 filed a motion to intervene.

New Mexico also moved to dismiss Texas' complaint against New Mexico, as well as to dismiss the United States' complaint in intervention.

The special master issued his draft First Report on June 28, 2016, and recommended that

- the court deny New Mexico's motion to dismiss Texas' complaint,
- the court partially grant New Mexico's motion to dismiss the United States' complaint in intervention, and
- the court deny EBID's and EPCWID's motions to intervene.

The special master then invited corrections of facts or misstatements of law in his draft First Report. These corrections were to be submitted to him by Aug. 1, 2016, after which he would decide whether or not to change anything in the report before forwarding a final First Report to the Supreme Court.

As of Aug. 31, 2016, the special master had not forwarded his final First Report to the Supreme Court.

When the Supreme Court receives the final First Report, they will ask for a period of time where the parties can file exceptions, which are appeals to the report. The report then continues through the Court's procedural process where they can choose to affirm the report as is and ignore the exceptions or ask the parties to come and argue their exceptions. In the interim, the Special Master is proceeding forward with the case and planning for the parties to go to trial.

International Treaties

Two international treaties have a major impact on water supplies available to Texas. The 1906 convention between the United States and Mexico apportions the waters of the Rio Grande Basin above Fort Quitman, Texas, while the 1944 treaty between the United States and Mexico apportions the waters of the basin below Fort Quitman.

Mexico continues to under-deliver water to the United States under the 1944 Treaty. Mexico does not treat the United States as a water user and only relies on significant rainfalls to make deliveries of water to north of the border. This stands in contrast to the manner in which the United States treats Mexico in regards to the Colorado River. In fact, the United States has always supplied Mexico its annual allocation from the Colorado River. The Colorado River and the Rio Grande are both covered by the same

1944 water treaty. Efforts continue through the Texas congressional delegation to address this problem.

A related issue concerns the accounting of waters in the Rio Grande at Fort Quitman. While the 1906 convention clearly granted 100 percent of all waters below El Paso to Fort Quitman to the United States, the International Boundary and Water Commission has allocated the waters equally between the United States and Mexico.

Groundwater

The TCEQ is responsible for delineating and designating priority groundwater management areas and creating groundwater-conservation districts in response to landowner petitions or through creating PGMAs.

In 2017, the TCEQ and the Texas Water Development Board will submit a joint legislative report that details activities in fiscal 2015–16 relating to PMGAs and the creation and operation of groundwater-conservation districts.

Groundwater conservation districts, each governed by a locally selected board of directors, are the state's preferred method of groundwater management. Under the Texas Water Code, GCDs are authorized and required to issue permits for water wells, develop a management plan, and adopt rules to implement the plan. The plan and the "desired future conditions" for a groundwater management area must be readopted and approved at least once every five years. The TCEQ actively monitors and ensures GCD compliance to meet requirements for adoption and re-adoption of management plans.

The TCEQ also has responsibility for supporting the activities of the interagency Texas Groundwater Protection Committee. Texas Water Code Sections 26.401–26.408, enacted by the 71st Texas Legislature (1989), established non-degradation of the state's groundwater resources as the goal for all state programs. The same legislation created the TGPC to bridge gaps between existing state groundwater programs and to optimize groundwater quality protection by improving coordination among agencies involved in groundwater activities.

Among the TGPC's mandated activities are:

- developing and updating a comprehensive groundwater protection strategy for the state
- publishing an annual report on groundwater monitoring activities and cases of documented groundwater contamination associated with activities regulated by state agencies

 preparing and publishing a biennial report to the legislature describing these activities, identifying gaps in programs, and recommending actions to address those gaps

Waste Management

Disposal of Low-Level Radioactive Waste

In 2009, the TCEQ issued a license to Waste Control Specialists LLC (WCS) authorizing the operation of a facility for disposal of low-level radioactive waste (LLRW) in Andrews County, Texas.

The LLRW generated in the Texas LLRW Disposal Compact between the states of Texas and Vermont may be disposed of in the Compact Waste Disposal Facility, in addition to accepted non-compact wastes. A separate, adjacent facility, which was authorized by the same license, may accept LLRW and mixed waste (waste that contains both a hazardous and a radioactive constituent) from federal facilities. Upon eventual closure of this site, the facility will be owned by the U.S. Department of Energy.

After the TCEQ authorized commencement of operations at the Compact Waste Disposal Facility portion of the site, the facility received its first waste shipment in April 2012. The TCEQ then authorized operations to begin at the Federal Waste Disposal Facility portion of the site, and the facility received its first waste shipment in June 2013. Since operations began at both sites, more than 300,000 cubic feet of waste had been safely disposed of, and nearly \$37 million in disposal and processing fees had been collected as revenue for the state through fiscal 2016.

Texas' LLRW is produced predominantly by nuclear utilities, academic and medical research institutions, hospitals, industry, and the military. LLRW typically consists of radioactively contaminated trash, such as:

- paper
- rags
- plastic
- glassware
- syringes
- protective clothing (gloves, coveralls)
- cardboard
- packaging material

- organic material
- spent pharmaceuticals
- used (decayed), sealed radioactive sources
- residues from water treatment

Nuclear power plants contribute the largest portion of LLRW in the form of contaminated ion-exchange resins and filters, tools, clothing, and irradiated metals and other hardware. LLRW does not include waste from nuclear-weapons manufacturing or from U.S. Navy nuclear propulsion systems.

By law, the TCEQ is responsible for setting rates for the disposal of LLRW at the compact facility. In November 2013, the TCEQ adopted a final disposal rate by rule and published the notice in the *Texas Register*.

Disposal of Radioactive By-Product Material

Licensed in 2008, the WCS site has been open for byproduct disposal since 2009. By-product material that can be disposed of by WCS is defined as tailings or wastes produced by, or resulting from, the extraction or concentration of uranium or thorium from ore.

Since 2009, WCS has disposed of one by-product waste stream containing 3,776 canisters of waste generated by the Department of Energy's Fernald facility in Ohio.

Underground Injection Control of Mining Wastes

The TCEQ regulates disposal of by-product material generated at *in situ* uranium mining and processing sites. This occurs through permitting and enforcement of Class I injection wells under the agency's federally authorized Underground Injection Control (UIC) Program.

Uranium mining sites may have a permitted Class I UIC well for disposal of concentrated waste produced from *in situ* mining and uranium recovery, as well as contaminated groundwater recovered during restoration of a site.

At the end of fiscal 2016, Texas had five uranium mining licenses comprising eight sites and two licensed uranium-processing facilities.

Uranium Production

Uranium is produced in Texas through *in situ* leaching. Uranium is leached directly out of a uranium-bearing formation underground and pumped in solution to the surface for processing. The conventional method for uranium production, used in the past, created impoundments for disposal of by-product waste.

Superfund Program

Superfund is the federal program that enables state and federal environmental agencies to address properties contaminated by hazardous substances. The EPA has the legal authority and resources to clean up sites where contamination poses the greatest threat to human health and the environment.

Texas either takes the lead or supports the EPA in the cleanup of Texas sites that are on the National Priorities List, which is the EPA's ranking of national priorities among known releases or threatened releases of hazardous substances, pollutants, or contaminants.

In addition, Texas has a state Superfund program to address sites that are ineligible for the federal program. This program is the state's safety net for addressing contaminated sites. The TCEQ uses state funds for cleanup at sites in the Texas Superfund Registry if no responsible parties can or will perform the cleanup. The TCEQ also takes legal steps to recover the cleanup expenses.

After a site is proposed for the state Superfund program, either the responsible party or the TCEQ proceeds with a remedial investigation, during which the agency determines the nature and extent of the contamination. A feasibility study follows to identify possible cleanup remedies. A local public meeting is held to explain the proposed remedy and to accept public comments. The TCEQ then selects an appropriate remedial action.

In fiscal 2015, Texas had a 112 active sites in the state and federal Superfund programs. Remedial action was completed at two state Superfund sites, one in Bexar County, and the other in Harris County. One state Superfund site in El Paso County was deleted from the Texas Superfund Registry.

In fiscal 2016, one new site in Bexar County was proposed for the National Priorities List, for a total of 110 active sites. Remedial actions were completed at one Texas Superfund Registry site located in Brazoria County which was subsequently deleted from the Texas Superfund Registry. Two additional state Superfund sites became inactive upon their deletion deed notices being filed, one in Nacogdoches County and one in El Paso County.

Petroleum-Storage Tanks

The TCEQ oversees the cleanup of contamination of groundwater and soil due to leaking petroleum-storage tanks. Since the program began in 1987, the agency has received reports of 27,645 leaking PST sites—primarily at gasoline stations.

By the end of fiscal 2016, cleanup had been completed at 26,090 sites, and corrective action was under way at 1,555 sites.

Of the total reported PST releases, about half have affected groundwater.

Leaking PSTs are often discovered when a tank owner or operator upgrades or removes tanks, when an adjacent property owner is affected, or when the tank leak-detection system signals a problem. Some leaks are detected during construction or utility maintenance. Most tank-system leaks are due to corrosion, incorrect installation, or damage during construction or repairs.

To avoid releases, tank owners and operators are required to properly operate and monitor their storage-tank systems, install leak-detection equipment and corrosion protection, and take measures to prevent spills and overfills.

Tank owners and operators are required to clean up releases from leaking PSTs, beginning with a site assessment that may include drilling monitoring wells and taking soil and groundwater samples. The TCEQ oversees the remediation.

Under state law, cleanups of leaking tanks that were discovered and reported after Dec. 23, 1998, are paid by the owners' environmental liability insurance or other financial assurance mechanisms, or from their own funds.

The PST State Lead Program cleans up sites at which the responsible party is unknown, unwilling, or financially unable to do the work—and in situations in which an eligible site was transferred to State Lead by July 2011. State and federal funds pay for the corrective actions. Except for the eligible sites placed in the program by the July 2011 deadline, the state allows cost recovery from the current owner or any previous responsible owner.

Voluntary Cleanups

The Texas Voluntary Cleanup Program gives incentives for pollution cleanup by releasing future property owners from liability once a previously contaminated property is cleaned up to the appropriate risk-based standard.

Since 1995, the program has provided regulatory oversight and guidance for 2,755 applicants and has issued 2,132 certificates of completion.

In the last two years, the program received 147 applications and issued 190 certificates. Recipients of the certificates report that the associated release of liability helps with property sales, including transactions that would not have otherwise occurred due to real or perceived environmental impacts. As a result, many underused or unused properties may be restored to economically beneficial use.

The key benefit of the VCP is the liability release afforded to future property owners once the certificate is issued. The certificate insulates future owners from potential changes in environmental conditions, such as the discovery of previously unknown contamination.

The VCP is funded by an initial \$1,000 fee paid by each applicant. Costs beyond the initial fee are invoiced to the applicant monthly by the TCEQ.

Under the Innocent Owner/Operator Program, the TCEQ also implements the law providing liability protection to property owners whose land has been affected by contamination that migrated onto their property from an off-site source. In the last two years, the TCEQ issued 103 certificates.

Dry Cleaners

Since 2003, the TCEQ has been responsible for collecting fees for a remediation fund designed to help pay for the cleanup of contaminated dry-cleaner sites. The fees come from the annual registration of dry-cleaning facilities and drop stations, property owners, prior property owners, and solvent fees from solvent distributors.

The Legislature in 2007 established registration requirements for current and prior property owners who wish to claim benefits from the remediation fund, and authorized a lien against current and prior property owners who fail to pay registration fees due during corrective action.

In addition, the use of perchloroethylene was prohibited at sites where the agency has completed corrective action.

In fiscal 2015, there were 3,075 dry-cleaner registrations and more than \$3.3 million in invoiced fees; in fiscal 2016, a total of 2,963 registrations and approximately \$3.27 million in invoiced fees.

Managing Industrial and Hazardous Waste

The Resource Conservation Recovery Act establishes a system for controlling hazardous waste from the time it is generated until its ultimate disposal. The EPA has delegated the primary responsibility of implementing the RCRA in Texas to the TCEQ.

The TCEQ reviews and approves plans, evaluates complex analytical data, and writes new and modified Industrial and Hazardous Waste permits. Texas has 179 permitted I&HW treatment, storage, and disposal facilities.

During fiscal 2015 and 2016, the TCEQ issued 30 1&HW permit renewals, performed approximately 1,150 industrial waste stream audits, and oversaw remediation of a total of 310 sites.

Managing Municipal Solid Waste

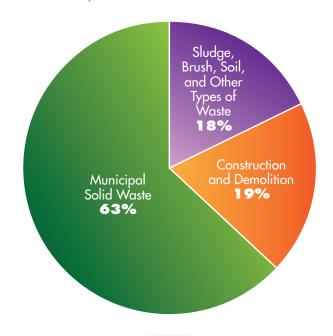
With growing demands on the state's waste-disposal facilities, the TCEQ evaluates the statewide outlook for landfill capacity and strives to reduce the overall amount of waste generated.

In fiscal 2015 (the most recent data available), there were 199 active municipal solid waste landfills in the state. Over 33.4 million tons of waste were disposed of, an increase of 9.4 percent from fiscal 2013. In fiscal 2015, the average per capita disposal rate was 6.7 pounds per person per day.

At the end of fiscal 2015, overall municipal solid-waste capacity was about 1.9 billion tons, representing an average of 56 years of disposal capacity. This is a net decrease of approximately 15 million tons, or roughly 3.7 million cubic yards, compared with the capacity in fiscal 2013. Throughout the state, the existing trend is for regional landfills to serve the state's more-populous areas, while less-populous areas in West Texas are served by small, arid-exempt landfills that accept less than 40 tons per day.

Municipal Solid Waste

Texas had 199 active municipal solid waste landfills in fiscal 2015 (the most recent data available). Municipal solid waste disposal reached about 33.4 million tons.



To assist regional and local solid-waste planning initiatives, such as addressing adequate landfill capacity, the TCEQ provides solid waste planning grants to each of the 24 regional councils of governments. The planning initiatives are based on goals specified in each COG's regional solid-waste-management plan.

For the 2014–15 grant period, the COGs received about \$10.9 million. Pass-through projects included recycling activities, cleanups of illegal dump sites (including illegal tire sites), household hazardous waste collection events, and education and outreach projects.

The Solid Waste Grants Program Funding Report, FY2014–2015, includes data collected by the TCEQ from the 24 COGs, and details the regional solid waste grant activities for that two-year period. The report will be available on the TCEQ's website in January 2017.

Environmental Assistance

Voluntary Programs

The TCEQ uses technical assistance, education, and pollution prevention programs to encourage environmental improvements. The Environmental Assistance Division (EAD) steers many of these programs in a direction that focuses on agency priorities and aligns with agency regulatory systems.

In fiscal 2015 and 2016, the division responded to 13,986 requests for assistance from small businesses and local governments. Of those, 663 received one-on-one assistance at their business site or facility.

In fiscal 2015, more than 180 small businesses and local governments took advantage of the EAD's Site Visit Program, which allowed them a site visit, during which a contractor of the TCEQ used a checklist to identify problems with environmental compliance. After the visit, the businesses and facilities received recommendations about actions they could take to resolve those problems. In fiscal 2015, 48 participants resolved the issues that were identified.

For fiscal 2016, the program was modified to focus resources on the requirements of the federal Energy Policy Act. Under that act, all registered petroleum storage tanks must undergo an investigation at least once every three years. Through the Site Visit Program, PST facilities have an opportunity to receive an Energy Policy Act site visit. If they achieve full compliance with the Energy Policy Act's checklist, they receive credit for their three-year investigation. Site visits do not lead to an investigation or citation, unless there is an imminent threat to human health or the environment.

In this first year of the new program focus, 178 site visits occurred, resulting in 77 compliant facilities. Those facilities that were not compliant received recommendations for resolving non-compliance issues so they can prepare for a future investigation under the Energy Policy Act.

In outreach to the smallest of water systems, the division developed an easy-to-use guide, *Managing Small Public Water Systems* (publication RG-501) in 2014. The guide includes simple instructions and worksheets to complete and maintain an asset-management plan with or without a computer. It covers system inventory and prioritization, planning, budgeting, assessing and protecting water sources, and best management practices.

Workshops on making the best use of RG-501 continued through fiscal 2015 and 2016 and were held in 13 cities, educating representatives from more than 350 water systems. Workshop locations included Midland, Uvalde, El Paso, Weslaco, Lubbock, New Braunfels, Denton, Rosenberg, Liberty, Cleveland, Texarkana, Tyler, and Golden.

Continuing with the same goal but focused on wastewater systems, the division developed another easy-to-use guide, *Managing Small Domestic Wastewater Systems* (RG-530). This guide also includes simple instructions and worksheets to complete and maintain an asset-management plan with or without a computer, and similarly covers system inventory and prioritization, planning, budgeting, and best management practices.

Workshops on making the best use of RG-530 were held in eight cities, educating representatives from more than 170 wastewater systems. Workshop locations included Round Rock, McKinney, Hillsboro, Conroe, Richmond, San Benito, Austin, and Tyler.

The TCEQ also offers educational opportunities and technical assistance through coordinated workshops,

seminars, and education events, including the annual Environmental Trade Fair and Conference held in downtown Austin. During the last two years, the agency sponsored 15 seminars to provide technical information to almost 13,000 attendees.

For larger organizations such as refineries, universities, and municipal utility districts, the TCEQ offered technical advice on innovative approaches for improving environmental performance through pollution prevention planning.

All together, these efforts resulted in reductions of hazardous waste by more than 5,126,000 tons and toxic chemicals by about 4,126,000 tons during fiscal 2015–16.

Renewing Old and Surplus Materials

Texas established the Resource Exchange Network for Eliminating Waste (RENEW) in 1988 to promote the reuse or recycling of industrial waste.

The materials-exchange network has assisted in the trading of millions of pounds of materials, including plastic, wood, and laboratory chemicals. These exchanges divert materials from landfills and help participants reduce waste-disposal costs and receive money for their surplus materials. Additionally, exchanges help protect the environment by conserving natural resources and reducing waste.

RENEW is a free, easy-to-use service. Listings are grouped under "Materials Available" for anyone offering raw materials to other facilities, and "Materials Wanted" for anyone looking to find raw materials.

Through the RENEW website <www.renewtx.org>, these participants can list and promote information on opportunities for exchanging at national and regional levels.

In fiscal 2015 and 2016, 109 users signed up to use RENEW, and 215 new listings were posted.



CHAPTER THREE

Legislation from the 84th Session

uring the regular legislative session in 2015, state lawmakers considered 638 bills that had the potential to affect the programs and activities of the Texas Commission on Environmental Quality.

Of those, about 174 bills were passed and became law. The new laws triggered a variety of activities at the TCEQ: new rules, operational or procedural changes, revised guidance documents, or internal administrative actions. Some of the newly enacted laws are summarized in this chapter.

HB 655

Aquifer Storage and Recovery Projects

House Bill 655, by Rep. Lyle Larson, amended the Texas Water Code to add requirements for aquifer storage and recovery projects, which inject water into subsurface geologic units, where it is stored for future recovery and beneficial use. The bill directs the TCEQ to adopt standards for such projects, including standards for well design and operation, the quality of injected water, public notice, reporting, and injection and recovery of appropriated water.

In addition, the bill directs the TCEQ to define the term "native groundwater" as "groundwater naturally occurring in a geologic formation." Rules for bill implementation were adopted on April 27, 2016, and became effective on May 19, 2016.

HB 2230

Disposal of Nonhazardous Brine

HB 2230, introduced by Rep. Lyle Larson, gives the TCEQ the ability to authorize an injection well that is used for oil and gas waste disposal permitted by the Railroad Commission of Texas to be used for the disposal of nonhazardous brine generated by a desalination operation or nonhazardous drinking-water-treatment residuals. A Class II injection well operator under the jurisdiction of the RRC, in good

standing with the RRC and operating a Class II well in active status, can seek authorization with the TCEQ to operate the Class II well as a Class V injection well. HB 2230 took effect on Sept. 1, 2015. Proposed rules for bill implementation were approved for publication on July 6, 2016 and are anticipated to be adopted on Dec. 7, 2016.

SB 394

Local Government Supplemental Environmental Projects

Senate Bill 394, adds language to the Texas Water Code that

(1) requires the TCEQ to approve a compliance Supplemental Environmental Project (SEP) for a local government if the local government has not previously committed a violation at the same site with the same underlying cause in the preceding five years, as documented in a commission order, and did not agree to perform the project before the date that the commission initiated the enforcement action, and

(2) exempts such a local government from the financial assessment required by Texas Water Code Section 7.067(a-2) to prevent regulated entities from systematically avoiding compliance through the use of compliance SEPs.

SB 394 took effect June 19, 2015. Several activities were completed in order to implement SB 394. The application form for a compliance SEP was revised. A document entitled "Verification for Compliance SEP to Proceed" was created to ensure that enforcement coordinators and litigation attorneys assigned to enforcement cases involving local governments review all commission orders for the site for the preceding five years. In addition, standard operating procedure (SOP) was revised to ensure that the SEP staff determines whether the local-government respondent has previously agreed to perform the project before the TCEQ initiated the enforcement action. These operational changes were necessary in order to determine whether

a local government meets the statutory conditions and is therefore automatically authorized to perform a compliance SEP without a financial assessment. The SEP guidance document (publication GI-352) was also revised to reflect the changes caused by the passage of SB 394. In addition, SEP personnel conducted a presentation for Office of Compliance and Enforcement staff regarding the operational changes caused by SB 394. Furthermore, the sections of the SEP SOP that were revised to reflect the changes caused by the passage of SB 394 have been provided to OCE staff and the entire SEP SOP has been made available to all agency personnel on the agency's intranet.

HB 2031 and HB 4097 Rule Project No. 2015-029-295-OW Marine Seawater Desalination

HB 2031, introduced by Rep. Eddie Lucio III, relates to the diversion, treatment, and use of marine seawater from the Gulf of Mexico, conveyance of treated marine seawater, and the discharge of treated marine seawater and waste resulting from desalination. This bill creates Chapter 18, Texas Water Code, to address marine seawater desalination projects.

The bill prohibits the diversion of marine seawater and the discharge of waste resulting from its desalination in a bay or estuary under the expedited permit process as allowed by the new Chapter 18. A person has the option to use existing law to seek a permit to divert or discharge in a bay or estuary.

HB 4097, introduced by Rep. Todd Hunter, relates to seawater-desalination projects for marine seawater from the Gulf of Mexico or other seawater from a bay or arm of the Gulf of Mexico. This bill creates Sections 11.1405 and 26.0272 and amends Sections 27.021 and 27.025, Texas Water Code, to address desalination for industrial purposes.

The bill requires the Public Utilities Commission and the Electricity Reliability Council of Texas (ERCOT) to study seawater-desalination projects. Additionally, the TCEQ will adopt rules to expedite permitting for the diversion of seawater.

The rulemaking to implement HB 2031 and HB 4097 amends Title 30, Texas Administrative Code Chapters 39, 295, and 297. It also creates a new Chapter 318 in the commission's rules.

Chapter 39 establishes an expedited public notice process for treated marine seawater discharges and off-shore discharges from the marine seawater desalination project.

Chapter 295 establishes the requirements for a waterright application to divert marine seawater or seawater and a waterright application to convey treated marine seawater in the bed and banks of a watercourse. It also establishes the requirements for notice of a water-right application to divert marine seawater or seawater and for notice of a water-right application to convey treated marine seawater in the bed and banks of a watercourse.

Chapter 297 establishes the approval criteria for a water-right application to divert marine seawater and seawater and a water-right application to convey treated marine seawater in the bed and banks of a watercourse.

Chapter 318 establishes an expedited permitting process for discharges of treated marine seawater and off-shore discharges.

The proposed rule was approved by the commission for publication and public hearing on May 11, 2016, and was published in the May 27, 2016, issue of the *Texas Register*. The agency held a rulemaking public hearing on June 21, 2016, in Austin at the TCEQ's headquarters.

The agency anticipates that these rules will be adopted at the Oct. 19, 2016, commission agenda meeting and will be effective on Nov. 16, 2016.

SB 709

Contested-Case-Hearing Process

SB 709, introduced by Sen. Troy Fraser, makes several changes to the current contested-case-hearing process for permit applications related to air quality; water quality; municipal, industrial, and hazardous waste; and underground injection control. The legislation amends the affected-person determination process, places a timeline on the State Office of Administrative Hearings, and overhauls the permitting process for all parties involved.

The effective date of the legislation was Sept. 1, 2015, with rulemaking required by Jan. 1, 2016. Implementation of the bill included:

- Creating a new, additional notification to legislators of draft permits, together with changes to procedures for the permitting programs to ensure timely notification without delay of application processing.
- Making updates to the Commissioners' Integrated
 Database for applications subject to SB 709. The
 database tracks the procedural process for applications and contains comments and filings submitted on
 those applications.

- Revising various notice templates and the transmittal memo for the executive director's responses to comments, and changing the procedures for the Office of Chief Clerk for mailing responses to comments and compiling and certifying the administrative record for filing with the State Office of Administrative Hearings.
- Conducting outreach to the public regarding the changes in the law, including revising information on public participation (on the web and in print) disseminated by the Environmental Assistance Division, and ensuring that notice of administratively complete applications for all permits and licenses is available on the TCEQ's website.
- Adopting rules on Dec. 9, 2015, effective Dec. 31, 2015.

HB 942 Tier II Chemical Reporting

HB 942, by Rep. Kyle Kacal, transferred the Tier II Chemical Reporting Program from the Texas Department of State Health Services to the TCEQ. The TCEQ received 13 full-time employees on Sept. 1, 2015—11 transfers from DSHS and two new positions. The TCEQ is instituting a new system that chemical reporters can use to report their chemical storage online through the Tier II report. The

TCEQ is also investigating facilities to ensure that those reports are submitted as required. In addition, the TCEQ has launched a grant program to assist Local Emergency Planning Committees in fulfilling the requirements of the Emergency Planning and Community Right to Know Act.

SB 20, General Appropriations Act Art. IX, Sec. 7.12 Contract Administration and Ethics

SB 20, by Sen. Jane Nelson, sought to improve the transparency and administration of state agency contracting. The bill also required agencies to adopt certain ethics procedures. To implement the bill, the TCEQ has made all new contracts available to the public on the agency's website, revised contract management and ethics policies, extended contract document retention periods, updated and published a Contract Management Handbook, and revised procedures for conflict of interest disclosures by executive management and staff involved in procurements. The TCEQ's rule for enhanced contract monitoring has been published and is scheduled for adoption by the commission on Nov. 16, 2016. Additionally, in accordance with related new provisions in the General Appropriations Act, the TCEQ also reports certain contracts to the Legislative Budget Board.



C H A P T E R F O U R

Agency Resources

his chapter outlines the agency's workforce and financial resources.

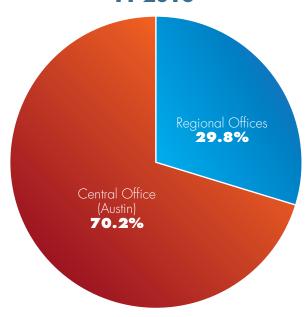
The Texas Commission on Environmental Quality has about 2,700 full-time employees, with more than a

has about 2,700 full-time employees, with more than a quarter working outside of the Austin headquarters. The agency has 16 regional offices, as well as five satellite offices throughout Texas.

These field offices give the TCEQ a statewide presence, enabling its staff to communicate firsthand with municipalities, businesses and industry, and community groups in all quarters of Texas.

The TCEQ's budgetary needs are based on the demands of state and federal laws concerned with protecting human health and the environment. The operating budget totaled \$367.6 million in fiscal 2015 and \$473.7 million in fiscal 2016. Most of the budget is supported from revenues collected from fees.

Locations of TCEQ Employees
FY 2016



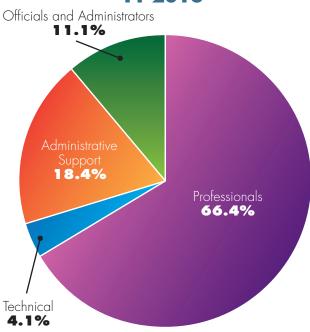
The TCEQ posts its quarterly expenditures online. The data is reported in broad categories, such as salaries, travel, utilities, and maintenance. The web page also links to an expenditure database, called "Where the Money Goes," at the state comptroller's website. These online postings are in response to the Texas Legislature's call for greater accountability in state government.

Workforce

Size and Job Categories

The overall size of the TCEQ workforce remains fairly consistent. In fiscal 2015, the agency was authorized to have 2,756.2 full-time-equivalent positions, and the average number of FTEs utilized was 2,689.2. In fiscal 2016,

Job Categories of TCEQ Workforce FY 2016



the authorized FTEs were 2,780.2; the TCEQ averaged 2,696.9 during that time.

The TCEQ staff is composed largely of professionals trained in science, technology, engineering, computer science, and related fields. In fiscal 2016, professionals represented 66.5 percent of the workforce; technical and administrative support staff made up 22.5 percent; and officials and administrators (managers) filled 11 percent of positions. This reflects almost no change in the distribution of job categories within the agency from fiscal 2015, with professionals up only 0.2 percent, technical and administrative support staff down 0.4 percent, and officials and administrators (managers) up 0.3 percent.

Equal Employment

It is the TCEQ's policy to afford equal-employment opportunities to all employees and qualified applicants, regardless of race, color, religion, national origin, sex, sexual orientation, age, disability, genetic information, veteran status, or other status protected by law.

The agency is committed to recruiting, selecting, and retaining a multitalented, culturally diverse workforce that is representative of the state's available labor force. In accordance with the Texas Labor Code, Chapter 21, all employees are trained on equal-employment practices to make them aware of state and federal employment laws and regulations.

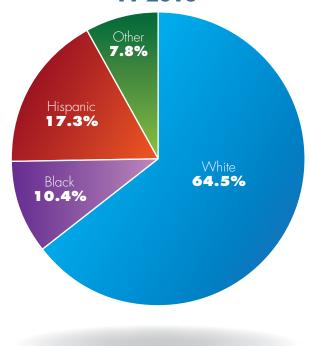
With regard to race and ethnicity, the agency's workforce composition in fiscal 2016 was 64.5 percent white, 10.4 percent black, 17.3 percent Hispanic, and 7.8 percent other (including Asian, Pacific Islander, American Indian, and Alaskan Native). With regard to gender, women continue to be in the majority at the TCEQ: female employees represented 52.1 percent; males, 47.9 percent.

Ethnicity and Gender

The Legislature requires each state agency to analyze its workforce by ethnicity and gender. The TCEQ compares its workforce to the state civilian workforce using data provided by the Civil Rights Division of the Texas Workforce Commission. The TWC's report on equal-employment-opportunity hiring practices, which is published at the start of each legislative session, uses data sets based on the percentage of blacks, Hispanics, and females—by job category—within the civilian labor force in Texas.

In fiscal 2016, the TCEQ exceeded the percentage of the available black labor force in the job category of ad-

Ethnicities of TCEQ Workforce
FY 2016



ministrative support by 8.8 percent. The agency's female workforce exceeded the available female labor force in top management (officials and administrators/managers) by 4.8 percent, as well as in administrative support, by 10.3 percent.

Recruitment and Retention

The TCEQ continues its recruitment and retention efforts by emphasizing employee recognition, professional development, and workforce and succession planning. The agency also uses hiring programs, such as Express Hire, at recruitment events and Transitions Hiring for entry-level positions. In addition, the agency recruits at colleges and universities and administers the Mickey Leland Environmental Internship Program. The program focuses on summer internship opportunities for minorities, women, and economically disadvantaged students pursuing environmental, engineering, science-related, and public-administration careers at colleges and universities across the United States.

In fiscal 2016, staff turnover was 12.95 percent, a slight decrease (0.5 percent) from fiscal 2015. The agency's turnover continues to fall below the overall average for full- and part-time classified employees at state agencies. The TCEQ will continue its efforts to attract and retain a gualified and diverse workforce.

Finances

In fiscal 2015, the agency's approved operating budget was \$367.6 million. Of that, \$309.9 million was appropriated from general revenue-dedicated (GRD) fee revenue, \$39.7 million from federal funds, and \$6.7 million from general revenue. Other sources provided the remaining \$11.3 million.

In fiscal 2016, the approved operating budget totaled \$473.7 million. Of that, \$408.7 million was appropriated from GRD fee revenue, \$41.2 million from federal funds, and \$14.1 million from general revenue. Other sources supplied the remaining \$9.7 million.

Pass-through funds accounted for 37 percent of the agency's operating budget in fiscal 2015 and 48 percent in fiscal 2016. Pass-through funds primarily support grants, remediation, and reimbursements for other agency programs, such as the Texas Emissions Reduction Plan (TERP), the Low-Income Vehicle Repair Program, the Clean Rivers Program, petroleum storage tank cleanups, Superfund cleanups, and municipal solid waste. The water and air programs also pass dollars on to local and regional units of government, but the amounts are not as significant.

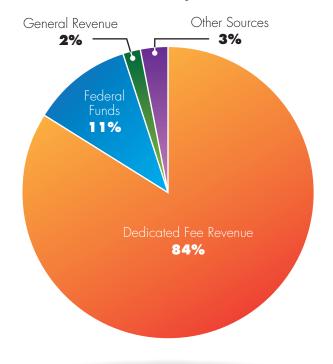
Funds other than those passed through are devoted to day-to-day agency operations. Salaries accounted for 45 percent in fiscal 2015 and 36 percent in fiscal 2016. The remaining operating funds support professional services, supplies, utilities, rent, travel, training, and capital.

Fees

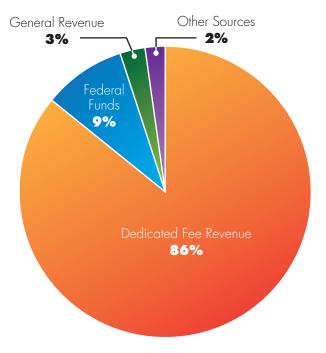
The TCEQ collects more than 100 separate fees. The following fees each generated revenue in excess of \$17 million a year:

• Texas Emissions Reduction Plan (\$232.1 million in fiscal 2015, \$212.5 million in fiscal 2016). Fees are assessed on the sale, registration, and inspection of vehicles. The TERP Account (5071) draws from five separate fees and surcharges. Revenue sources for this account are collected by the Texas Department of Public Safety, the Texas Department of Motor Vehicles, and the Texas Comptroller of Public Accounts on behalf of the TCEQ. The TCEQ is the authorized manager of the account, and handles the management and transfer of funds from the account. The programs supported by TERP funding are vital to implementing the State Implementation Plan.

Fiscal Year 2015: \$367.6 Million



Fiscal Year 2016: \$473.7 Million



- Petroleum-product delivery fee (\$24.5 million in fiscal 2015, \$18.4 million in fiscal 2016). The fee is assessed on the bulk delivery of petroleum products. The CPA collects and deposits to the Petroleum Storage Tank Remediation Account (0655) on behalf of the TCEQ.
- Air emissions fee (\$36.3 million in fiscal 2015, \$36.9 million in fiscal 2016). The fee is authorized to recover the costs of developing and administering the Title V Operating Permit Program. The fee revenue is deposited to the Operating Permit Fees Account (5094).
- Solid-waste disposal fee (\$35.2 million in fiscal 2015, \$34.6 million in fiscal 2016). The fee is assessed on the operators of municipal solid-waste facilities for the disposal of solid waste. The fee revenue was deposited 50-50 between the Waste Management Account (0549) and the Solid Waste Disposal Account (5000) until June 2013. In accordance with the fee change authorized in HB 7, 83rd Legislative Session, 66.7 percent of the fee revenue is deposited to Account 0549 and 33.3 percent to Account 5000.
- Auto-emission inspection, on-board diagnostic fee (\$26.7 million in fiscal 2015, \$44.9 million in fiscal 2016). The fee provides funding for the Low-Income Repair Assistance Program (LIRAP) for counties that have opted into the program. Beginning March 1, 2015, the state converted to a single sticker for both inspection and registration. The combined sticker fee is due upon registering the vehicle. The fee revenue is deposited to the Clean Air Account (0151).
- Motor-vehicle safety-inspection fee (\$25.0 million in fiscal 2015, \$39.8 million in fiscal 2016). The fee is assessed per vehicle on the sale of state safety-inspection stickers at inspection stations, auto dealers, and other service providers. Beginning March 1, 2015, the state transferred to a single sticker for both inspection and registration. The combined sticker fee is due upon registering the vehicle. The fee revenue is deposited to the Clean Air Account (0151).
- Consolidated water quality fee (\$24.4 million in fiscal 2015, \$26.8 million in fiscal 2016). The fee is assessed against each permit authorizing the treatment and/or discharge of wastewater issued

- under the Texas Water Code, Chapter 26. The fee is calculated based on several factors, including flow volume and type, traditional pollutants, toxicity, and facility designation as major or minor. The fee revenue is deposited to the Water Resource Management Account (0153).
- Public Health Service fee (\$20.6 million in fiscal 2015, \$20.9 million in fiscal 2016). This fee is assessed against owners or operators of public drinking water supply systems, and is based on the number of connections. The fee revenue is deposited to the Water Resource Management Account (0153).

Fee Revisions

As a result of state legislation passed in 2015, a number of changes were made to the TCEQ's fees and funding structure, including the following:

- HB 7, Section 44, requires the agency, when setting the petroleum product delivery fee, to exclude amounts appropriated by the Legislature for monitoring or remediation of releases occurring on or before Dec. 22, 1998. This provision would cause the unexpended balance in the account (\$151 million) to be used to fund monitoring and cleanup of the remaining sites with releases reported to the TCEQ on or before December 1998. The 37 percent reduction across all the various fee rates resulted in reduction of \$8 million in collected revenue in fiscal 2016.
- HB 7, Section 35, reduces the assessment of the diesel surcharge on the sale, lease, or rental of certain off-road equipment from 2 to 1.5 percent. The reduction in the diesel surcharge fee decreased revenue to TERP by \$13 million in fiscal 2016.
- HB 7, Section 21, required the two-year inspection fee for new vehicles be reduced to \$2 instead of the \$4 currently deposited to Clean Air Account 151.
 The remaining \$2 will be deposited to the credit of the Texas Department of Public Safety. The change to the two-year inspection sticker reduced the Clean Air Account revenue by an estimated \$3 million.
- HB 942 transferred the Tier II Chemical Reporting
 Program from the Texas Department of State Health
 Services to the TCEQ, effective Sept. 1, 2015. This
 transfer included 11 FTEs, equipment, and resources,
 including the balance in the Workplace Chemicals
 List Account (5020). In addition, the TCEQ received
 two additional FTEs.

- 2016-17 General Appropriations Act (GAA), Article IX, Section 18.01(c), instructed the TCEQ to conduct a study to determine the level of agency workload related to each fee payer group, and the relative benefit each fee payer group receives from agency water quality permitting, water quality regulation, and Safe Drinking Water Act programs. The study will be completed prior to the start of the 85th Legislative Session. In addition, the GAA instructed the agency to raise fee rates for the Public Health Service (PHS) Fee and the Water Quality Fee by rule, to ensure adequate revenue to support the Legislature's appropriation for the TCEQ's water programs. The TCEQ adopted a new PHS rule, because of insufficient FY 17 funds to meet appropriations. The rule allows the TCEQ to raise the
- fee in the future as needed to support the agency's water programs.
- SB 347 created a new account, the Environmental Radiation and Perpetual Care Account, to replace the Perpetual Care Account relating to the TCEQ. The new account was not included in the 83rd Legislative Session fund consolidation. HB 6, 84th Legislative Session, re-created the Environmental Radiation and Perpetual Care Account. Fee revenue from the 20 percent non-party surcharge and the 5 percent surcharge on radioactive license revenue is deposited to the new account.
- HB 2452 created a new watermaster for the Brazos River Basin with the authority to assess fees on waterright holders.

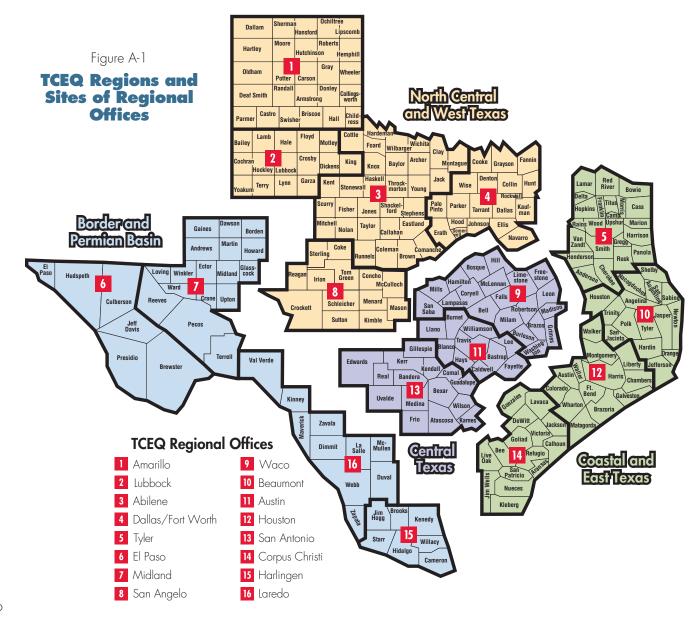


A P P E N D I X A

Assessment of Complaints Received

he Texas Commission on Environmental Quality receives thousands of complaints each year from Texans concerned about various environmental matters. In these communications, the complainant relates a situation or event in which a possible environmental,

health, or regulatory violation has occurred. Typically, complaints are submitted to the agency by phone, e-mail, or letter to its Central Office in Austin or one of its 16 regional offices for response. The agency also maintains a 24-hour toll-free hotline (888-777-3186) for



receiving such calls and a website where complaints can be submitted online.

Legislation requires the TCEQ to review the complaints received each year, including analyses by the following categories:

- Region
- Environmental media (air, waste, and water)
- Priority classification
- Enforcement action
- Commission response
- Trends by complaint type

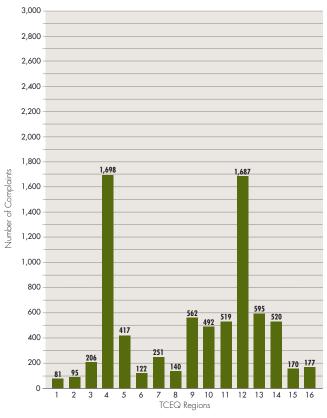
The agency is also required to assess the impact of any changes made in the commission's complaint policy. This analysis is conducted and submitted in accordance with Texas Water Code, Sections 5.1773 and 5.178.

Complaint Data Collection and Reporting

After an environmental complaint is received by the Office of Compliance and Enforcement, the data related to the

Figure A-2

FY 2015 Complaints by Region



2015 Total Number of Complaints = 7,732

initial complaint are recorded in the Consolidated Compliance and Enforcement Data System. If an investigation is warranted, an investigator is assigned to investigate the complaint and enter all resulting data into CCEDS. Management reviews, approves, and closes the investigation and a record is entered directly into the data system.

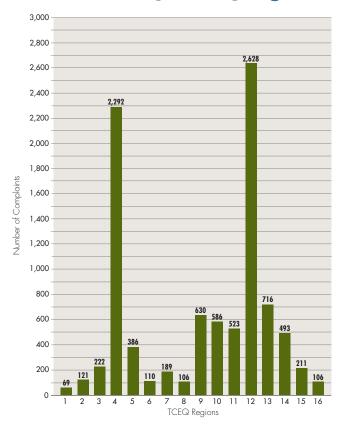
All of the data summarized in this chapter were extracted from CCEDS. This report reflects activity that occurred in the agency's 16 regions and at the Central Office during fiscal 2015 (Sept. 1, 2014, through Aug. 31, 2015) and fiscal 2016 (Sept. 1, 2015, through Aug. 31, 2016). The data are presented in a series of charts (Figures A-2 to A-9).

Complaints by Region

In fiscal 2015, the TCEQ received a total of 7,732 complaints; in fiscal 2016, the total was 9,388. Figures A-2 and A-3 show the complaints received annually by the regional offices, as well as the Central Office, and the manner in which the complaints were distributed across the regional offices for further assessment.

Figure A-3

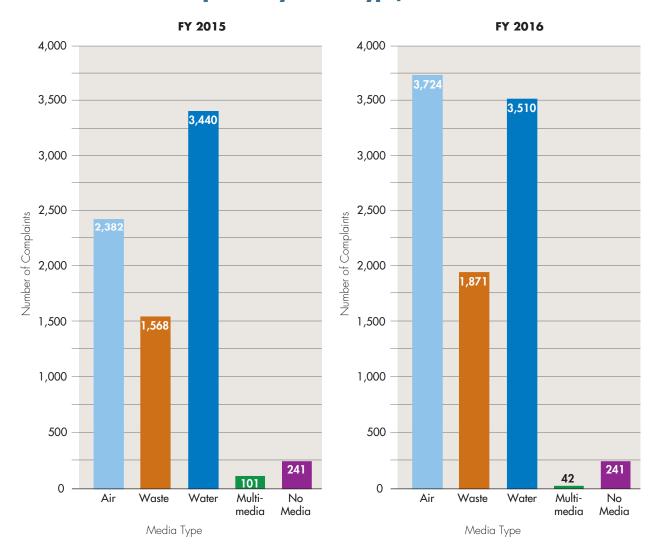
FY 2016 Complaints by Region



2016 Total Number of Complaints = 9,388

Figure A-4

Complaints by Media Type, Statewide



The data shows that the number of complaints received varies according to regional population. For example, 44 percent of all the complaints were received from the two largest metropolitan areas, Dallas/Fort Worth and Houston in fiscal 2015 (22 percent in each of the two regional areas) and 52 percent of all the complaints were received from Dallas/Fort Worth and Houston in fiscal 2016 (24 percent and 28 percent, respectively).

Complaints Received by Environmental Media (Air, Waste, Water, Multimedia, and No Media)

Total complaints received can be analyzed by environmental media (air, waste, water, multimedia, and no media) statewide. "No media" refers to complaints that do not

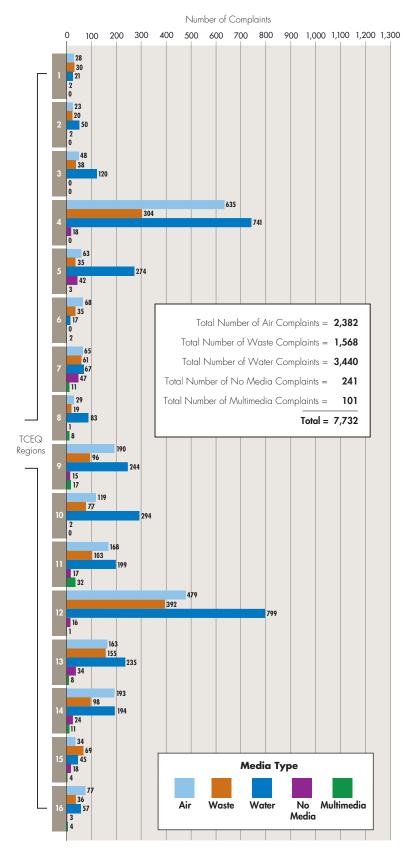
fit within one of the established media, such as noise complaints. As shown in Figure A-4, water complaints represent the largest number of complaints received in fiscal 2015 and air complaints represent the largest number of complaints received in fiscal 2016.

Between fiscal 2003 (the first year of reporting) and fiscal 2008, air complaints constituted the largest portion of total complaints received statewide. Between fiscal 2009 and fiscal 2015, the agency received more complaints related to water than air. The data reflect an apparent increase in the interest and concerns that Texans have regarding their water quality and water resources, such as water rights, drought, and drinking water quality.

In fiscal 2015, the TCEQ experienced an increase in complaints during drought conditions when water-right holders were asked to take steps to conserve water, implement their drought contingency plans, and prepare for

Figure A-5

Complaints by Region & Media Type
FY 2015



suspensions or curtailments. An increase in water-related complaints in fiscal 2015 can also be attributed to numerous severe rainfall events experienced in several municipalities throughout Texas that resulted in catastrophic flooding events. The number of water complaints continued to increase in fiscal 2016; however, in that same year, air complaints outnumber water complaints. This trend is demonstrated in Figures A-5 and A-6, which show the distribution of complaints received by region and by media.

In fiscal 2016, the Dallas/Fort Worth and Houston areas saw a significant increase in the number of air complaints. This is primarily due to a large volume of complaints related to odors reported near residential areas. When multiple complaints are related, they may be addressed collectively according to the agency's standard investigative procedures.

Water complaints outnumbered air complaints in 13 of the 16 regions and 12 of the 16 regions in fiscal 2015 and 2016, respectively. By comparison, water complaints in fiscal 2013 and 2014 outnumbered air complaints in 11 regions in both fiscal years. Historically, air complaints were the leading category in the heavily populated regions of Dallas/Fort Worth and Houston; however, in fiscal 2015, water complaints outnumbered air complaints in these regions as well.

Complaints Received by Priority Level

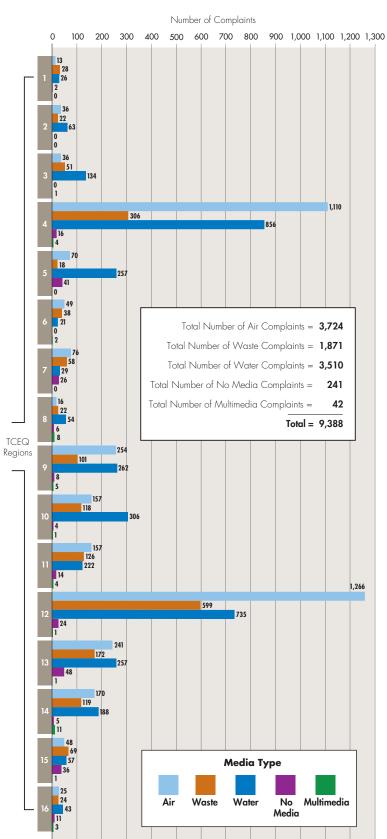
Complaints received in regional offices are prioritized in the following categories, based on the relative threat that is posed to public health, safety, or the environment. Each priority level represents a prescribed response time. The priority levels are:

Immediate Response Required

Response time is as soon as possible, but no later than 24 hours from receipt. This classification includes a new category established by the 81st Legislature of response within 18

Figure A-6

Complaints by Region & Media Type
FY 2016



hours for odor complaints involving certain types of poultry operations.

Respond within One Working Day

As soon as possible, but no later than one working day from receipt.

Respond within Five Working Days

As soon as possible, but no later than five working days from receipt.

Respond within 14 Calendar Days

As soon as possible, but no later than 14 calendar days from receipt.

Respond within 30 Calendar Days

As soon as possible, but no later than 30 calendar days from receipt.

Refer or Do Not Respond

This classification is for complaints that, due to jurisdictional issues, are referred to other authorities for investigation, or for complaints that the TCEQ does not routinely investigate but needs to track for special projects, as determined by management.

Other specified time frame.

This classification is for special projects that occur as on-demand events and complaints in which the complainant or source is unavailable and region management has granted prior approval for extending an investigation. Response time is based on management's evaluation of the project and the overall staff workload.

For this report, the distribution of complaints is shown by priority classification statewide (Figure A-7). Approximately 77 percent of the complaints received during the last two years were classified as requiring investigation in 30 calendar days or less.

Figure A-7

Complaints by Priority, Statewide

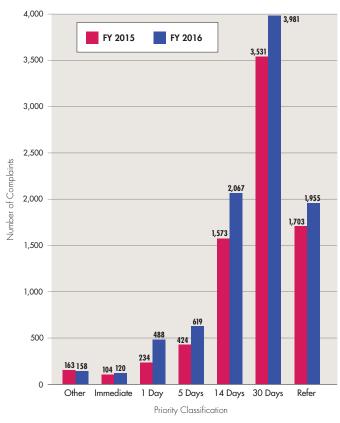
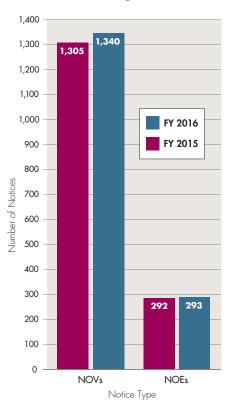


Figure A-8 Complaints Resulting in NOVs & NOEs, Statewide



Complaint Investigations that Trigger Enforcement Action

All complaint investigations are conducted according to priority levels, as described previously. Subsequent action depends on the outcome of the investigation. For approximately 81 percent of the complaints received during fiscal 2015 and 2016, no specific enforcement action was necessary. In some cases, the agency must take enforcement action in the form of a Notice of Violation (NOV) or a Notice of Enforcement (NOE).

Issuance of an NOV indicates that TCEQ rules, state statutes, or permit requirements have been violated, but that the violation is not considered serious enough to require an enforcement order and that the violation is expected to be resolved within a time frame specified by the investigating office.

An NOE is issued when a substantial violation has been documented and formal action is required. Typically, an NOE leads to the assessment of administrative penalties.

In fiscal 2015, the agency issued 1,305 NOVs and 292 NOEs as a result of complaint investigations; in fiscal 2016, the totals were 1,339 NOVs and 293 NOEs.

Complaint Investigations by Program Type

Another analysis is by the program type of the investigations conducted to address complaints. Waste and water media each have several subcategories of programs. Air complaints are not further subdivided by program type. If a complaint investigation involves more than one program type, it is classified as "multi-program."

The waste program types are dry cleaners, emergency response, petroleum storage tanks (including Stage II vapor recovery), industrial and hazardous waste, and municipal solid waste.

The water program types are animal feeding operations, the Edwards Aquifer Protection Program, on-site sewage facilities, public water supply, water rights, aggregate production operations, landscape irrigation, and water quality. Water quality also comprises several program sub-types (sludge transporters, beneficial use, stormwater, and municipal and industrial wastewater treatment, and pretreatment); however, these sub-types are not listed separately in this analysis. Aggregate Production Operations was added as a program in fiscal 2015.

Figure A-9 shows the number of complaint investigations that were conducted in each program type. In fiscal 2015, 4,747 complaint investigations were conducted. In fiscal 2016, 4,832 investigations were conducted. One investigation may be conducted for multiple complaints for the same or similar incidents or conditions.

In fiscal 2015, air complaint investigations made up 34 percent of the total; water complaint investigations, 46 percent; waste investigations, 16 percent; and multi-program complaint investigations, 4 percent. In fiscal 2016, air investigations were 34 percent of the total; water investigations, 46 percent; waste investigations, 17 percent; and multi-program complaint investigations, 3 percent.

Conclusions

There continued to be an upward trend in overall complaints received for fiscal 2015 and 2016 when compared to previously reported fiscal years. The most

significant changes were for water between fiscal 2014 and 2015 and for air between fiscal 2015 and 2016.

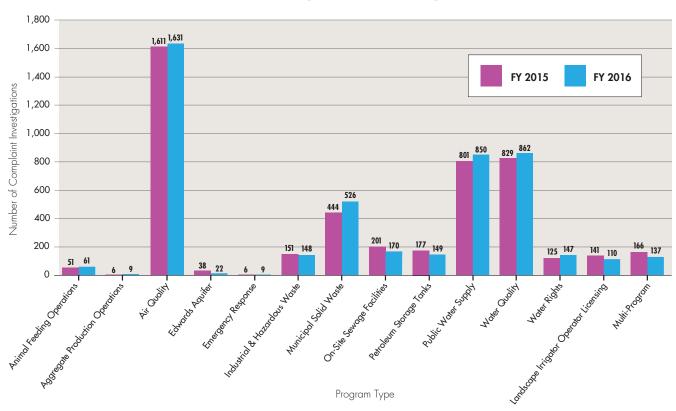
The large increase in water complaints in fiscal 2015 may be attributed to the unprecedented rain events and subsequent flooding in multiple areas of the state. The large increase in air complaints in fiscal 2016 are related to large numbers of odor-related complaints near residential areas in the Dallas/Fort Worth and Houston areas.

As the number of complaints received has increased, the number of complaint investigations completed by TCEQ staff has also increased. Water complaint investigations increased from fiscal 2013 to fiscal 2015.

Finally, the analysis of complaint investigations by program type reflects the fact that the TCEQ places a high priority on investigating citizen complaints. All complaints received are reviewed by management, prioritized according to potential impact on public health or the environment, and either investigated in accordance with the assigned priority or, if not within TCEQ jurisdiction, referred to the appropriate authority.

Figure A-9

Complaint Investigations by Program Type



A D D E NI D I V D

Permit Time-Frame Reduction and Tracking

he Texas Commission on Environmental Quality is charged with issuing permits and other authorizations for controlling air pollution, managing hazardous and nonhazardous waste and surface water, protecting water quality and safe and adequate drinking water, remediating soil and groundwater, and safely operating in situ mines.

Texas Government Code 2005.007 requires the TCEQ to report every two years on its permit application system, showing the periods adopted for processing each type of permit issued and any changes enacted since the last report.

The biennial update also includes a statement of the minimum, maximum, and average time periods for processing each type of permit—from the date a request is received to the final permitting decision. Finally, the report describes specific actions taken to simplify and improve the entire permitting process, including application and paperwork requirements.

Permit Time-Frame Tracking

One of the agency's primary goals is to issue well-written permits that are protective of human health and the environment, and to do so as efficiently as possible. The TCEQ's Permit Time-Frame Tracking process focuses not only on establishing time frames for processing permits, but also on establishing goals for adhering to the time frames. The goal in most program areas is to review 90 percent of all permit applications within the established time frames.

Each type of TCEQ authorization tracked within this process is prioritized as follows:

- Priority 1. These projects require agency action before applicants may begin operations. This category includes uncontested applications for new permits and for amendments to existing permits requesting changes from current permit requirements.
- Priority 2. These projects allow permit applicants to continue operating while the agency processes the request. This category includes uncontested ap-

plications for renewals of existing permits to continue under existing permit conditions.

The time-frame goals, or "target maximums," established by the agency for processing each type of permit vary by program area and by environmental media.

Figures B-1 through B-6 show the status of Priority 1 and Priority 2 projects at the end of fiscal 2016 in the following categories:

- air permits
- waste permits
- water quality permits
- water right permits
- water supply authorizations
- radioactive material licenses
- permits and authorizations for underground injection control (UIC)

Excluded from the data are projects that were contested or that involved significant review or approval outside of the TCEQ—such as obtaining EPA approval—that can significantly slow down the application processing times.

Air Permitting met the goal to review 90 percent of all permit applications within the established time frames despite a historically high number of applications received over the last three years.

Water Rights Permitting did not meet the goals, due to the severe drought conditions that continued through 2015. The continued drought required a focus on priority-call responses, complex drought-related permit applications, and other drought-related activities, which resulted in a backlog of applications.

Greater Efficiencies

The agency has identified several measures that will help to streamline the permitting process, improving efficiencies and reducing paperwork requirements. Some of those measures are described as follows.

Expand options for applicants for online permitting, notification, and payment.

The TCEQ's e-permitting options allow applicants to apply for a permit online and receive authorization within minutes. This feature, which went online in 2008, makes it easier for the agency to add more applications. The TCEQ continues to offer fee incentives for water quality general permits obtained through the e-permitting system.

In fiscal 2015-2016, the Air Permitting program added options that allow online submission of all permit-by-rule applications and certain standard permit applications. Additionally, an "auto-issue" feature was added for other specific permit-by-rule authorizations. It results in an automatic registration letter after the application is completed appropriately.

The e-permitting system has helped with Air Permitting's workload. With similar staffing, the number of completed projects submitted online grew from 2 in fiscal 2013-2014 to 2,049 in fiscal 2015-2016. Twenty percent of completed New Source Review projects in FY16 were completed automatically through e-permitting with same-day response.

And for fee collection, during fiscal 2015 and 2016, the agency's e-Pay system processed about 64,900 fee payments and collected about \$24 million in fees.

Implement targeted initiatives within permitting programs.

Waste Permits:

- Holding pre-application meetings
- Checklists and forms to facilitate more consistent and complete applications
- Updates on pending applications posted to the TCEQ website to inform stakeholders

Radioactive Material Licenses and UIC Permits:

- Working with federal counterparts to streamline approvals of Aquifer Exemptions
- Holding pre-application and post-application meetings to ensure a better understanding of TCEQ rules and procedures

Water-Right Permits:

- Updating application forms and documents
- Holding pre-application meetings to facilitate more complete applications
- Making changes to the internal review process for applications requiring limited technical review and creating a new team to expedite them

Implementing form return and extension policies for applications

Water Quality:

- Using university contractors for minor permit writing, data entry, and for expediting review of stormwater notices of intent, and stormwater management programs for over 500 systems
- Modifying policies and procedures to resolve longstanding EPA objections related to whole effluent toxicity, pH and temperature that had delayed permit issuance

Air Permits:

- Enhancing administrative review to address application deficiencies, reduce erroneous public notices, and thereby improve the technical review process
- Providing draft Title V operating permits online, instead of sending by e-mail, which allows broader access and reduces paper
- Developing readily available permits for specific types of facilities

Expand the options for more standardized permitting through the use of general permits, standard permits, and permits by rule.

The TCEQ offers over 20 types of standard permits in the Air Permitting program; 13 general permits in its Water Quality program; six permits by rule and three registrations by rule in the Waste Permitting program; and one general permit in the UIC program. The continued use of these authorizations has helped to reduce the time frames for processing permits.

Maintain an expedited permitting process for all economic-development projects.

In addition to the time-frame goals for processing standard permits, the TCEQ maintains an expedited permitting process for economic-development projects. TCEQ personnel meet regularly with the Governor's Office of Economic Development and Tourism to prioritize these types of projects. During fiscal 2015 and 2016, the TCEQ tracked and issued 32 permits for major economic-development projects.

Figure B-1 **Air Permits (Uncontested) Processing Times**

Application Type	Received in FY15 and FY16	Processed in FY15 and FY16	Exceeding Target as of 8/31/16	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
New Source Review (NSR) New Permits	273	293	40	18	1,626	335	285
New Source Review Amendments	992	867	145	1	1,551	306	315
NSR New Permits – Federal Timeline	4	18	2	206	953	523	365
NSR Amendments – Federal Timeline	4	14	2	261	637	447	365
Federal New Source Review (Prevention Significant Deteriora- tion, Nonattainment, 112g) New & Major Modifications	137	136	32	14	1,009	368	365
Permits by Rule	12,518	12,793	71	1	795	58	45
Standard Permits (w/o public notice), Changes to Qualified facilities (SB1126) & relocations	3,132	3,217	18	1	1,506	49	45
Standard Permits (with public notice)	133	128	0	12	146	81	150
Standard Permits for Concrete Batch Plants (with public notice)	337	356	0	14	349	104	195
Priority 1 Totals	17,530	17,822	310				
Priority 2							
New Source Review Alterations & Other Changes	801	796	20	1	864	75	120
New Source Review Renewals	1,267	1,164	207	13	1,519	222	270
New Site Operating Permits (SOP)	99	66	12	231	1,457	467	365
Site Operating Permit Revisions	478	398	46	29	2,495	242	365
Site Operating Permit Renewals	438	423	79	223	1,471	400	365
New General Operating Permits (GOP)	67	71	9	47	770	142	120
General Operating Permit Revisions	221	196	11	50	637	149	330
General Operating Permit Renewals	142	102	10	22	1,146	166	210
Priority 2 Totals	3,513	3,216	394				
Overall Totals	21,043	21,038	704				

Figure B-2
Waste Permits (Uncontested) Processing Times

Application Type	Received in FY15 and FY16	Processed in FY15 and FY16	Exceeding Target as of 8/31/16	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
IHW New Permits*	3	0	0	N/A	N/A	N/A	450
IHW Class 3 Modifications	18	11	1	72	462	287	450
IHW Major Amendments	1	0	0	N/A	N/A	N/A	450
MSW New Permits	16	13	0	46	245	135	360
MSW Major Amendments	15	17	0	47	375	243	360
MSW Registered Transfer Stations	4	10	0	186	232	205	230
MSW Registered Liquid Waste Processor	2	1	0	242	242	242	230
Priority 1 Totals	59	52	1				
Priority 2							
IHW Renewals	26	30	7	72	978	508	450
Priority 2 Totals	26	30	7				
Overall Totals	85	82	8				

^{*} No IHW new permits or major amendments were processed (completed) during the biennium and minimum, maximum, and average processing times have not been calculated.

From Sept. 1, 2014 through Aug. 31, 2016, the TCEQ processed to a final decision 41 industrial and hazardous waste (IHW) and 41 municipal solid waste (MSW) authorizations. As shown in Figure B-2, the average processing time for these applications ranged from 135 days to 508 days. These average times were within their respective targets, with the exception of IHW renewal and MSW registered liquid-waste processor applications. All average times were lower than the previ-

ous biennium except for MSW registered liquid-waste processor applications.

Initiatives to streamline applications and reduce review times include pre-application meetings with the regulated community, checklists and forms to facilitate more consistent and complete applications, updates for pending applications on the TCEQ website to inform stakeholders, and resolving minor issues and minor application deficiencies through phone calls or emails.

Figure B-3
Water Quality Permits (Uncontested) Processing Times

Application Type	Received in FY15 and FY16	Processed in FY15 and FY16	Exceeding Target as of 8/31/16	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
New Permits (Major Facilities)	1	3	0	365	365	365	330
Major Amendments (Major Facilities)	58	78	7	196	1,283	410	330
New Permits (Minor Facilities)	200	172	3	131	2,170	295	330
Major Amendments (Minor Facilities)	154	151	7	140	876	322	300
Sludge Registrations	44	41	1	32	498	128	270
Priority 1 Totals	457	445	18				
Priority 2							
Renewal Major Facilities	208	238	10	175	1,270	303	330
Renewal Minor Facilities	1,013	1,039	11	126	1,947	248	300
Priority 2 Totals	1,221	1,277	21				
Overall Totals	1,678	1,722	39				

Figure B-4
Water Rights Permits (Uncontested) Processing Times

Application Type	Received in FY15 and FY16	Processed in FY15 and FY16	Exceeding Target as of 8/31/16	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
Water Rights New Permits	57	71	78	97	2,476	728	300
Water Rights Amendments w/Notice	43	47	63	125	2,839	845	300
Water Rights Requiring Notice Review Pursuant to Work Session	55	32	52	159	1,809	828	300
Water Rights Amendments without Notice, Rio Grande Watermaster Area	58	51	8	48	1,229	331	180
Water Rights Amendments without Notice, Outside Rio Grande Watermaster Area	40	41	3	6	998	159	180
Priority 1 Totals	253	242	204				

Figure B-5
Water Supply Permits (Uncontested) Processing Times

Application Type	Received in FY15 and FY16	Processed in FY15 and FY16	Exceeding Target as of 8/31/16	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
Water District Expedited Bond Applications	194	214	0	17	114	59	60
Water District Regular Bond Applications	180	264	3	7	331	152	180
Water District Expedited Escrow Releases & Surplus Fund Requests	100	130	0	10	105	52	60
Water District Regular Minor Applications	270	346	1	1	173	56	120
Water District Expedited Creation Applications	9	9	1	110	180	144	120
Water District Regular Creations & Conversions	16	17	5	114	352	196	180
Water Engineering Plan Reviews	4,310	4,123	1	1	111	53	60
Exceptions	2,132	2,172	1	1	189	75	100
Alternative Capacity Requirements	140	141	0	13	90	73	90
Priority 1 Totals	7,351	7,416	12				

From Sept. 1, 2015 through Aug. 31, 2016, the TCEQ's Water Supply Permitting program completed reviews for 7,416 applications and authorizations. As shown in Table B-5, the average processing time for the applications and authorizations completed during fiscal 2015 and 2016 ranged from 52 to 196 days. Of the total number of applications and authorizations processed, 99 percent met target timeframes.

Severe drought conditions over the last five years, as well as growing population trends, have resulted in public

water systems considering new water resources and innovative and alternate treatment technologies.

Public water systems continue to experience water supply shortages and the requests for emergency authorizations and exceptions that require expedited technical and engineering reviews are increasing. The Water Supply program expedited many reviews to allow public water systems to receive funding and meet health-based drinking water quality regulations.

Figure B-6

Radioactive Materials Permits (Uncontested) Processing Times

Application Type	Received in FY15 and FY16	Processed in FY15 and FY16	Exceeding Target as of 8/31/16	Minimum Processing Time	Maximum Processing Time	Average Processing Time (Days)	Target Maximum
Priority 1							
Uranium Radioactive Material License Initial Issuance	1	0	0	N/A	N/A	N/A	885
Low-Level Radioactive Waste, Radioactive Material License Initial Issuance	0	0	0	N/A	N/A	N/A	990
Underground Injection Control New Permits	4	14	0	316	682	362	390
Underground Injection Control General Permits	0	0	0	N/A	N/A	N/A	60
Underground Injection Control Permit Major Amendments	12	11	0	261	552	331	390
Underground Injection Control Class III Production Area Authorizations	0	1	0	552	552	552	390
Underground Injection Control Class I Pre-Injection Unit Registrations	1	2	0	398	520	459	390
Priority 1 Totals	18	28	0				
Priority 2							
Uranium Radioactive Material License Renewals	0	0	3	N/A	N/A	N/A	885
Uranium Radioactive Material License Major Amendments	1	3	1	503	701	610	885
Uranium Radioactive Material License Minor Amendments	3	3	0	95	610	300	230
Low-Level Radioactive Waste, Radioactive Material License Renewals	0	0	2	N/A	N/A	N/A	990
Low-Level Radioactive Waste, Radioactive Material License Major Amendments	0	0	0	0	0	0	990
Low-Level Radioactive Waste, Radioactive Material License Minor Amendments	2	2	0	95	227	161	230
Underground Injection Control Permit Renewals	57	34	14	172	793	383	390
Underground Injection Control Class V Authorizations	163	175	2	2	671	42	60
Priority 2 Totals	226	217	22				
Overall Totals	244	245	22				

N/A: No permit action was completed within fiscal 2015-16.

In addition to the targeted initiatives to help streamline applications and reduce review times, Radioactive Materials permitting also conducted more meetings with applicants throughout the permitting and licensing process to ensure better understanding of regulations, forms, and procedures, and resolved minor issues and minor application deficiencies through phone calls or e-mails.

Additional Information:

Activity among Texas uranium producers has been slow because of the depressed uranium market. Several factors have contributed to this market status: a global oversupply of uranium, heightened safety and environmental concerns after the Fukushima nuclear power plant accident, and the premature closing of U.S. nuclear power plants because of the global availability of cheaper sources of energy. The TCEQ is currently processing an application for a radioactive material license authorizing uranium production.

Definitions for Tables

Number Received – The number of applications/permits/amendments received.

Number Processed – The number of applications/permits/amendments completed.

Exceeding Target – The total pending applications/permits/amendments exceeding agency target WITHOUT exceptions.

Minimum Processing Time (Days) – The minimum processing time of applications/permits/amendments WITHOUT exceptions.

Maximum Processing Time (Days) – The average processing time of applications/permits/amendments WITHOUT exceptions.

Average Processing Time (Days) – The average processing time of applications/permits/amendments WITHOUT exceptions.

Target Maximum – The maximum days allowed for processing the specific applications/permits/amendments.



A P P F N D I X C

Office of Public Interest Counsel Annual Report to the TCEQ

— FISCAL YEAR 2016 —

Introduction

exas Water Code, Chapter 5, Subchapter G prescribes the role, responsibilities and duties of the Office of Public Interest Counsel (OPIC or Office) at the Texas Commission on Environmental Quality (Commission or TCEQ). Included among these statutory duties is the requirement under Section 5.2725 of the Texas Water Code for OPIC to make an Annual Report to the Commission containing:

- An evaluation of the Office's performance in representing the public interest;
- 2. An assessment of the budget needs of the Office, including the need to contract for outside expertise; and
- 3. Any legislative or regulatory changes recommended pursuant to Section 5.273 of the Texas Water Code.

OPIC must make its Annual Report in time for the Commission to include the reported information in the Commission's reports under Texas Water Code, Section 5.178(a) and (b), and in the Commission's biennial legislative appropriations requests, as appropriate. Accordingly, OPIC respectfully submits this Annual Report to comply with the requirements of Section 5.2725 of the Texas Water Code.

OPIC Mission

OPIC was created in 1977 to ensure that the Commission promotes the public's interest. To fulfill the statutory directive of Section 5.271 of the Texas Water Code, OPIC participates in contested case hearings and other Commission proceedings to ensure that decisions of the Commission are based on a complete and fully developed record. In these proceedings, OPIC also protects the rights

of the citizens of Texas to participate meaningfully in the decision-making process of the Commission to the fullest extent authorized by the laws of the State of Texas.

OPIC Philosophy

To further its mission to represent the public interest, OPIC provides sound recommendations and positions supported by applicable statutes and rules and the best information and evidence available to OPIC. OPIC is dedicated to performing its duties professionally, ethically, and fairly.

Overview and Organizational Aspects

OPIC develops positions and recommendations in matters before the Commission affecting the public interest, including environmental permitting proceedings, enforcement proceedings, district creation and oversight proceedings, and rulemaking proceedings. The Office is committed to a process that encourages the participation of the public and seeks to work with the Commission to create an environment to further this goal.

OPIC works independently of other TCEQ divisions and parties to a proceeding to bring to the Commission the Office's perspective and recommendations on public interest issues arising in various matters. To accomplish this objective, OPIC engages in a number of activities on behalf of the public and the Commission, including:

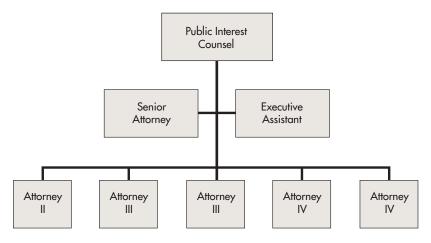
- Participating as a party in contested case hearings;
- Preparing briefs for Commission consideration regarding hearing requests, requests for reconsideration, motions to overturn, motions for rehearing, use determination appeals, and various other matters set for briefing by the Office of General Counsel;

- Reviewing and commenting on rulemaking proposals and petitions;
- Reviewing and recommending action on other matters considered by the Commission, including, but not limited to, proposed enforcement orders and proposed orders on district matters;
- Participating in public meetings on permit applications with significant public interest; and
- Responding to inquiries from the public related to agency public participation procedures and other legal questions related to statutes and regulations relevant to the agency.

As a party to Commission proceedings, OPIC is committed to providing independent analysis and recommendations that serve the integrity of the public participation and hearing process. OPIC is committed to ensuring that relevant information and evidence on issues affecting the public interest is developed and considered in Commission decisions. OPIC's intent is to facilitate informed Commission decisions that protect human health, the environment, the public interest, and the interests of affected citizens of Texas to the maximum extent allowed by applicable law.

The Public Interest Counsel (Counsel) is appointed by the Commission. The Counsel supervises the overall operation of OPIC by managing the Office's budget, hiring and supervising staff, ensuring compliance with agency operating procedures, and establishing and ensuring compliance with Office policies and procedures. OPIC has eight full-time equivalent positions: the Counsel; Senior Attorney; five Assistant Public Interest Counsels; and the Office's Executive Assistant.

Figure C-1
Office of Public Interest Counsel



OPIC is committed to fulfilling its statutory duty to represent the public interest in Commission proceedings by hiring, developing, and retaining knowledgeable staff who are dedicated to OPIC's mission. To maintain high quality professional representation of the public interest, OPIC ensures that attorneys in the office receive continuing legal education and other relevant training. OPIC further ensures that its staff undertakes all required agency training and is fully apprised of the agency's operating policies and procedures.

Evaluation of OPIC's Performance

Section 5.2725(a)(1) of the Texas Water Code requires OPIC to provide the Commission with an evaluation of OPIC's performance in representing the public interest. In determining the matters in which the Office will participate, OPIC applies the factors stated in 30 Texas Administrative Code (TAC) Section 80.110 (Public Interest Factors) including:

- The extent to which the action may impact human health;
- 2. The extent to which the action may impact environmental quality;
- 3. The extent to which the action may impact the use and enjoyment of property;
- 4. The extent to which the action may impact the general populace as a whole, rather than impact an individual private interest;
 - 5. The extent and significance of interest expressed in public comment received by the Commission regarding the action;
 - The extent to which the action promotes economic growth and the interests of citizens in the vicinity most likely to be affected by the action;
 - The extent to which the action promotes the conservation or judicious use of the state's natural resources; and
 - 8. The extent to which the action serves Commission policies regarding the need for facilities or services to be authorized by the action.

OPIC's performance measures classify proceedings in four categories: environmental proceedings; district proceedings; rulemaking proceedings; and enforcement proceedings.

Environmental proceedings include environmental permitting proceedings at the State Office of Administrative Hearings (SOAH) and Commission proceedings related to consideration of hearing requests, requests for reconsideration, motions to overturn, use determination appeals, and miscellaneous other environmental matters heard by the Commission. These include proceedings related to applications for municipal solid waste landfills and other municipal and industrial solid waste management and disposal activities, underground injection and waste disposal facilities, water rights authorizations, priority groundwater management area designations, water master appointments, municipal and industrial wastewater treatment facilities, sludge application facilities, concentrated animal feeding operations, rock and concrete crushers, concrete batch plants, new source review air permits, use determination appeals, various authorizations subject to the Commission's motion to overturn process, single property designations, and permit suspension, revocation, and emergency order proceedings.

District proceedings include proceedings at SOAH and at the Commission related to the creation and dissolution of districts and any other matters within the Commission's jurisdiction relating to the oversight of districts.

Rulemaking proceedings include Commission proceedings related to the consideration of rulemaking actions proposed for publication, rulemaking actions proposed for adoption, and consideration of rulemaking petitions.

Enforcement proceedings include enforcement proceedings active at SOAH, Commission proceedings related to the consideration of proposed orders, and other proceedings initiated with the issuance of an Executive Director's Preliminary Report and Petition (Petition). For purposes of this report, enforcement proceedings do not include other agreed enforcement orders issued by the Executive Director for violations resolved prior to the issuance of a Petition.

OPIC's Performance Measures

As required by Section 5.2725(b) of the Texas Water Code, the Commission developed the following OPIC performance measures which were implemented on September 1, 2012:

Goal 1: To provide effective representation of the public interest as a party in all environmental and district proceedings before the Texas Commission on **Environmental Quality**

Objective: To provide effective representation of the public interest as a party in 75 percent of environmental proceedings and 75 percent of district proceedings heard by the TCEQ

Outcome Measure:

- Percentage of environmental proceedings in which OPIC participated
- Percentage of district proceedings in which OPIC participated
- Goal 2: To provide effective representation of the public interest as a party in all rulemaking proceedings before the Texas Commission on Environmental Quality

Objective: To participate in 75 percent of rulemaking proceedings considered by the TCEQ

Outcome Measure:

- Percentage of rulemaking proceedings in which OPIC participated
- Goal 3: To provide effective representation of the public interest as a party in all enforcement proceedings before the Texas Commission on Environmental Quality
- **Objective:** To provide effective representation of the public interest as a party in 75 percent of enforcement proceedings heard by the TCEQ

Outcome Measure:

• Percentage of enforcement proceedings in which OPIC participated

Evaluation of OPIC Under Its Performance Measures

OPIC's performance measures for environmental, district, rulemaking and enforcement proceedings are expressed as percentages of all such proceedings in which OPIC could have participated. For purposes of this report, OPIC uses the TCEQ Commissioners' Integrated Database and a reporting process that allows OPIC to track its work on matters active at any point within a fiscal year regardless of the date such matters were opened or closed. Assignments tracked include active matters carried forward from the past fiscal year, as well as matters assigned during the relevant fiscal year. Performance measure percentages were derived from reviewing Α Р Р

the following information available through August 15, 2016: work assignments tracked by the Office during fiscal year 2016; SOAH quarterly reports; TCEQ Litigation Division Reports; and matters considered by the Commission at its public meetings.

Fiscal Year 2016

In fiscal year 2016, OPIC participated in a total of 921 proceedings: 92 environmental proceedings; 10 district proceedings; 55 rulemaking proceedings; and 764 enforcement proceedings. OPIC's participation in 92 of 92 total environmental proceedings resulted in a participation percentage of 100%. OPIC's participation in 10 of 10 district proceedings resulted in a participation percentage of 100%. OPIC's participation in 55 rulemaking proceedings, including all active rule assignments carried forward from fiscal year 2015, as well as the review of all petitions, proposals, and adoptions considered by the Commission during fiscal year 2016, resulted in a participation percentage of 100%. OPIC's participation in 764 of 764 enforcement proceedings, including the review of enforcement matters considered at Commission agendas and the participation in or monitoring of docketed cases where a Petition had been issued during fiscal year 2016 or the matter was otherwise pending at SOAH during fiscal year 2016, resulted in a participation percentage of 100%. Figures 2 and 3 below summarize the measures of OPIC's performance.

Figure C-2 **Proceedings with OPIC Participation** Fiscal Year 2016

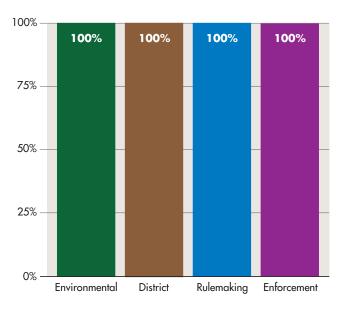


Figure C-3 **Outcomes Table**

Outcome	Projected FY 2016	Actual FY 2016	
Goal 1A: Percentage of environmental proceedings in which OPIC participated	75%	100%	
Goal 1B: Percentage of district proceedings in which OPIC participated	75%	100%	
Goal 2: Percentage of rulemaking proceedings in which OPIC participated	75%	100%	
Goal 3: Percentage of enforcement proceedings in which OPIC participated	75%	100%	

Assessment of Budget Needs

Section 5.2725(a)(2) of the Texas Water Code directs OPIC to provide the Commission with an assessment of its budget needs, including the need to contract for outside expertise. The operating budget for OPIC in fiscal year 2016 totaled \$547,099.

Figure C-4 **OPIC Budget, FY 2016**

	Budget Category	FY 2016 Budget
31	Salaries	\$530,099
37	Travel	\$7,100
39	Training	\$5,500
41	Postage	\$50
43	Consumables	\$550
46	Other Operating Expenses	\$1,600
54	Facilities, Furniture & Equipment	\$2,200
	TOTAL	\$547,099

Budget Needs for Retaining Outside Technical Expertise

For context, OPIC first provides an overview of how its budget has addressed retaining outside technical expertise in the recent past. Fiscal year 2013 was the first year OPIC's budget included funding for retaining outside technical expertise. OPIC's fiscal year 2013 budget category number 35, temporary and professional services, included \$30,000 specifically earmarked for such purposes. OPIC worked with agency staff to develop administrative and contracting procedures to hire outside consultants. Because establishing these procedures required more time than expected, OPIC was unable to implement this process in time to use the funding included in the fiscal year 2013 budget. OPIC's initial budgets since fiscal year 2013 have not included funding designated for retaining outside technical expertise.

During fiscal year 2014, further contracting procedures were established with the assistance and guidance of the Executive Director's purchasing staff. Through an additional funding request (AFR), OPIC requested and received \$4,200 to retain consulting services for purposes of OPIC's participation in a complex air permitting contested case hearing.

During fiscal year 2015, an AFR of \$5,000 was granted to pay for expert consulting services for purposes of OPIC's participation in complex proceedings relating to a water use permit application to construct and maintain a reservoir on Bois d'Arc Creek. Pursuant to OPIC's contract for services from LaCosta Environmental LLC, OPIC received a report evaluating the applicant's water conservation plan that facilitated OPIC's understanding of applicant's compliance with applicable statutory and regulatory requirements. Another AFR of \$5,000 was granted to retain expert consulting services for purposes of proceedings on an air permit application submitted by Columbia Packing, Inc. Because the decision to grant a requested contested case hearing on this application was not made until after fiscal year 2015 ended — and the application was subsequently withdrawn - OPIC requested a release of these funds to the Commission's general operating budget.

For fiscal year 2016, OPIC's initial budget did not include funds in the category of professional and temporary services that could be used for retaining technical expertise. During the course of the year, however, OPIC received additional funding of \$5,000 for this purpose. OPIC has used these funds to retain technical expertise regarding

sewage sludge land application issues in proceedings on the application of Beneficial Land Management LLC for renewal and amendment of Permit No. WQ0004666000.

OPIC continues to work with other agency staff to utilize appropriate contracting procedures to allow OPIC the ability to retain experts quickly and effectively. Accordingly, OPIC could retain experts expeditiously in more complex environmental proceedings should future budgets include funding upfront for such purposes.

Legislative Recommendations

Texas Water Code, Section 5.273(b), authorizes OPIC to recommend needed legislative changes. Texas Water Code, Section 5.2725(a)(3) provides that such recommendations are to be included in OPIC's annual report. Accordingly, OPIC's recommendations for legislative changes, including both new proposals and proposals incorporated from prior reports, are discussed below.

Proposal Concerning Penalties for violations of Public Water Supply and Drinking Water Statutes, Rules, and Orders

Texas Health and Safety Code, Section 341.049 provides that if a person causes, suffers, allows, or permits a violation of Texas Health and Safety Code, Subchapter C or a rule or order adopted under that subchapter, the Commission may assess a penalty of not less than \$50 nor more than \$1,000 for each violation. Enforcement orders are commonly seen that assess penalties as low as \$200 or less for drinking water violations such as exceedances of maximum contaminant limitations (MCLs). These low penalties result even when the Commission Penalty Policy's Environmental, Property, Human-Health Matrix classifies such violations as actual or potential releases or exposures to contaminants with the possibility of major or moderate harm.

Under the current statutory limitation, violations of public drinking water standards are often so low they seem unlikely to deter future violations or encourage compliance. Objectives of encouraging compliance and protecting human health may be better served by increasing Commission penalty authority to a range of \$1,000-\$5,000 for each violation.

For these reasons, OPIC recommends the following changes to Texas Health and Safety Code, Section 341.049(a):

If a person causes, suffers, allows, or permits a violation of this subchapter or a rule or order adopted under this subchapter, the commission may assess a penalty against that person as provided by this section. The penalty shall not be less than \$1,000 nor more than \$5,000 for each violation. Each day of a continuing violation may be considered a separate incident.

2. Proposal Concerning Changes to Permit Applications

OPIC proposes uniform limitations on the ability of permit applicants across all agency programs to change applications after the 31st day before the date the preliminary hearing at SOAH is scheduled to begin. OPIC notes this proposal is not intended to limit the ability of the Commission to adopt changes to any draft permit or incorporate special permit provisions into permits when considering any proposal for decision following a contested case hearing.

Members of the public often express concern about perceived unfairness when permittees change their applications late in the public participation process in response to issues or evidence brought to light by protesting parties. These parties contend that when such changes are allowed – and the need to address deficiencies has been made known only through efforts and expenses of protesting parties – the subject of the hearing becomes a "moving target." OPIC's proposal is intended to address the "moving target" concern by discouraging application changes late in the public participation process. The proposal seeks to encourage the regulated community to ensure applications are accurate and complete when filed. The intended result is a more efficient and effective use of the time and resources of all parties to a proceeding.

Existing Texas Health and Safety Code, Section 382.0291(d) currently limits an air quality permit applicant's ability to amend applications. With some modifications, OPIC's proposal is based on Section 382.0291(d). OPIC proposes revisions to clarify the language of this statute and incorporate its requirements into the appropriate provisions of Texas Water Code, Chapters 5, 11, 13, 26 and 27 and Texas Health and Safety, Chapters 361, 382 and 401, and any other statutory provisions relating to permits that are issued by the Commission and subject to contested case hearings. Such legislative changes would promote consistency across agency permitting programs by imposing a uniform limitation on application revisions across all media under the Commission's jurisdiction.

For these reasons, OPIC recommends the following language be incorporated into the necessary provisions of the Texas Water Code and the Texas Health and Safety Code:

An applicant for a license, permit, registration, or similar form of permission required by law to be obtained from the commission may not request changes to the application after the 31st day before the first date scheduled for a preliminary hearing in a contested case hearing on the application. If an applicant determines that it will not proceed to hearing with the application that was on file with the commission on the 31st day before the first date scheduled for the preliminary hearing, the applicant shall withdraw the application with or without prejudice in accordance with procedures provided by commission rules. If an applicant withdraws the application without prejudice and subsequently submits a revised application, the applicant must again comply with notice requirements and any other requirements of law or commission rule in effect on the date the revised application was submitted to the commission. The prohibition on changes to applications imposed by this subsection will not apply if, following a preliminary hearing and the naming of parties to the hearing, all parties to the hearing on the application agree in writing to the applicant's proposed changes to the application and noticing of the revised application is not otherwise required by applicable law.

3. Affected Persons in Contested Case Hearings on Concrete Batch Plant Registrations

This recommended legislative change would expand the right to a hearing for Standard Permit registrations pursuant to Texas Health & Safety Code Section 382.05195. At present, Texas Health & Safety Code Section 382.058(c) extends the right to request a hearing as an affected person to "only those persons actually residing in a permanent residence within 440 yards of the proposed plant." By narrowing the universe of affected persons to only those persons actually residing in a permanent residence, the law does not consider potential impacts to the health of potentially sensitive receptors of particulate matter who may be present at places such as schools,

places of worship, licensed day-care facilities, hospitals and other medical facilities.¹ Furthermore, the current version of the law does not protect a citizen residing in a trailer or mobile home if their home is not considered a "permanent residence."

The apparent intent of Texas Health & Safety Code Section 382.058(c) is to limit the universe of affected persons entitled to protest a concrete batch plant registration for the sake of efficiency of the hearing process, given the relatively minimal presumed potential impact to persons beyond 440 yards from a facility. However, the public interest is best served when efficiency does not impair the TCEQ's mission of controlling or abating air pollution and the emission of air contaminants and when such efficient action is consistent with protection of public health and general welfare as required by Texas Health & Safety Code Section 382.002. OPIC's proposal is intended to balance efficiency interests served in limiting affected person status under Section 382.058(c) with the TCEQ's mandate to protect public health and general welfare under Section 382.002.

Under the current law, vulnerable populations and sensitive receptors within 440 yards of a facility may not be afforded the procedural protections available to persons residing in permanent residences within 440 yards of a facility. For instance, on May 13, 2015, the Commission considered a hearing request made by CR Emergency Room, LLC (Hospital) regarding the Standard Permit registration of Munilla Construction Management, LLC under Texas Clean Air Act (TCAA) Section 382.05195. The Hospital was concerned that dust from the proposed plant would harm its patients, especially those with respiratory and pulmonary conditions, and sought a hearing. There was no dispute that the Hospital was directly across the street from and within 440 yards of the proposed facility. However, the Commission was compelled to deny the request because it was not filed by "a person actually residing in a permanent residence within 440 yards of the proposed plant" as required by Texas Health and Safety Code Section 382.058(c).

Briefs filed by OPIC and the Executive Director agreed that the Hospital did not meet the statutory definition of affected person; however, the issue of potential impact

to human health raised by the Hospital was relevant and material to the Commission's decision on the registration. But for the limitation placed on the Commission by statute, the Hospital's concern about human health was an issue appropriate for referral to SOAH. While the Commission has authority under Texas Water Code Section 5.556(f) to hold a hearing if the public interest warrants doing so, it also must respect the current constraints on affected person determinations imposed by the Legislature. Without a change to Section 382.058(c), the Commission will continue to face a statutory obstacle to granting a hearing to certain vulnerable populations and other receptors within 440 yards of a registered concrete batch plant facility.

For these reasons, OPIC proposes the following amendment to Texas Health & Safety Code Section 382.058(c) to expand the definition of affected persons and allow for the protection of human health of vulnerable populations and other receptors within 440 yards of a proposed concrete batch plant:

(c) For purposes of this section, only schools, places of worship, licensed day-care facilities, hospitals, medical facilities, and persons residing within 440 yards of the proposed plant may request a hearing under Section 382.056 as a person who may be affected.

Regulatory Recommendations

Texas Water Code, Section 5.273(b), authorizes OPIC to recommend needed regulatory changes. Such recommendations are to be included in OPIC's annual reports under Texas Water Code, Section 5.2725(a)(3). OPIC's recommendations for regulatory changes, including both new proposals and proposals carried forward from prior annual reports, are discussed below.

1. Proposal Concerning Mandatory Direct Referrals

OPIC recommends the regulatory changes discussed below to conserve agency resources when processing a permit application which has triggered a large volume of hearing requests and when it is obvious that hearing requests have been filed by affected persons.

Texas Water Code Section 5.557(a) provides that an application may be referred to SOAH for a contested case hearing immediately following issuance of the Executive Director's preliminary decision. Under this statutory authority, and under Commission rules at 30 TAC Section

OPIC notes that for registrations under the concrete batch plant standard permit with enhanced controls that are not subject to the contested case hearing process, Texas Health & Safety Code Section 382.05198 (19) requires that the facility's baghouse be located at least 440 yards from "any building used as a single or multi-family residence, school, or place of worship" at the time of application if the facility would be located in an area without zoning.

55.210(a), the Executive Director or the applicant may request that an application be directly referred to SOAH for a contested case hearing. While the Executive Director has statutory as well as regulatory authority to request a direct referral, current practice is to defer to the applicant and never make such a request absent agreement from the applicant. In effect, this practice negates the Executive Director's statutory authority and renders it moot. In past cases, the Executive Director's justification for this practice is a purported right of applicants to go before the Commission to request a narrowing of the scope of issues to be referred. OPIC agrees that House Bill 801, Act of May 30, 1999, 76th Leg., R.S., Section 5 (codified at Tex. Water Code (TWC) Section 5.556) requires the Commission to specify issues referred to hearing when granting hearing requests; however, the Legislature apparently envisioned that in some cases the Executive Director could request a direct referral without the consent of the applicant. Otherwise, it would have been pointless for the Legislature to grant the Executive Director such independent authority under Texas Water Code Section 5.557(a).

Often when the agency receives a large volume of hearing requests from citizens who are in close proximity to a facility, there is little doubt that there are affected persons who will eventually be granted a contested case hearing. In these situations, a hearing is a reasonable certainty, even before the agency begins the resource-intensive tasks of setting consideration of the requests for a Commission agenda, mailing notice and a request for briefs to a multitude of interested persons, having the Executive Director and OPIC prepare briefs analyzing a voluminous number of requests, and serving such briefs on a multitude of people. OPIC's proposed rule change would require a mandatory direct referral under these circumstances. Such a rule change would conserve agency resources in a number of ways, including reducing the number of multiple mass mailings from multiple agency offices. This change would also conserve the agency's human resources otherwise required to process, review, analyze, and consider hundreds of hearing requests in circumstances where a hearing is already a reasonable certainty.

The following provision would be added to 30 TAC Section 55.210(a):

The executive director shall refer an application directly to SOAH for a hearing on the application if:

 at least 100 timely hearing requests on the application have been filed with the chief clerk; and

- (2) for concrete batch plant authorizations subject to a right to request a contested case hearing, the Executive Director confirms that at least one of the timely hearing requests was filed by a requestor located within 440 yards of the proposed facility; or
- (3) for wastewater discharge authorizations subject to a right to request a contested case hearing, the Executive Director confirms that at least 10 timely hearing requestors own property either adjacent to or within one-half mile of the proposed or existing facility or along the proposed or existing discharge route within one mile downstream; or
- (4) for all other applications subject to contested case hearings, the Executive Director confirms that at least 10 of the hearing requestors own property or reside within one mile of the existing or proposed facility.

2. Proposal Concerning Consideration of Site Compliance History Upon Change of Ownership

OPIC submits the proposal described below in order to avoid penalizing new innocent purchasers of a site under enforcement based on the bad acts of prior site owners and to facilitate the sale of troubled sites to new owners who are willing to bring sites into compliance.

Texas Water Code Section 7.053(3)(A) states that with respect to an alleged violator, the history and extent of previous violations shall be considered in the calculation of an administrative penalty. Under 30 TAC Section 60.1(b), the Commission considers compliance history for a five year period. Under 30 TAC Section 60.1(d), "for any part of the compliance history period that involves a previous owner, the compliance history will include only the site under review." Therefore, while a prior owner's entire compliance history cannot be used against a new owner, a prior owner's bad acts committed during the compliance period at the site under review are considered in calculating the compliance history of a current owner. OPIC proposes that this rule be changed.

The current system for calculating compliance history has resulted in owners of regulated entities being held responsible for acts that occurred years before their ownership of a site began. Because compliance history is used

to make decisions on permitting and enforcement matters, current owners are being adversely affected, through no fault of their own. Additionally, the current system can have the effect of dissuading a potential buyer from purchasing a troubled site that could benefit from new ownership. While a purchaser of a site can conduct due diligence and make an informed decision as to whether to purchase a site, others who inherit a site have no such opportunity. Such individuals may become owners of a site with a poor compliance history which could complicate operations or sale of a site.

This rule revision would remove an impediment to a sale of a site to a potentially more responsible owner who could improve operations. Additionally, those who inherit a site and were not afforded an opportunity to conduct due diligence would be better able to operate or sell a site to a new owner free of the burden of a previous owner's bad acts. The effect would be better ownership and operation of previously poor performing sites as well as promoting economic activity by removing a barrier to a sale of a site. The public would benefit from potentially better operated sites that pose less risk to human health and the environment. Furthermore, the Commission would be able to make better informed decisions on permits and enforcement matters based on more accurate assessments of the compliance history of the current owners of a site.

While a rule change could create a potential for abuse by those who would transfer ownership between affiliated entities, proposed rule language could minimize the potential for abuse.

The following revision is proposed for 30 TAC Section 60.1(d):

The compliance history will not include violations of a previous owner of a site under review unless the previous and current owners have or had shared officers, majority shareholders, or other majority interest holders in common.

3. Proposal Concerning Website Notice of Application Materials

With a few exceptions, ² TCEQ does not require that copies of permit applications, draft permits, or technical

memoranda produced by Executive Director's staff be made available online. At present, members of the public interested in reviewing these documents must arrange an in-person visit at either the TCEQ in Austin or a designated public place (such as a local library or county courthouse) in the county where the facility is located or is proposed to be located.³ Additionally, the public is usually required to pay a fee to have these documents copied.

This rule proposal would require the Executive Director to provide an electronic copy of the permit application to the Chief Clerk once the application is declared administratively complete. The Executive Director would have discretion to obtain the electronic version from the applicant. The rule would also require the Executive Director to provide an electronic copy of the draft permit and any technical review memoranda to the Chief Clerk once technical review is completed. The Chief Clerk would post on the Commission's website the permit application, draft permit, and technical review memoranda. This rulemaking would improve public participation in environmental permitting by giving the public an easy way to review permit applications. Additionally, the rule would further implement and promote the purposes of Texas Water Code Section 5.1733 which requires the Commission to post public information on its website. Finally, the posting of this additional information would complement and complete the existing universe of documents related to public participation in permitting actions which are already required to be available on the Commission's website, such as the Executive Director's Decision and Response to Comments.⁴

The following provision would be added as 30 TAC Section 39.405(I)⁵ and to such other rules deemed appropriate:

After the executive director declares an application administratively complete, the executive director shall provide an electronic copy of the application to the chief clerk and the chief clerk shall post this copy on the commission's website. The posted copy of the application must be updated as changes, if any, are made to the application. The complete and updated application must be posted and must remain available on

² See 30 TAC Sections 39.419(e)(1) (in air quality permitting, requiring the chief clerk to post the executive director's draft permit and preliminary decision, the preliminary determination summary and air quality analysis on the commission's website); 330.57(i)(1) (requiring certain municipal solid waste facilities to provide a complete copy of any application, including all revisions and supplements, on a publicly accessible internet website.)

³ See 30 TAC Section 39.405(g).

⁴ See 30 TAC Section 55.156(g).

 $^{^5}$ 30 TAC Section 39.405(k) requires posting on the Commission's website of notices of administrative completeness, but not posting of the application itself.

the commission's website until the commission has taken action on the application. If the application is submitted with confidential information, the posting must indicate that there is additional information maintained by the commission in a confidential file marked as confidential by the applicant. The executive director may require applicants to submit the electronic copy required by this subsection at the time the application, and any changes to the application, are submitted to the executive director for review.

The following provisions would be added to the Commission's Chapter 39 and 55 rules in 30 TAC Sections 39.419, 39.420, 55.156, or such other rules deemed appropriate:

After the executive director has completed technical review of an application, the executive director shall provide to the chief clerk, and chief clerk shall post on the commission's website, electronic copies of the executive director's draft permit and preliminary decision, and, if applicable, the executive director's technical review memoranda, fact sheet, compliance history, and environmental analysis. After the close of the comment period and consistent with the requirements of Section 55.156(g), the executive director shall provide to the chief clerk and the chief clerk shall post on the commission's website, electronic copies of the executive director's decision and response to comments. The documents must be posted and remain available until the commission has taken action on the application.

4. Proposal Concerning Landowners to be Identified in Applications for Wastewater Discharge Permits

Currently, an applicant for a new or amended Texas Pollutant Discharge Elimination System (TPDES) permit is required by 30 TAC Section 305.48(a)(2) to submit as part of the application a list and map showing the ownership of the tracts of land adjacent to the treatment facility and for a reasonable distance along the watercourse from the proposed point of discharge. This list is obtained from the current county tax rolls or another reliable source. Pursuant to the Commission's Chapter

39 rules, the Chief Clerk of the TCEQ then uses this list to provide mailed notice (as opposed to notice by publication for the general public) of the application and for subsequent mailings concerning the application. The application when filed must include this landowners list in order to be declared administratively complete.

Odors have the potential to migrate over a considerable distance from a facility. The size, dimensions, and configuration of properties can affect the potential for owners of property beyond the tracts adjacent to a facility to experience odors. The goal of mailed notice is to identify and notify potentially affected persons of their public participation rights as early as possible. Accordingly, this proposal would require mailed notice to owners of tracts within one-half mile of the facility (not just adjacent landowners), in addition to landowners adjacent to the discharge route for a distance of one-mile downstream who already receive mailed notice under existing Commission rules.

Complaints alleging insufficient mailed notice to neighboring land owners are often heard at public meetings on wastewater permit applications. For example, at the public meeting held on June 18, 2015 in Spring, Texas regarding the application of Randolph Todd and Meyers Ranch Development for permit no. WQ0015314001, numerous individuals voiced concern that they were not notified of the application, despite their close proximity to the proposed site of the facility. The proposed revision is consistent with the notice provisions for sewage sludge land application and disposal activities regulated under the Commission's Chapter 312 rules. Those rules require mailed notice to persons who own property within specified distances from an application site (1/4 mile) or disposal facility (1/2 mile), beyond the universe of landowners adjacent to the facility. This rulemaking recommendation is intended to address this common situation and to provide adequate notice and an opportunity for earlier public participation to potentially affected persons.

The following provision would be added to the Commission's Chapter 305 rules in 30 TAC Section 305.48(a) (2) and such other TCEQ rules deemed appropriate:

If the application is for the disposal of any waste into or adjacent to a watercourse, the application shall show the ownership of the tracts of land within one-half (1/2) mile of the treatment facility and for a reasonable distance along the watercourse from the proposed point of discharge.

5. Proposal Concerning Schedules in SOAH Cases where the Preliminary Hearing is Continued

Preliminary hearings are conducted at the commencement of contested case proceedings pursuant to 30 TAC Section 80.105. At a preliminary hearing, the Administrative Law Judge (ALJ) will take jurisdiction, name parties, and establish a procedural schedule. On occasion, because of potential defects in the notice of hearing or for other reasons, the preliminary hearing may be continued to subsequent dates.

For example, the preliminary hearing on the City of Wimberley's wastewater permit application was initially convened on June 2, 2015, but was continued to June 24, 2015 after the ALJ learned that many interested persons were unable to attend the proceedings in the aftermath of the historic floods that had just occurred in the area. Some parties who were able to attend the June 2 hearing were admitted as parties at that time. When the preliminary hearing was reconvened on June 24, 2015, the ALJ admitted several additional parties. However, these new parties did not have the same opportunities to argue issues relating to jurisdiction, party status, and the timing of the procedural schedule that were afforded the parties admitted earlier.

The object of this proposed rulemaking would be to protect party participation in the contested case hearing process and ensure that parties admitted during all phases of any continued preliminary hearing be afforded due process. Particularly in light of the time restrictions on the duration of the hearing under SB 709, it is important to protect all parties' full rights of public participation and allow input in determining the procedural schedule. The following provision would be added to the Commission's Chapter 80 rules in 30 TAC Section 80.6, 80.105 (a) and such other Chapter 80 rules deemed appropriate:

If the judge determines a preliminary hearing should be continued, the judge shall not issue an order setting a procedural schedule until after all parties are named at the last day of the preliminary hearing and after the judge considers the positions of all parties, including parties admitted on the last day of the preliminary hearing. The scheduling order shall allow sufficient time for all parties to conduct discovery and shall consider the last day of the preliminary hearing as the starting date of the hearing for purposes of calculating the duration of the

hearing in compliance with applicable law and any commission order. Discovery may commence among named parties after the first date of the preliminary hearing, however the discovery cut-off date shall not be established until the issuance of the scheduling order.

6. Proposal Concerning Procedural Schedules in Contested Case Hearings on permit applications subject to SB 709

HB 801 established timeframes for procedural schedules in contested case hearings on applications filed on or after September 1, 1999. For these matters, hearings are required to last no longer than one year from the date of the preliminary hearing until the issuance of the proposal for decision (PFD). No specific timeframe was set for the time between the close of the hearing record and the issuance of the PFD. Though not specified by statute or rule applicable to TCEQ environmental permit application hearings, to the standard practice at SOAH has been for judges to set aside a 60-day period from the close of the hearing record until issuance of the PFD.

SB 709 established new timeframes for procedural schedules in contested case hearings on applications filed on or after September 1, 2015. For these matters, hearings are required to last no longer than 180 days from the date of the preliminary hearing until the issuance of the PFD. There are no specific statutory requirements in SB 709 regarding the time between the close of the hearing record and the issuance of the PFD.

If current SOAH practice continues to set aside 60 days of the maximum 180-day hearing schedule exclusively for preparation of the PFD, parties may be significantly impaired in their ability to develop and argue the merits of their positions through the contested case hearing process. This 60-day period consumes one-third of the 180-day maximum allowed statutorily-mandated procedural schedule. Following this practice, an ALJ has 60 days (basically 2 months) to prepare the PFD, leaving the parties with only 120 days (basically 4 months) to conduct all discovery,

⁶ Texas Government Code Section 2001.058(f)(1) allows a state agency to provide by rule that a proposal for decision in an occupational licensing matter must be filed no later than the 60th day after the latter of the date the hearing is closed or the date by which the judge has ordered all briefs, reply briefs, or other post-hearing documents to be filed. By its wording, this statute applies to occupational licensing matters and not environmental permitting matters subject to HB 801 or SB 709.

including the deposition of witnesses, resolve discovery disputes through motions and hearings as necessary, prepare and file pre-filed testimony and exhibits, object to such pre-filed testimony and exhibits and have objections and motions for summary disposition resolved through any needed pre-hearing conferences, conduct the hearing on the merits, await the transcript, and prepare closing arguments and replies to closing arguments.

A reallocation of the 180-day time period would serve the public interest by allowing parties more time to develop the evidentiary record and present arguments in support of their respective positions. The public interest would be served by allowing 30 working days, rather than 60 days, from the close of the hearing record until issuance of the PFD.

The proposal is based in part on the 30 TAC Section 80.251(b) timeframe that applies to applications filed before September 1, 1999. Under rule 80.251(b), ALJs are required to issue a PFD within 30 working days after the close of the record. OPIC's proposal also incorporates language from Texas Government Code Section 2001.058(f)(1) that calculates the applicable time period for PFD issuance as running from the latter of close of the hearing or the date by which the judge has requested closing briefing. The proposed rule allows for requests for an extension of this timeline from the Commission. The object of this recommendation is to promote the public interest by allowing parties participating in the contested case hearing process more of the SB 709-required hearing schedule timeframe to develop the evidentiary record and present arguments in support of their respective positions.

The following provisions would amend the Commission's Chapter 80 rules in 30 TAC Sections 80.105(b)(3), 80.252(c) and/or such other Chapter 80 rules deemed appropriate:

Section 80.105(b)(3)

- (b) If jurisdiction is established, the judge shall:
- (1) name the parties;
- (2) accept public comment in the following matters:
- (A) enforcement hearings; and
- (B) applications under Texas Water Code (TWC), Chapter 13 and TWC, Sections 11.036, 11.041, or 12.013;
- (3) establish a docket control order designed to complete the proceeding within the maximum expected duration set by the commis-

sion. The order should include a discovery and procedural schedule including a mechanism for the timely and expeditious resolution of discovery disputes. In contested cases regarding a permit application filed with the commission on or after September 1, 2015, and referred under Texas Water Code, Section 5.556 or Section5.557, the order shall include a date for the issuance of the proposal for decision within the maximum expected duration set by the commission and no later than the 30th working day after the latter of the date the hearing is closed or the date by which the judge has ordered all briefs, reply briefs, or other post-hearing documents to be filed;

Section 80.252. Judge's Proposal for Decision.

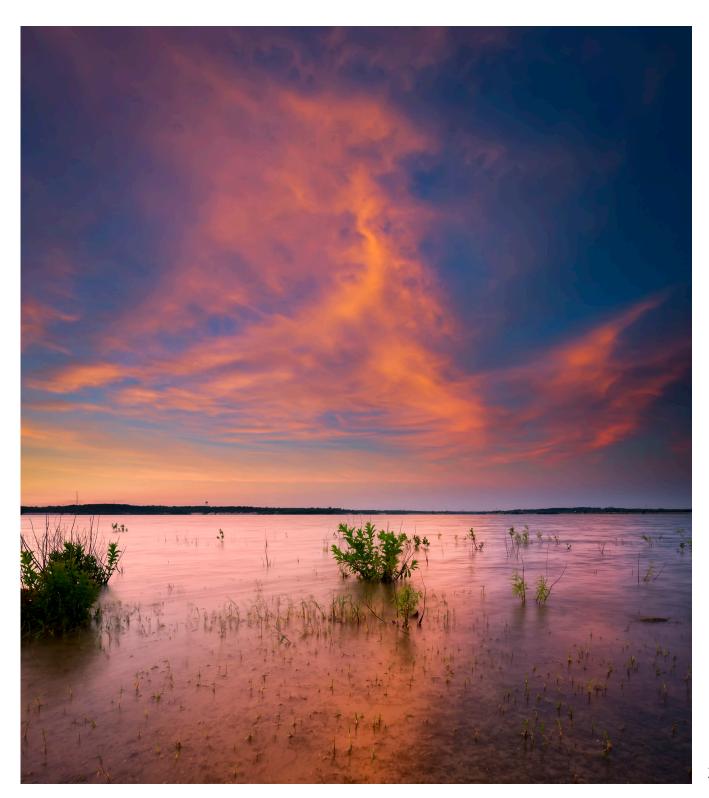
- (a) Any application that is declared administratively complete on or after September 1, 1999, is subject to this section.
- (b) Judge's proposal for decision regarding an application filed before September 1, 2015, or applications not referred under Texas Water Code, Section 5.556 or Section 5.557. After closing the hearing record, the judge shall file a written proposal for decision with the chief clerk no later than the end of the maximum expected duration set by the commission and shall send a copy by certified mail to the executive director and to each party.
- (c) <u>Judge's proposal for decision regarding</u> an application filed on or after September 1, 2015, and referred under Texas Water Code, Section 5.556 or Section 5.557. The judge shall file a written proposal for decision with the chief clerk no later than 30 working days after the latter of the date the hearing is closed or the date by which the judge has ordered all briefs, reply briefs, or other post-hearing documents to be filed. If the judge is unable to file the proposal for decision within 30 working days, the judge shall request an extension from the commission by filing a request with the chief clerk. In no event shall the proposal for decision be filed later than 180 days after the first day of

the preliminary hearing, the date specified by the commission, or the date to which the deadline was extended pursuant to Texas Government Code, Section 2003.047(e-3). Additionally, the judge shall send a copy of the proposal for decision by certified mail to the executive director and to each party.

Conclusion

OPIC appreciates the opportunity afforded by this statutory reporting requirement to reflect upon the Office's work.

OPIC continues in its commitments to represent the public interest in Commission proceedings and to conduct its work and evaluate its performance transparently.



A P P F N D I X D

Evaluation of Water Basins in Texas without a Watermaster

ection 5.05 of House Bill 2694, the TCEQ's Sunset bill from the 82nd legislative session, requires the agency to evaluate, at least once every five years, the water basins that do not have a watermaster program to determine whether one should be established. The statute requires that the commissioners establish criteria for the evaluation

Overview of Watermaster Programs

A TCEQ watermaster office is headed by a watermaster and staffed with personnel who regulate and protect water rights under the provisions of Chapter 11 of the Texas Water Code (TWC). Watermaster programs are created and authorized to take actions under TWC Sections 11.326, 11.3261, 11.327, 11.3271, 11.329, and 11.551–11.559. Rules governing this program are under 30 Texas Administrative Code Chapters 303, 304, 295, and 297.

Watermasters and their staffs have the authority to protect water rights by:

- reviewing diversion notifications
- authorizing appropriate diversions
- deterring illegal diversions
- providing real-time monitoring of area streamflows
- investigating alleged violations of Chapter 11
- mediating conflicts and disputes among water users TWC Chapter 11 sets forth the mechanisms by which a watermaster program can be established:
 - by the executive director in a water division established by the commission under Section 11.325
 - by court appointment
 - by the commission, upon receipt of a petition of 25 or more water-right holders in a river basin or segment of a river basin, or on its own motion, if the

commission finds that senior water rights have been threatened.

In addition, the Legislature has the authority to create a watermaster.

The TCEQ has an existing watermaster program in each of these areas:

- Rio Grande, which serves the Rio Grande Basin and coordinates releases from the Amistad and Falcon reservoir systems. Established by a 1956 court appointment.
- South Texas, which serves the Lavaca, Nueces, San Antonio, and Guadalupe river basins, as well as the adjacent coastal basins. Established in 1988, based on a water-division creation order signed in 1988 and amended in 1998.
- Concho River, which serves a portion of the Concho River segment of the Colorado River Basin. Created by the Legislature in 2005.
- Brazos, which serves the Lower Brazos River Basin including and below Possum Kingdom Lake. On April 12, 2014, the commission issued an order directing that a watermaster be appointed for this basin. The program was fully implemented on June 1, 2015.

Criteria and Schedule

In 2011, the commissioners established the following criteria to consider during evaluations:

- Is there a court order to create a watermaster?
- Has a petition been received requesting a watermaster?
- Have senior water rights been threatened based on the following:
 - a history of senior calls or water shortages within the river basin?

• the number of water right complaints received annually in each river basin?

The commissioners also approved an evaluation schedule so that all areas without a watermaster may be evaluated at least once every five years:

- Fiscal 2012
 - ◆ Brazos River Basin
 - ◆ Brazos-Colorado Coastal Basin
 - ◆ Colorado River Basin
 - ◆ Colorado-Lavaca Coastal Basin
- Fiscal 2013
 - ◆ Trinity River Basin
 - ◆ Trinity-San Jacinto Coastal Basin
 - ◆ San Jacinto River Basin
 - ◆ San Jacinto-Brazos Coastal Basin
- Fiscal 2014
 - ◆ Sabine River Basin
 - ◆ Neches River Basin
 - ◆ Neches-Trinity Coastal Basin
- Fiscal 2015
 - ◆ Canadian River Basin
 - ◆ Red River Basin
- Fiscal 2016
 - ◆ Sulphur River Basin
 - ◆ Cypress Creek Basin

Evaluation Activities in Fiscal 2015

For the Canadian and Red River basins:

- Updated the web page explaining the evaluation process, inviting stakeholders in these basins to participate and get automated updates by e-mail. (See <www.tceq.texas.gov/permitting/water_rights/ wmaster/evaluation>.)
- Mailed initial outreach letters on March 13, 2015
 (Figure D-1), to the stakeholders in each area, including all water-right holders, county judges and extension agents, river authorities, agricultural interests, industries, environmental organizations, and other interested parties. Requested comments by June 12, 2015.
- Held three stakeholder meetings in May and June, in Amarillo, Wichita Falls and Texarkana. A total of 17

people attended the meetings. At each meeting the manager of the Watermaster Section and a TCEQ regional office representative were present to deliver information and answer questions.

- Of the 13 stakeholder comments received:
 - 12 were opposed to establishing a watermaster program
 - ◆ 0 were in favor
 - ◆ 1 was neutral

The TCEQ evaluated the basins based on the criteria outlined in 2011. The findings are highlighted below.

- There were no court orders to appoint a watermaster for any of these basins.
- There were no active or approved petitions to appoint a watermaster for any of these basins.
- There was no history of threatened water rights or water shortages in these basins, other than certain cities being on watering restrictions because they enacted drought contingency plans.

The TCEQ did note that there were some water-rights related complaints and investigations in the three preceding fiscal years.

- In the Canadian River Basin, 2 investigations were conducted in fiscal 2012, 1 in fiscal 2013, and 0 in fiscal 2014.
- In the Red River Basin, there were 12 investigations in fiscal 2012, 9 in FY 2013, and 17 in FY 2014.
- Estimated costs to the agency to conduct these activities:
 - ◆ 2012, Canadian River Basin: \$383; Red River Basin: \$5,724
 - ◆ 2013, Canadian River Basin: \$521; Red River Basin: \$3,556
 - ◆ 2014, Canadian River Basin: \$0; Red River Basin: \$5,867

The cost to conduct the required evaluations of these basins in 2015:

- Office of Water: \$109,151.69, which included salary and fringe benefits, postage, and travel
- Office of Legal Services staff time: \$140
- Office of Compliance and Enforcement: \$682.20, which included staff time, travel time, and equipment use

 Representatives from the TCEQ's Intergovernmental Relations Division participated in the evaluation process, but incurred no cost.

Agenda Presentation

At the commission's agenda meeting on Aug. 19, 2015, TCEQ personnel gave a presentation and made recommendations related to the fiscal 2015 evaluation. Considerations for the commissioners to discuss are outlined below:

- No watermaster program to be established in either the Red or the Canadian river basins.
- A watermaster program that includes both basins.
 Predicted cost for the first year: \$387,343.52, and for subsequent years: \$298,427.89.
- A watermaster program that includes only the Red River Basin. Predicted cost for the first year: \$387,343.52, and for subsequent years: \$298,427.89.

Evaluation Activities in Fiscal 2016

For the Cypress Creek and Sulphur river basins:

- Updated the web page explaining the evaluation process, inviting stakeholders in these basins to participate and get automated updates by e-mail. (See <www.tceq.texas.gov/permitting/water_rights/ wmaster/evaluation>.)
- Mailed initial outreach letters on March 10, 2016 (Figure D-2), to the stakeholders in each area, including all water-right holders, county judges and extension agents, river authorities, agricultural interests, industries, environmental organizations, and other interested parties. Requested comments by June 24, 2016.
- Held one stakeholder meeting on June 7, 2016
 in Mount Pleasant, with 22 people attending. The
 manager of the Watermaster Section and TCEQ
 regional-office representatives were present to deliver
 information and answer questions. Final stakeholder
 comments were due on June 26, 2016.

All of the 24 comments received from the stakeholders through June 24, 2016 opposed establishing a watermaster program.

The TCEQ evaluated the basins based on the criteria outlined in 2011, and found:

• There were no court orders to appoint a watermaster for these basins.

- There were no active or approved petitions to appoint a watermaster for these basins.
- There was no history of threatened water rights or water shortages in these basins, other than certain cities being on watering restrictions because they enacted drought contingency plans.

The TCEQ did note some complaints and investigations related to water rights in the three preceding fiscal years:

- In the Sulphur River Basin, 3 investigations were conducted in fiscal 2013, 6 in fiscal 2014, and 1 in fiscal 2015.
- In the Cypress Creek Basin, there were 14 investigations in fiscal 2013, 18 in fiscal 2014, and 5 in fiscal 2015.
- Estimated costs to the agency to conduct these activities:
 - ◆ 2013: Sulphur River Basin, \$648; Cypress Creek Basin, \$3,022
 - ◆ 2014: Sulphur River Basin, \$1,295; Cypress Creek Basin, \$3,885
 - ◆ 2015: Sulphur River Basin, \$216; Cypress Creek Basin, \$1,079

The costs to conduct the required evaluations of these basins in 2016:

- Office of Water: \$110,408.89, which included salary and fringe benefits, postage, and travel
- Office of Legal Services staff time: \$140.00
- Office of Compliance and Enforcement: \$284.17, which included staff time, travel time, and equipment use
- Representatives from the TCEQ's Intergovernmental Relations Division participated in the evaluation process, but incurred minimal costs.

Agenda Presentation

At the commission's agenda meeting on Aug. 24, 2016, TCEQ personnel gave a presentation and made recommendations related to the fiscal 2016 evaluation. Considerations for the commissioners to discuss are outlined below:

- No watermaster program to be established in any of the basins.
- A watermaster program that includes both basins.
 Predicted cost for the first year: \$402,331, and for subsequent years: \$305,615.

Executive Director's Recommendation in Fiscal 2015 and 2016

With no court orders or petitions to create a watermaster, and no repeated history of threatened water rights, the executive director recommended that the commission not move forward on its own motion to create a watermaster program in any of the basins reviewed in fiscal 2015 and fiscal 2016.

While the statute requires the agency to evaluate the need for a watermaster in those basins without a watermaster program at least every five years, there is no prohibition against evaluating a basin sooner, as needed. The executive director can review this decision and evaluate

additional threats to senior water rights as they occur and consider area stakeholder input. It is important to have stakeholder support in articulating the threat and the need to establish a new regulatory program, as stakeholders will be responsible for paying annual fees to support it.

As stated above, the executive director is always open to any additional information stakeholders may want to submit, and 25 water-right holders may petition the agency at any point to consider creating a watermaster program. Once it has received a petition from 25 water-right holders, the commission will refer the issue to the State Office of Administrative Hearings for a complete administrative hearing and recommendation to the commissioners for consideration.



Figure D-1

Outreach Letters to Stakeholders, FY 2015

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 13, 2015

Re: Preliminary Watermaster Evaluation for the Canadian River Basin

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating the Canadian and Red River Basins to determine whether there is a need to establish a watermaster. The purpose of this letter is to notify you and to seek written input on the process, which will help the agency to identify information that should considered during our evaluation.

According to Sections 11.326(g) and (h) of the Texas Water Code the Executive Director (ED) must evaluate all river basins that do not currently have a watermaster to determine whether one should be appointed. The ED must report the findings from the evaluation and make recommendations to the TCEQ Commissioners. The commissioners will direct the ED to move forward with the recommendation, revise the recommendation, or they may take no action on the recommendation. The evaluation findings and recommendations are to be included in the agency's Biennial Report to the Legislature.

In an effort to include the public and develop the best recommendations, we are soliciting input from stakeholders, including water right holders, domestic and livestock users, river authorities, agricultural, industrial and environmental organizations, the general public, and other interested parties. This request for written input is your first opportunity to participate in this process. As part of the evaluation, we also plan to mail notifications to all current water right holders within the Canadian River Basin of stakeholder meetings expected to be held in June of 2015. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for later this summer.

As a water right holder in the Canadian River Basin or other stakeholder, you are being contacted during this initial outreach. If you are aware of any other person who might be interested but did not receive this initial outreach letter, please forward this information to them. We welcome and encourage input from any interested stakeholders.

We will consider the following criteria when evaluating a basin:

- (1) Has there been a court order to create a watermaster?
- (2) Has TCEQ received a petition requesting a watermaster?
- (3) Have senior water rights been threatened, based on either the history of senior calls or water shortages within the basin or the number of water right complaints received on an annual basis in each basin?

If the establishment of a watermaster is recommended and approved, a budget would be established each year, and the watermaster program would be administered using fees collected

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Outreach Letters to Stakeholders, FY 2015

Re: Canadian River Basin Watermaster Evaluation Page 2 March 13, 2015

from water right holders in the watermaster area. The amount assessed to each water right holder would be determined each year based on the watermaster program's budget by establishing a base fee (currently \$50) and then adding the water right permitted amount multiplied by a rate factor depending on the type of use.

The enclosed fact sheet includes general information about the watermaster. TCEQ requests and appreciates your input on this evaluation. In particular, we ask that you provide written input regarding the possible threat to senior water rights (item 3 above) as well as proposals for implementing a possible watermaster program.

Please include the following information in your letter:

- 1. The river or other waterbody you are discussing.
- 2. Your affiliation (for example, a water right holder with a water right permit (including number if known), a domestic and livestock user, an adjacent landowner, an interested party, or environmental organization).

Please send written comments by March 27, 2015 to my attention at the following address: TCEQ, Water Availability Division, Watermaster Section, MC-160, P.O. Box 13087, Austin, Texas 78711-3087. You may also send an email to: watermaster@tceq.texas.gov.

If you have any questions or additional comments, please feel free to contact my staff in the Watermaster Section: Cindy Hooper at (210) 403-4080 or Michael Redda at (512) 239-4631. In addition, you may sign up to receive email updates at: https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new.

Additional information on the evaluation process is available on TCEQ's website: www.tceq.texas.gov/goto/watermaster.

We value your comments on the evaluation process, including the criteria being used, as well as information to assist the agency in its evaluation of your basin. Thank you for your participation.

Sincerely,

Amy Settemeyer, Manager Watermaster Section, MC-160 Water Availability Division

Texas Commission on Environmental Quality

Enclosures

Outreach Letters to Stakeholders, FY 2015

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 13, 2015

Re: Preliminary Watermaster Evaluation for the Red River Basin

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating the Canadian and Red River Basins to determine whether there is a need to establish a watermaster. The purpose of this letter is to notify you and to seek written input on the process, which will help the agency to identify information that should considered during our evaluation.

According to Sections 11.326(g) and (h) of the Texas Water Code the Executive Director (ED) must evaluate all river basins that do not currently have a watermaster to determine whether one should be appointed. The ED must report the findings from the evaluation and make recommendations to the TCEQ Commissioners. The commissioners will direct the ED to move forward with the recommendation, revise the recommendation, or they may take no action on the recommendation. The evaluation findings and recommendations are to be included in the agency's Biennial Report to the Legislature.

In an effort to include the public and develop the best recommendations, we are soliciting input from stakeholders, including water right holders, domestic and livestock users, river authorities, agricultural, industrial and environmental organizations, the general public, and other interested parties. This request for written input is your first opportunity to participate in this process. As part of the evaluation, we also plan to mail notifications to all current water right holders within the Red River Basin of stakeholder meetings expected to be held in June of 2015. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for later this summer.

As a water right holder in the Red River Basin or other stakeholder, you are being contacted during this initial outreach. If you are aware of any other person who might be interested but did not receive this initial outreach letter, please forward this information to them. We welcome and encourage input from any interested stakeholders.

We will consider the following criteria when evaluating a basin:

- (1) Has there been a court order to create a watermaster?
- (2) Has TCEQ received a petition requesting a watermaster?
- (3) Have senior water rights been threatened, based on either the history of senior calls or water shortages within the basin or the number of water right complaints received on an annual basis in each basin?

If the establishment of a watermaster is recommended and approved, a budget would be established each year, and the watermaster program would be administered using fees collected

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Outreach Letters to Stakeholders, FY 2015

Re: Red River Basin Watermaster Evaluation Page 2 March 13, 2015

from water right holders in the watermaster area. The amount assessed to each water right holder would be determined each year based on the watermaster program's budget by establishing a base fee (currently \$50) and then adding the water right permitted amount multiplied by a rate factor depending on the type of use.

The enclosed fact sheet includes general information about the watermaster. TCEQ requests and appreciates your input on this evaluation. In particular, we ask that you provide written input regarding the possible threat to senior water rights (item 3 above) as well as proposals for implementing a possible watermaster program.

Please include the following information in your letter:

- 1. The river or other waterbody you are discussing.
- 2. Your affiliation (for example, a water right holder with a water right permit (including number if known), a domestic and livestock user, an adjacent landowner, an interested party, or environmental organization).

Please send written comments by March 27, 2015 to my attention at the following address: TCEQ, Water Availability Division, Watermaster Section, MC-160, P.O. Box 13087, Austin, Texas 78711-3087. You may also send an email to: watermaster@tceq.texas.gov.

If you have any questions or additional comments, please feel free to contact my staff in the Watermaster Section: Cindy Hooper at (210) 403-4080 or Michael Redda at (512) 239-4631. In addition, you may sign up to receive email updates at: https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new.

Additional information on the evaluation process is available on TCEQ's website: www.tceq.texas.gov/goto/watermaster.

We value your comments on the evaluation process, including the criteria being used, as well as information to assist the agency in its evaluation of your basin. Thank you for your participation.

Sincerely,

Amy Settemeyer, Manager Watermaster Section, MC-160 Water Availability Division

Texas Commission on Environmental Quality

Enclosures

Outreach Letters to Stakeholders, FY 2015

Watermaster Evaluation Fact Sheet - 2015

Background

On May 28, 2011, the Texas Legislature adopted the Texas Commission on Environmental Quality (TCEQ) Sunset legislation, HB 2694, which includes a requirement for the TCEQ to evaluate and issue a report for all river and coastal basins that do not have a watermaster. The report will assess whether or not there is a need to appoint a watermaster and is required at least once every five years. The TCEQ developed a schedule to consider several basins each year. During 2012, the TCEQ evaluated the Brazos River Basin, the Brazos-Colorado Coastal Basin, the Colorado River Basin, and the Colorado-Lavaca Coastal Basin; in 2013 the Trinity River Basin, the Trinity-San Jacinto Coastal Basin, the San Jacinto River Basin, and the San Jacinto-Brazos Coastal Basin; and in 2014 the Sabine River Basin, Neches River Basin, and Neches-Trinity Coastal Basin. For 2015 TCEQ will evaluate the Canadian River Basin and the Red River Basin.

What is a Watermaster Program?

Watermaster programs operate from field offices within their designated basin(s) and perform the following functions:

- A watermaster continuously monitors streamflows, reservoir levels, and water use within a basin.
- As needed, holders of impoundment rights may notify the watermaster when they plan to release sold water. The watermaster can then monitor usage downstream to ensure that the released water reaches the buyer.
- Before starting their pumps, opening their sluice gates, or starting to divert water in any other way, all water right holders must notify the watermaster and state how much water they plan to divert.
- The watermaster determines whether a diversion will remove water that rightfully belongs to another user and could notify a user with more junior water rights to reduce or stop pumping if needed.
- When streamflows diminish, the watermaster allocates available water among the water right holders according to each user's priority date.
- If a water-right holder does not comply with the water right or with TCEQ rules, the executive director may direct a watermaster to adjust the control works, including pumps, to prevent the owner from diverting, taking, storing, or distributing water until the water right holder complies.

There are currently three watermaster programs in Texas, with a new one beginning in June 2015:

- The Rio Grande Watermaster coordinates releases from the Amistad and Falcon reservoir system for irrigation, municipal, and industrial uses.
- The South Texas Watermaster serves the Nueces, San Antonio, Guadalupe, and Lavaca river basins, as well as the adjacent coastal basins.
- The Concho Watermaster, currently a division of the South Texas Watermaster, serves the Concho River segment of the Colorado River Basin.

Outreach Letters to Stakeholders, FY 2015

* The newest program, the Brazos Watermaster, covers Possum Kingdom reservoir and areas downstream of the reservoir in the Brazos River Basin.

Advantages of a Watermaster Program.

In addition to their monitoring of river conditions, TCEQ watermasters can provide valuable services to the water users in the basins they oversee:

- Watermasters can coordinate diversions in the basin, ensuring that all water users get the best overall value from the water available to them.
- With their real-time monitoring of local streamflows, watermasters can quickly identify and stop illegal diversions.
- Watermasters may be able to anticipate a shortage before it reaches the crisis point, thus enabling local users to work together to develop a strategy that will meet everyone's most basic needs.
- When disputes arise among water users, the watermaster can often help the users settle the matter, thereby avoiding costly litigation.
- Watermasters can provide valuable technical assistance.
- ❖ A watermaster program affords a long-term solution for managing water rights in a river basin.

Program Costs and Fees.

According to state law, water-right holders in a watermaster area must pay the costs associated with a watermaster program through an annual fee. Certain domestic and livestock uses are exempted from water rights permitting and any fees associated with the watermaster program.

The total amount assessed per water right holder is comprised of a \$50 per account base fee and an annual use fee that is based on the volume of water that may be diverted for each authorized use. The use fee is calculated each year and is based on the proposed operating budget for each watermaster program.

In addition, most users will be required to add a meter to their pumps, which may cost \$400 or more (depending on the technology of the meter). However, by using a meter, the user might find that he or she had been running the unmetered pumps longer than necessary, which may lead to water savings.

Participating in the Process

We encourage your input on this process. If you are interested in the evaluation of the Canadian River Basin or the Red River Basin, or if you have any questions on this process, please contact:

By Letter: Amy Settemeyer, Manager, Watermaster Section (MC-160), P.O. Box 13087, Austin, Texas 78711-3087

By Email: watermaster@tceq.texas.gov

By Phone: Call a Watermaster Program Liaison: Cindy Hooper at (210) 403-4080 or Michael Redda at (512) 239-4631.

Web Site: www.tceq.texas.gov/goto/watermaster

Outreach Letters to Stakeholders, FY 2015

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Zak Covar, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 24, 2015

Re: Stakeholder Meetings - Watermaster Evaluation for the Canadian and Red River Basins

Dear Stakeholder:

The purpose of this letter is to invite you to attend stakeholder meetings and to provide updates regarding the Texas Commission on Environmental Quality's (TCEQ) review of the need for a watermaster in the Canadian and Red River Basins. According to Section 11.326(g) and (h) of the Texas Water Code, the TCEQ must evaluate all river basins in the state that do not currently have a watermaster program to determine whether one should be appointed.

On March 13, 2015, letters were mailed to all water right holders, county judges, extension agents, and other interested parties in the Canadian and Red River Basins requesting input for the evaluation. TCEQ will be holding the following stakeholder meetings to discuss the evaluation and the watermaster program, and to accept any additional comments you may have.

6:00 p.m. – May 28, 2015 Region 16 Education Center Palo Duro Conference Room 5800 Bell Street Amarillo, Texas 79109

6:00 p.m. – June 2, 2015 North Texas Regional Planning Commission 4309 Old Jacksboro Hwy, St 200 Wichita Falls, Texas 76302

6:00 p.m. – June 4, 2015 Texarkana College Truman Arnold Student Center Levi Hall Conference Room 2500 N Robison Road Texarkana, Texas 75599

Additional comments in response to the stakeholder meetings will be accepted through **5:00 p.m. on June 12, 2015**, which will be the close of the comment period. Please mail your comments to the Watermaster Section, MC 160, P.O. Box 13087, Austin, Texas 78711-3087 or by email to watermaster@tceq.texas.gov.

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Outreach Letters to Stakeholders, FY 2015

Stakeholder Meetings Watermaster Evaluation for the Canadian and Red River Basins Page 2 April 24, 2015

If you have any questions, please feel free to contact my staff in the Watermaster Section: Cindy Hooper at (210) 403-4080 or Michael Redda at (512) 239-4631. In addition, you may sign up to receive email updates at https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new. Additional information on the watermaster evaluation process is available at www.tceq.texas.gov/goto/watermaster.

We value your input on the evaluation process, including the draft options, as well as information to assist the agency in its evaluation of your basin. Thank you for your participation as we go through this very important process.

Sincerely,

Amy Settemeyer, Manager Watermaster Section, MC-160 Water Availability Division

Texas Commission on Environmental Quality

Figure D-2

Outreach Letters to Stakeholders, FY 2016

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 10, 2016

Re: Watermaster Evaluation for the Cypress Creek and Sulphur River Basins

Dear Stakeholder:

The Texas Commission on Environmental Quality (TCEQ) is currently evaluating the Sulphur and Cypress Creek River Basins to determine whether there is a need to establish a watermaster. The purpose of this letter is to notify you and to seek written input on the process, which will help the agency to identify information that should be considered during our evaluation.

According to Subsections 11.326(g) and (h) of the Texas Water Code, the Executive Director (ED) must evaluate all river basins that do not currently have a watermaster to determine whether one should be appointed. The ED must report the findings from the evaluation and make recommendations to the TCEQ Commissioners. The Commissioners will direct the ED to move forward with the recommendation, revise the recommendation, or they may take no action on the recommendation. The evaluation findings and recommendations are to be included in the agency's Biennial Report to the Legislature.

In an effort to include the public and develop the best recommendations, we are soliciting input from stakeholders, including water right holders, domestic and livestock users, river authorities, agricultural, industrial and environmental organizations, the general public, and other interested parties. This request for written input is your first opportunity to participate in this process. As part of the evaluation, we also plan to mail notifications of stakeholder meetings to all current water right holders within these two basins expected to be held in June of 2016. The input received from stakeholders will be discussed at the TCEQ Commissioners' Agenda tentatively scheduled for later this summer.

As a water right holder in either the Cypress Creek or Sulphur River basin or other stakeholder, you are being contacted during this initial outreach. If you are aware of any other person who might be interested but did not receive this initial outreach letter, please forward this information to them.

We will consider the following criteria when evaluating a basin:

- (1) Has there been a court order to create a watermaster?
- (2) Has TCEQ received a petition requesting a watermaster?
- (3) Have senior water rights been threatened, based on either the history of senior calls or water shortages within the basin or the number of water right complaints received on an annual basis in each basin?

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Outreach Letters to Stakeholders, FY 2016

Re: Watermaster Evaluation

Page 2

March 10, 2016

If the establishment of a watermaster is recommended and approved, a budget would be established each year, and the watermaster program would be administered using fees collected from water right holders in the watermaster area. The amount assessed to each water right holder would be determined each year based on the watermaster program's budget by establishing a base fee (currently \$50) and then adding the water right permitted amount multiplied by a rate factor depending on the type of use.

The enclosed fact sheet includes general information about the watermaster programs. TCEQ requests and appreciates your input on this evaluation. In particular, we ask that you provide written input regarding the possible threat to senior water rights (item 3 above) as well as proposals for implementing a possible watermaster program.

Please include the following information in your letter:

- 1. The river or other waterbody you are discussing.
- 2. Your affiliation (for example, a water right holder with a water right permit (including number if known), a domestic and livestock user, an adjacent landowner, an interested party, or environmental organization).

Please send written comments by March 25, 2016 to my attention at the following address: TCEQ, Water Availability Division, Watermaster Section, MC-160, P.O. Box 13087, Austin, Texas 78711-3087. You may also send an email to: watermaster@tceq.texas.gov. If you have any questions or additional comments, please feel free to contact my staff in the Watermaster Section: Brooke McGregor at (512) 239-2025. In addition, you may sign up to receive email updates at: https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new.

Additional information on the evaluation process is available on TCEQ's website: www.tceq.texas.gov/goto/watermaster. We value your comments on the evaluation process, including the criteria being used, as well as information to assist the agency in its evaluation of your basin. Thank you for your participation.

Sincerely,

Amy Settemeyer, Manager Watermaster Section, MC-160

Water Availability Division

Texas Commission on Environmental Quality

Enclosures

Outreach Letters to Stakeholders, FY 2016

Bryan W. Shaw, Ph.D., P.E., Chairman Toby Baker, Commissioner Jon Niermann, Commissioner Richard A. Hyde, P.E., Executive Director



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 6, 2016

Re: Stakeholder Meeting - Watermaster Evaluation for the Cypress Creek and Sulphur River Basins

Dear Stakeholder:

The purpose of this letter is to invite you to attend stakeholder meetings and to provide updates regarding the Texas Commission on Environmental Quality's (TCEQ) review of the need for a watermaster in the Cypress Creek and Sulphur River Basins. According to Section 11.326(g) and (h) of the Texas Water Code, the TCEQ must evaluate all river basins in the state, at least once every five years, that do not currently have a watermaster program to determine whether one should be appointed.

On March 10, 2016, letters were mailed to all water right holders, county judges, extension agents, and other interested parties in the Cypress Creek and Sulphur River Basins requesting input for the evaluation. TCEQ will be holding the following stakeholder meeting to discuss the evaluation and the watermaster program, and to accept any additional comments you may have.

6:00 p.m. – June 7, 2016 Mount Pleasant Civic Center, Main Hall East 1800 N. Jefferson St. Mount Pleasant, Texas 75455

Additional comments in response to the stakeholder meeting will be accepted through **5:00 p.m. on June 24, 2016**, which will be the close of the comment period. Please mail your comments to the Watermaster Section, MC 160, P.O. Box 13087, Austin, Texas 78711-3087 or by email to watermaster@tceq.texas.gov.

If you have any questions, please feel free to contact my staff in the Watermaster Section: Brooke McGregor (512) 239-2025 or Stephen Kinal (512) 239-4010. In addition, you may sign up to receive email updates at: https://public.govdelivery.com/accounts/TXTCEQ/subscriber/new.

Additional information on the watermaster evaluation process is available at: <www.tceq.texas.gov/goto/watermaster>.

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Outreach Letters to Stakeholders, FY 2016

Stakeholder Meeting Watermaster Evaluation for the Cypress Creek and Sulphur River Basins Page 2 May 6, 2016

We value your input on the evaluation process, including the draft options, as well as information to assist the agency in its evaluation of your basin. Thank you for your participation as we go through this very important process.

Sincerely,

Amy Settemeyer, Manager

amysettemeyer

Watermaster Section, MC-160 Water Availability Division

Texas Commission on Environmental Quality

Outreach Letters to Stakeholders, FY 2016

Watermaster Evaluation Fact Sheet - 2016

Background

On May 28, 2011, the Texas Legislature adopted the Texas Commission on Environmental Quality (TCEQ) Sunset legislation, HB 2694, which includes a requirement for the TCEQ to evaluate and issue a report for all river and coastal basins that do not have a watermaster. The report will assess whether or not there is a need to appoint a watermaster and is required at least once every five years. The TCEQ developed a schedule to consider several basins each year. During 2012, the TCEQ evaluated the Brazos River Basin, the Brazos-Colorado Coastal Basin, the Colorado River Basin, and the Colorado-Lavaca Coastal Basin; in 2013 the Trinity River Basin, the Trinity-San Jacinto Coastal Basin, the San Jacinto River Basin, and the San Jacinto-Brazos Coastal Basin; in 2014 the Sabine River Basin, Neches River Basin, and Neches-Trinity Coastal Basin; and in 2015 the Canadian and Red River Basins. For 2016, TCEQ will evaluate the Sulphur and Cypress Creek River Basins.

What is a Watermaster Program?

Watermaster programs operate from field offices within their designated basin(s) and perform the following functions:

- * A watermaster continuously monitors streamflows, reservoir levels, and water use within a basin.
- As needed, holders of impoundment rights may notify the watermaster when they plan to release sold water. The watermaster can then monitor usage downstream to ensure that the released water reaches the buyer.
- Before starting their pumps, opening their sluice gates, or starting to divert water in any other way, all water right holders must notify the watermaster and state how much water they plan to divert.
- The watermaster determines whether a diversion will remove water that rightfully belongs to another user and could notify a user with more junior water rights to reduce or stop pumping if needed.
- When streamflows diminish, the watermaster allocates available water among the water right holders according to each user's priority date.
- If a water-right holder does not comply with the water right or with TCEQ rules, the executive director may direct a watermaster to adjust the control works, including pumps, to prevent the owner from diverting, taking, storing, or distributing water until the water right holder complies.

There are currently four watermaster programs in Texas:

- The Rio Grande Watermaster coordinates releases from the Amistad and Falcon reservoir system.
- The South Texas Watermaster serves the Nueces, San Antonio, Guadalupe, and Lavaca river basins, as well as the adjacent coastal basins.
- The Concho Watermaster, currently a division of the South Texas Watermaster, serves the Concho River segment of the Colorado River Basin.
- The newest program, the Brazos Watermaster, covers Possum Kingdom reservoir and areas downstream of the reservoir in the Brazos River Basin.

Outreach Letters to Stakeholders, FY 2016

Advantages of a Watermaster Program

In addition to their monitoring of river conditions, TCEQ watermasters can provide valuable services to the water users in the basins they oversee:

- Watermasters can coordinate diversions in the basin, ensuring that all water users get the best overall value from the water available to them.
- With their real-time monitoring of local streamflows, watermasters can quickly identify and stop illegal diversions.
- Watermasters may be able to anticipate a shortage before it reaches the crisis point, thus enabling local users to work together to develop a strategy that will meet the users' most basic needs.
- When disputes arise among water users, the watermaster can often help the users settle the matter, thereby avoiding costly litigation.
- Watermasters can provide valuable technical assistance.
- A watermaster program affords a long-term solution for managing water rights in a river basin.

Program Costs and Fees

According to state law, water-right holders in a watermaster area must pay the costs associated with a watermaster program through an annual fee. Certain domestic and livestock uses are exempted from water rights permitting and any fees associated with the watermaster program.

The total amount assessed per water right holder is comprised of a \$50 per account base fee and an annual use fee that is based on the volume of water that may be diverted for each authorized use. The use fee is calculated each year and is based on the proposed operating budget for each watermaster program.

In addition, users will be required to add a meter to their pumps, which may cost \$400 or more (depending on the technology of the meter). However, by using a meter, the user might find that he or she had been running the unmetered pumps longer than necessary, which may lead to water savings.

Participating in the Process

We encourage your input in this process. If you are interested in the evaluation of the Sulphur River Basin, the Cypress Creek River Basin or both or if you have any questions on this process, please contact:

By Letter: Amy Settemeyer, Manager, Watermaster Section (MC-160), P.O. Box 13087, Austin, Texas 78711-3087

By Email: watermaster@tceq.texas.gov

By Phone: Call the Watermaster Program Liaison: Brooke McGregor at (512) 239-2025.

Web Site: www.tceq.texas.gov/goto/watermaster